

Sharing Information on Progress (SIP) 2024

Cranfield School of Management



PURPOSE



VALUES



TEACH



RESEARCH



PARTNER



PRACTICE



SHARE

Cranfield School of Management

United Kingdom

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1. Letter from the most senior officer (e.g., Dean, Head) committing to PRME's Principles

Statement

Title: Letter from the most senior officer (e.g., Dean, Head) committing to PRME's Principles

Description: Letter from Professor David Oglethorpe - Dean, Cranfield School of Management, Deputy Vice-Chancellor, Faculty of Business & Management, International & Student Recruitment

Date: 18/10/2024

Language: British English

Sharing Rights: Public

Relevant Stakeholders: PRME, Cranfield School of Management

Purpose: o transform the practice of management around the world by creating and disseminating applied knowledge



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18 October 2024

Statement from the Deputy-Vice-Chancellor

Our **purpose** as Cranfield School of Management is to transform global management through responsible management education (RME), combining theory with practical application to advance sustainable and ethical business practices. Our postgraduate programmes are designed to have a real-world impact, particularly through our part-time students, who apply their learning directly in their roles. A recent development is the establishment of the Responsible and Sustainable Management Education Committee, led by Professor Stephanie Hussels, which meets quarterly to ensure that RME principles are integrated throughout the School, furthering our commitment to shaping a sustainable future.

In this reporting period, I am proud of the contributions Cranfield School of Management has made to the sustainability initiatives of the wider university. Cranfield University has received significant recognition for its sustainability efforts, including ranking in the global top 40 in the Times Higher Education Impact Rankings 2023 for its support of UN Sustainable Development Goal 17, placing in the top 15% globally, and notably ranking in the top 5% for the environmental impact of its research and education in the QS Sustainability Rankings 2024. Additionally, in the Financial Times MBA Global Rankings 2023, our re-launched Transformation MBA ranked 7th for student diversity and 1st in the UK for its commitment to reducing carbon footprint.

Our purpose is underpinned by responsible **values** and activated through campus-wide sustainability goals, driving greater commitment from faculty, staff, and students. We promote sustainability literacy by teaching core sustainability modules across our management programmes while also developing innovative specialist sustainability modules and programmes.

We invest in and support innovation in **teaching** methods. We are developing innovative approaches to teaching which make lifelong learning more inclusive, accessible, and with a lower carbon footprint. We support faculty in developing innovative learning experiences that inform and inspire responsible management practice, including investing in the 'Exploring Sustainable Futures' game, which was showcased at COP26, and the K2 "Against All Odds" simulation. Business simulations are a growing area of expertise within our faculty, supported by our specialist Digital Management Education Group and driven by demand from our executive management education partners.

Our **research** output at Cranfield School of Management has made significant progress, ranking 7th in the UK for impact in the 2021 REF. This progress is guided by our 2023–2030 Research Strategy, which focuses on quality and international partnerships. We host events on achieving research impact and closely monitor industry projects to ensure ongoing success. Cranfield School of Management leads a major university-wide research initiative, bringing together experts in management, engineering, and natural sciences to adopt an ecosystem approach to understanding organisational and systems resilience.

We take a **partnership** approach to our research and teaching, delivering co-produced programmes and customised executive education. Our Executive MBA, in partnership with Grant Thornton, ranked in the top ten in the UK in the Financial Times EMBA 2023 rankings. This close-to-practice approach ensures we prioritise teaching and research that address the skills gaps and challenges faced by businesses.

We engage with local businesses and civic organisations to deepen our regional influence and contribute to responsible economic growth through the Bettany Centre for Entrepreneurship. This is exemplified by the Ready for Net Zero Growth programme launched in 2022, and the Climate Action Programme launched in 2023. As a result, we were awarded the Small Business Charter accreditation in 2023, recognising our substantial support for small businesses and our commitment to entrepreneurship. This accolade underscores Cranfield's integral role in the Bedfordshire business ecosystem and reinforces its dedication to sustainability and responsible management practices.

Led by our Energy and Environment Committee, we continue to improve our university's own sustainability performance in our organisational **practices**. We have set new 2030 targets on carbon, waste and water management, travel, biodiversity, pollution control and climate adaptation, and signed up to the UN University and College SDG Accord. We have also made progress on our objective to be a net zero campus by 2030, supported by significant investment in our energy infrastructure and a newly formed team of energy champions.

Through our efforts and partnerships with other university schools, businesses, and the wider community, we apply the PRME principles to help achieve a more inclusive and sustainable global economy. We **share** our successes and challenges internally to continuously improve on our mission to transform the practice of management.

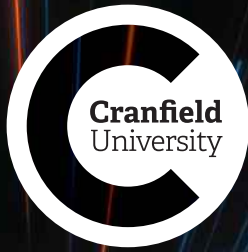
Yours faithfully

A handwritten signature in black ink, appearing to read 'DRO', followed by a long horizontal stroke and a small upward flick at the end.

Professor David Oglethorpe
Dean, Cranfield School of Management
Deputy Vice-Chancellor, Faculty of Business & Management,
International & Student Recruitment

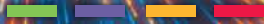
2. Mission, Vision, Strategy or Purpose

Statement	Date: 24/10/2024
Title: Mission, Vision, Strategy or Purpose	Language: British English
Description: Cranfield University corporate plan, Ambition 2027 - creating impact together, is an ambitious, five-year plan that outline focus and shared goals.	Sharing Rights: Public
	Relevant Stakeholders: PR ME, Cranfield School of Management
	Purpose: Ambition 2027 - creating impact together, is an ambitious, five-year plan that sets Cranfield University focus and aligns shared goals.



Ambition 2027

Creating impact together



Guided by our vision, mission, values, UN Sustainable Development goals and sector-facing themes, our corporate plan defines our ambitions for the next five years.

Our vision

To be valued globally for tackling the real-world issues of today to deliver a sustainable future.

Our mission

We work in partnership with business, academia, governments and other organisations to develop and deliver applied research and innovative education in science, technology, engineering and management.



Our areas of focus

Our ambitions are to:

- be an Employer of Choice;
- be a Partner of Choice;
- create the UK's Applied Research Powerhouse;
- create Distinctive Cranfield Learners.

These areas are not mutually exclusive. Each one interconnects and needs the others to succeed - we know we are stronger when we work across our boundaries.

We will monitor our progress against a set of super key performance indicators.

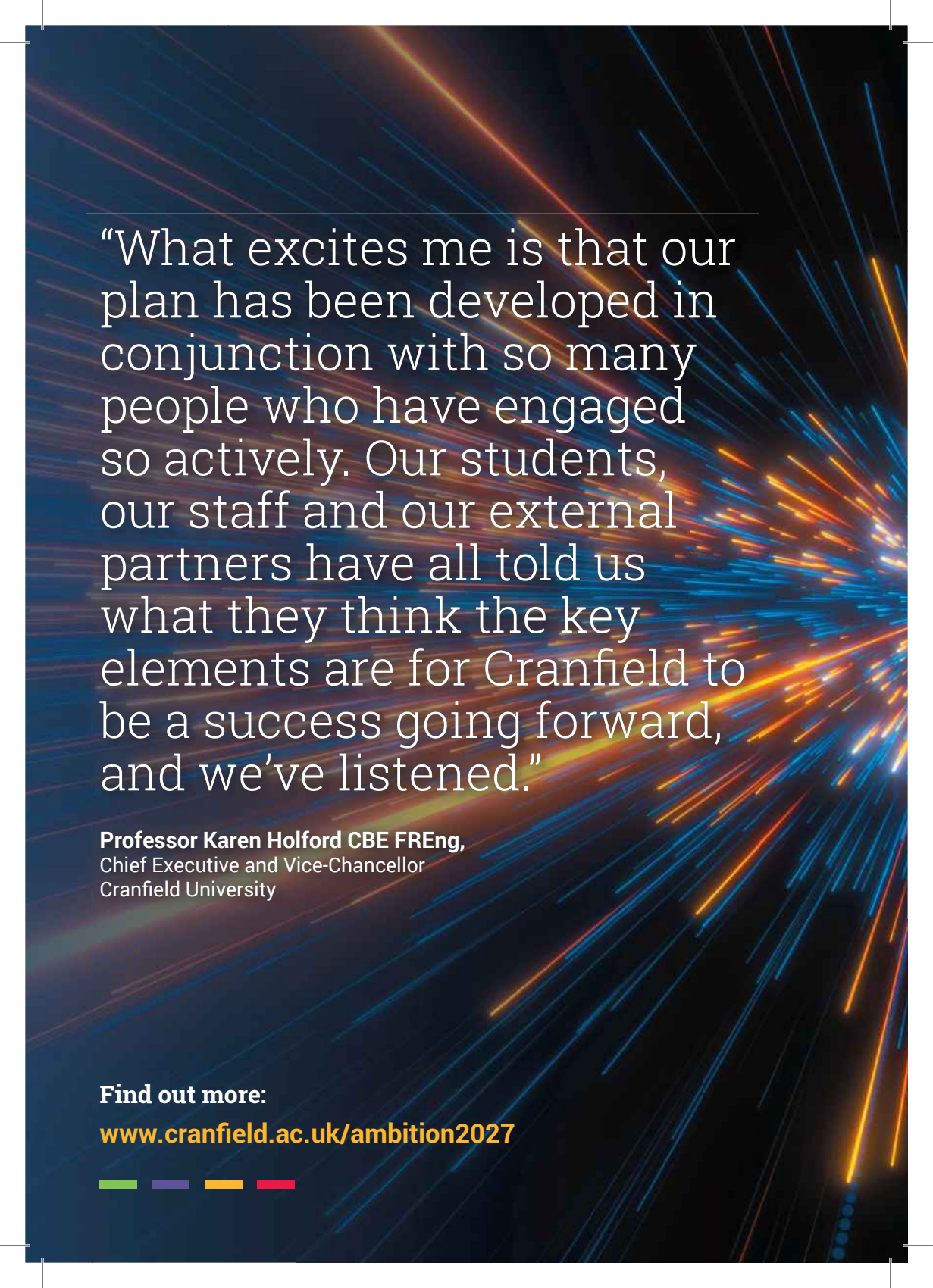
Our strategies

Through our eight interconnecting strategies we will realise our four ambitions.

Our values

Our values help to define who we are, guide the way we behave and shape our decisions. They sit at the heart of our plan.





“What excites me is that our plan has been developed in conjunction with so many people who have engaged so actively. Our students, our staff and our external partners have all told us what they think the key elements are for Cranfield to be a success going forward, and we’ve listened.”

Professor Karen Holford CBE FREng,
Chief Executive and Vice-Chancellor
Cranfield University

Find out more:

www.cranfield.ac.uk/ambition2027



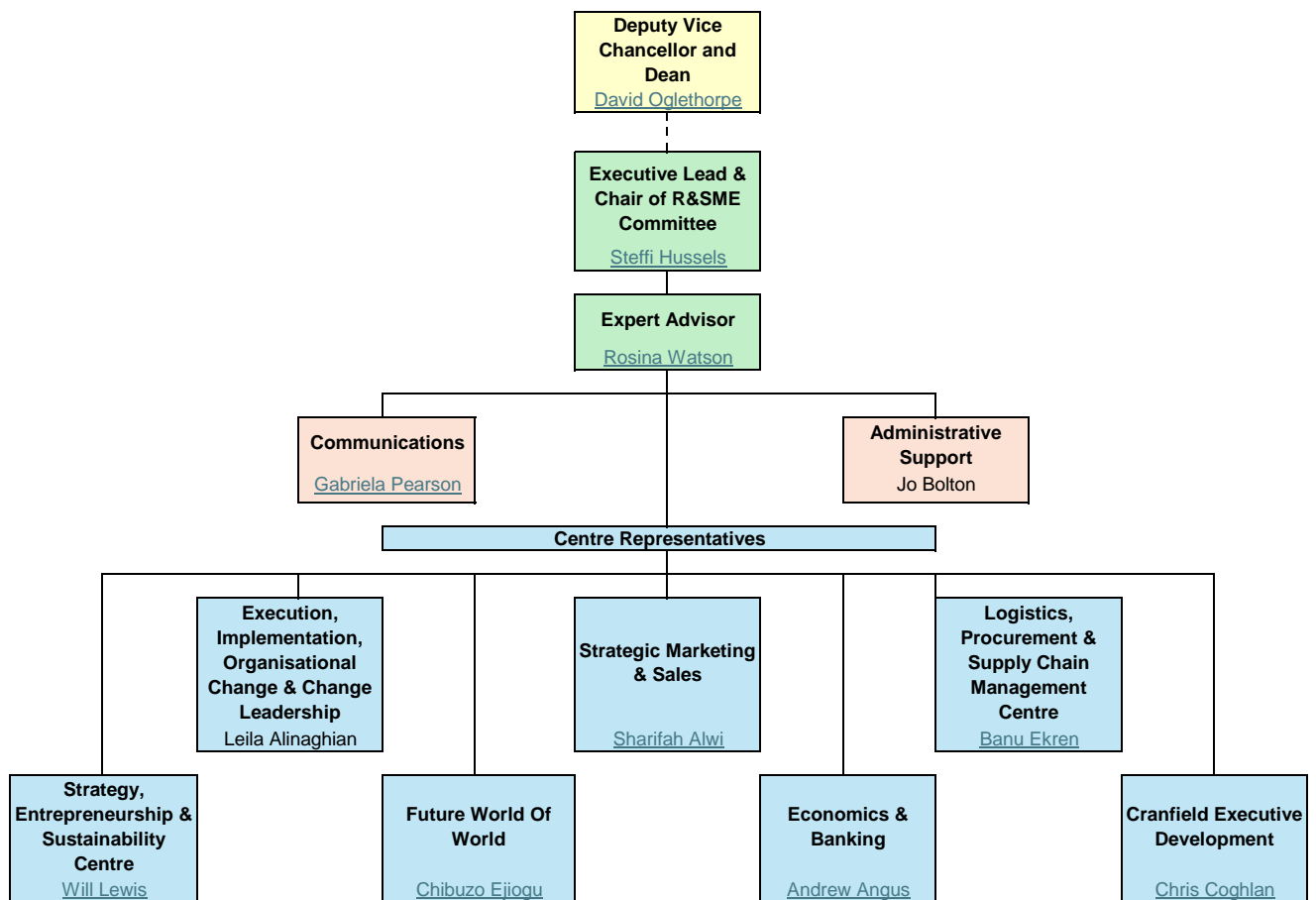
1. Does the PRME Signatory Member have a person who is accountable and responsible for RME?

☒

 Yes, the role is formalized in the senior leadership team (e.g., Dean, President, Head of School)

Statement	Date: 24/10/2024
Title: R&SME Committee Organisation Chart	Language: British English
Description: Responsible and Sustainable Management Education Committee Organisation Chart	Sharing Rights: Public
	Relevant Stakeholders: Cranfield University
	Purpose: R&SME Committee Organisation Chart

Responsible And Sustainable Management Committee Organisational Chart



Cranfield School of Management's newly established Responsible and Sustainable Management Education (R&SME) Committee

Impact Purpose

The R&SME Committee was established in 2024 to integrate Responsible Management Education (RME) principles across Cranfield School of Management (SoM). Led by Professor Stephanie Hussels, the committee unites faculty and staff to promote ethical, sustainable, and accountable management practices.

Impact Statement

The committee drives the adoption of responsible and sustainable business principles throughout the School, shaping teaching, research, and outreach. Its efforts ensure that future business leaders are equipped to address global challenges through ethical, long-term sustainability strategies.

Summary- Cranfield School of Management's newly established Responsible and Sustainable Management Education Committee

In early 2024, Cranfield School of Management established the Responsible and Sustainable Management Education (R&SME) Committee, under the leadership of Professor Stephanie Hussels, to promote the integration of Responsible Management Education (RME) across the faculty. Bringing together representatives from all six centres and professional staff, the committee convenes quarterly to discuss and coordinate efforts to embed responsible and sustainable practices throughout the School. At its inaugural meeting, the committee developed a working definition of responsible and sustainable business, emphasising ethical, transparent, and socially accountable practices alongside long-term sustainability goals. This definition underscores the interconnectedness of responsible business, focused on fairness and accountability, and sustainable business, which balances environmental, social, and economic needs for future generations. The committee aims to refine this approach as it evaluates the School's continued commitment to Responsible Management Education.

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Responsible
Management
Education

Cranfield School of Management Establishes Responsible and Sustainable Management Education (R&SME) Committee to Drive Faculty-wide Integration of RME Principles

To ensure Responsible Management Education (RME) is effectively integrated across the entire faculty, Cranfield School of Management (SoM) appointed Professor Stephanie Hussels as the executive lead of the newly established Responsible and Sustainable Management Education (R&SME) Committee, which was formally created in the first quarter of 2024 to spearhead the faculty's commitment to responsible and sustainable management practices. This committee plays a pivotal role in driving the integration of RME principles by bringing together faculty representatives from all six centres within the School of Management. Additionally, professional staff are included in the committee to enable comprehensive input from across the School of Management, thereby ensuring that the dialogue surrounding RME is inclusive and ongoing.

The committee convenes on a quarterly basis, with a structured agenda circulated to members in advance to facilitate focused and productive discussions. These meetings serve as a platform for representatives to collaborate on the latest developments in RME, share insights, and coordinate efforts to embed these principles throughout their respective areas. Following each meeting, representatives are responsible for communicating key discussions, decisions and action points to their colleagues within their centres. This process is designed to ensure that the outcomes of the committee's work are effectively disseminated, fostering a cohesive approach to RME across the entire faculty.

Defining Responsible and Sustainable Business for Cranfield School of Management (SoM)

In the inaugural meeting of the Responsible and Sustainable Management Education (R&SME) Committee, each faculty representative brought their centre's perspective on responsible and sustainable management. Together, a working definition was assembled to help us make focused and sustained progress on embedding Responsible Management Education (RME) through our respective teaching, research and outreach.

Responsible business refers to an organisation's commitment to ethical, transparent and socially accountable practices. It emphasises fairness in dealings with employees, suppliers and stakeholders, ensuring that operations are conducted in a way that aligns with environmental, social and economic responsibilities. It goes beyond Corporate Social Responsibility

(CSR) by embedding accountability and transparency into the core of business strategies, often through Environmental, Social and Governance (ESG) metrics.

Sustainable business focuses on the long-term viability of business activities by balancing the needs of present and future generations. It emphasises minimising environmental impact, conserving resources and fostering social equity. Sustainable businesses seek to align with the triple bottom line: people, planet and profit. Sustainable practices include reducing carbon footprints, promoting renewable energy and ensuring responsible consumption and production.

The relationship between responsible and sustainable business lies in the fact that responsible business practices are often essential components of sustainable business strategies. By acting responsibly, companies can mitigate risks, build trust with stakeholders and establish a foundation for long-term sustainability. Conversely, sustainable business practices often require a responsible approach to governance, operations and stakeholder engagement to be effective.

In essence, responsible business practices are a key enabler of sustainability, and sustainable business strategies typically incorporate responsible practices as integral elements of their approach to creating long-term value for all stakeholders.

Our mission is to transform the practice of management around the world by creating and disseminating applied knowledge. We envision ourselves as a world-leading management school that promotes **responsible management thinking and practice**. As part of the committee, we reflect on whether we need to evolve the definition we have created above and evaluate if we are upholding these principles.

2. Does the PRME Signatory Member have at least one organizational entity (e.g., center, institute, academic department) that is accountable and responsible for RME on behalf of the Signatory?

The Responsible and Sustainable Management Education (R&SME) Committee, which is accountable and responsible for Responsible Management Education (RME) on behalf of Cranfield School of Management (SoM), is involved in research, teaching and engaging communities and businesses.

3. List the names, positions, and email addresses of all people responsible and accountable for RME at the PRME Signatory Member

The people responsible and accountable for RME at Cranfield SoM

Impact Purpose

The R&SME Committee was established in 2024 to integrate Responsible Management Education (RME) principles across Cranfield School of Management (SoM). Led by Professor Stephanie Hussels, the committee unites faculty and staff to promote ethical, sustainable, and accountable management practices.

Impact Statement

The committee drives the adoption of responsible and sustainable business principles throughout the School, shaping teaching, research, and outreach. Its efforts ensure that future business leaders are equipped to address global challenges through ethical, long-term sustainability strategies.

Centre Representatives on the Responsible and Sustainable Management Education Committee

The Responsible and Sustainable Management Education (R&SME) Committee, which is accountable and responsible for Responsible Management Education (RME) on behalf of Cranfield School of Management (SoM), is involved in research, teaching and engaging communities and businesses.

The committee consists of the following individuals:

- Stephanie Hussels, the Executive Lead and Chair of the R&SME Committee, reports directly to the Cranfield SoM Executive and David Oglethorpe - Cranfield SoM Deputy Vice Chancellor and Dean - stephanie.hussels@cranfield.ac.uk
- Rosina Watson – Expert Advisor - rosina.watson@cranfield.ac.uk
- Gabriela Pearson – Report Lead and Communications - Gabriela.E.Pearson@cranfield.ac.uk
- Jo Bolton – Administrative Support – Jo.Bolton@cranfield.ac.uk

Centre Representatives

- Banu Ekren - Logistics, Procurement & Supply Chain Management - Banu.YetkinEkren@cranfield.ac.uk
- Sharifah Alwi - Strategic Marketing & Sales - Alwi.Sharifah@cranfield.ac.uk

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Contributors

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PRME Community

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Subjects

Responsible
Management
Education

- Leila Alinaghian - Leadership & Change - leila.alinaghian@cranfield.ac.uk
- Andrew Angus - Economics & Finance - a.angus@cranfield.ac.uk
- Will Lewis - Strategy, Entrepreneurship & Sustainable Business - Will.Lewis@cranfield.ac.uk
- Chibuzo Ejioogu - Work & Learning - Chibuzo.Ejioogu@cranfield.ac.uk
- Chris Coghlan - Cranfield Executive Development - Chris.Coghlan@cranfield.ac.uk

1. The PRME Signatory Member involves the following elements of RME in its degree programs. Mark all that apply.



Guest speakers and showcase events

Event

Title: Examples of guest speakers and showcase events

Description: MBA Leadership Week 2023

Date: 15/01/2023

Language: English

Sharing Rights: PRME
Community

Event Date Range: 18/06/
2023 - 24/06/2023

Location: Cranfield
University campus

Speakers: Lyn Lanka, Sabi
Samarnath, Mike Sutliff,
Stephen Carver

Description:
'Leadership in the new
reality of AI, remote and
distributed leadership'

FTMBA 23/24 - TERM 2 - LEADERSHIP WEEK (LS)
‘Leadership in the new reality of AI, remote and distributed leadership’

DATE	TIME	SESSION TITLE AND PRE-SESSION PREPARATION	TUTOR
Monday 18 th March 2024	09.00-09.30	Introduction to Leadership Week	LL
	09.30-10.15	OPENING SPEAKER	Sabu Samarnath
	10.15-10.45	BREAK	
	10.45-12.45	Peer Coaching Observation	LL/MS
	12.45-13.30	LUNCH	
	13.30-15.30	K2 2008 – Embracing the ‘Absurd’ in Leadership <u>Pre-session prep:</u> Complete the Paradox Mindset Poster, following the instructions on Canvas. Please bring to this session.	EK
	15.30-17.30	D5 model – Leadership and AI challenge	LL
Tuesday 19 th March 2024	09.00-17.00 CMRI Gallery	Crisis Management and Practice Press Conference <u>Pre-session prep:</u> Read and prepare in your learning teams your allocated crisis case study. Prepare individually on a subject that you would like to be 1:1 radio interviewed for. Watch/listen to the news and reflect on how the stories are told and the actors within them behave. Read: ‘Crises: Act in Haste, Regret at Leisure’. Further details available on Canvas.	SC & FS
Wednesday 20 th March 2024	09.00-11.00	D5 model – Leadership and AI challenge continued	LL
	11.00-11.15	BREAK	
	11.15-18.00	Peer Coaching Observation	LL/MS/KA
Thursday 21 st March 2024	09.00-17.00 TV Studio Bld 111	Actual Press Conference <u>Pre-session prep:</u> Watch the recordings of the Practice Press conference and discuss how they could be improved. Read and prepare in your Learning Team your allocated crisis case study (different from Practice). Watch/listen to the news and reflect on how the stories are told and the actors within them behave. Further details available on Canvas.	SC & FS
Friday 22 nd March 2024	09.00-11.00	Women’s Leadership <u>Pre-session prep:</u> Please read: ‘Where Women’s Leadership Development Programs Fall Short’.	DA
	11.00-11.15	BREAK	
	11.15-12.45	Leadership and the SDG’s	Sanjay Lanka
	12.45-13.15	Leadership Week: Debrief	LL

Lecturers: DA = Deirdre Anderson, FS = Fabian Steinmann, KA = Katrina Armstrong, LL = Lyn Lanka (Module Lead), MS = Mike Sutliff, SC = Stephen Carver

Enhancing the Student Experience: Integrating Practical Experience and Multidisciplinary Understanding at Cranfield School of Management

Impact Purpose

Cranfield School of Management (SoM) transforms learning environments by integrating responsible management concepts and practices into the curriculum and pedagogy through hosting guest speakers and showcase events.

Impact Statement

Cranfield School of Management (SoM) reinforces Responsible Management Education (RME) elements across its portfolio of taught degree programs, executive education and apprenticeships by providing co-curricular experiences.

Bringing Practice into the Classroom through Guest Speakers

Cranfield School of Management (SoM) regularly hosts industry speakers to provide students with valuable real-world insights into operating and leading responsible businesses. This commitment ensures that students grasp the principles of responsible management practices. Various course-specific speaker series are also open to other university students, fostering partnerships and encouraging external and local participation.

Notable examples during the reporting period across the academic centres in Cranfield SoM:

- • **Strategy, Entrepreneurship and Sustainability:** Over the last few years, MSc in Management and Entrepreneurship, a specialised MSc supported by the Bettany Centre, offered a series of Fireside Chats with investors and early-stage and established entrepreneurs operating across various contexts such as social, family business and tech entrepreneurship. Further external speakers were invited to MSc in Management and Entrepreneurship's curricular and co-curricular events. These included professionals from the entrepreneurial ecosystem (accelerators, venture builders, investors, tech scale-up leaders, etc.). These interactions allowed the students to discuss the speakers' entrepreneurial journeys, obstacles faced, strategies adopted to overcome or circumnavigate those and

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Responsible Management Education, Ethical Leadership, Social Entrepreneurship

recommendations for their own entrepreneurial and professional journeys and their potential impact. This intimate setting allows students to discuss in more detail the tools for success and challenges faced by the speakers. The Sustainable Business Group welcomed 27 guest speakers with sustainability expertise across nine modules, including Lucy Parker (co-author of 'The Activist Leader'), Sandy Rodger (former director at Diageo and former VP at Unilever), and Priya Satish (Corporate Sustainability Business Lead, Gatehouse Bank). See Principle 5: Partner for more examples of speaker series.

- **Strategic Marketing and Sales:** This group hosted several guest speakers, including a representative from Lush, who discussed 'Ethical and Fair Trade, Sustainability, and Animal Welfare' in the Retail Marketing module, and a speaker from the Institute for Advertising Ethics, who presented on 'The Importance of Studying Ethics in Advertising' in the Integrated Marketing Communication module.
- **Leadership and Change:** The **MBA Speaker Series** provides full-time MBA students and graduates with insights from a diverse group of industry leaders who share career experiences and offer new perspectives. One of the speakers was alumna Debra Charles, Founder and CEO of Novacraft, who discussed integrating people, processes and technology to transform organisations and make a meaningful societal impact.

Training Ethical Leaders in the MBA Leadership Week

As part of the MBA program, Cranfield's MBA Leadership Week is dedicated to ethical leadership. In 2023, the theme was "Ethical Leadership in the 21st Century," featuring workshops, speakers and events designed to build leadership capacity with a focus on ethics and sustainability. Diverse speakers from around the world contributed to the sessions, and students engaged in sustained peer coaching to build empathy, frame values, and understand responsible leadership in real-world scenarios.

Encouraging Multidisciplinary Understanding of Sustainability

Cranfield School of Management (SoM) promotes multidisciplinary understanding by facilitating learning from other schools, including the School of Water, Energy, and Environment (SWEE). The SWEE Research Leadership Networking Series fosters an engaging research culture and promotes scholarly discussion. Management students are encouraged to attend these sessions, and connections are established through shared

modules, such as the Leading Corporate Sustainability module, which is available to both management and technical students.

Incentivising Students to Engage in Responsible Management Education Extra-Curricular Activities

As a postgraduate-only university, Cranfield School of Management (SoM) has limited time with students, as most stay on campus for only one year. To maximise their exposure to Responsible Management Education (RME), the university offers a range of extracurricular activities focused on responsible and sustainable business. For example, the Entrepreneurship Speaker Series offers students firsthand insights from successful entrepreneurs and investors, emphasising responsible and sustainable business practices. One recent speaker was James Bidwell, owner and Chair of Springwise and co-founder of Re_Set, who discussed innovation and sustainability, drawing on his experience as the founder of a sustainability consultancy and an impact investment fund. To recognise their extra-curricular learning journey, in September 2023, digital badges were also introduced. The Entrepreneurship suite of badges incentivises students to participate in extracurricular activities featuring external speakers. This initiative engages the broader university community, promoting responsible education through interdisciplinary dialogue on sustainability-related topics.

“I have four badges from the Bettany Centre’s Venture Programme, which I have showcased on my LinkedIn profile. When people go through your profile, they ask you ‘oh, what are these badges? Have you done this? Have you gained perspective on this?’. So, I’ve found them to be a great conversation starter.” **Yash Mantri, Management and Entrepreneurship MSc (2024)**

SoM students actively enhance their practical skills through diverse competitions and industry engagements. In the [2023 Hult Prize Challenge](#)- Launch an innovative social venture in the clothing and fashion industry to make it more sustainable, MSc in Management and Entrepreneurship students reached the finals, securing \$100,000 for their sustainable venture, Innovious. The annual Cranfield-Colworth Innovation Challenge saw over 270 students tackle industry challenges from Unilever’s Ice Cream Business Group and Lipton Teas and Infusions, with nine teams presenting their solutions. The 2023 winning team, Mindit (Thomas Drescher, Shubham Pandey, Anushka Sawarkar, Subhramanian Srinivasan Rangamani, Andrei Boitcev) won the first prize of £5,000 for their innovative idea on reducing the impact of hail on tea estates.

“We are absolutely over the moon after winning the challenge! The competition was intense with strong runners-up. We put in

all our skills and passion to create the comprehensive approach we presented in the pitch. The long working hours united our team while promoting our skills in research, creative thinking and presenting. We are overwhelmed by the support we received from key people from both institutions throughout the competition. The challenge was a great opportunity for networking and beyond that to make friends.” **Thomas Drescher, MBA student and 2023 Winner**



Specific degree programs with RME in the program-level learning goals and assessment rubrics

Cranfield School of Management (SOM) degree programs with Responsible Management Education (RME) in the program-level learning goals and assessment rubrics

Impact Purpose

To embed Responsible Management Education (RME) into Cranfield School of Management (SOM)'s graduate programs, equipping future leaders with the skills to address global challenges through sustainable and ethical business practices.

Impact Statement

Cranfield School of Management (SoM)'s integration of Responsible Management Education (RME) into its curriculum ensures that all graduates are prepared to advance sustainability and ethical leadership in their professional roles, driving positive change in business and society.

Summary

Our programmes are split into award-bearing and non-award bearing education portfolios: Full-time graduate programmes; part-time graduate (including apprenticeship) programmes; open and customised (including apprenticeship) executive education and digital stackable programmes. These portfolios are underpinned by our fifth core business activity – research and scholarship – which is delivered across six administrative discipline-based centres.

Cranfield School of Management (SOM) has integrated Responsible Management Education (RME) into 37% of its degree programs, using program-level learning goals and assessment rubrics. The Responsible and Sustainable Management Education (R&SME) Committee will review these findings and collaborate with the remaining 14 Programme Directors over the next academic year to further enhance RME integration and highlight more explicitly RME learning goals.

Transformation MBA Redesign Enhances Focus on Responsible Management Education; Cranfield's Program Achieves Top UK Rankings and Global Recognition

The redesign of the Transformation MBA has increased the focus on Responsible Management Education (RME) at the program

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Responsible Management Education, Corporate Social Responsibility (CSR)

level. Cranfield's Full-time MBA was recently relaunched as the Transformation MBA under the leadership of Professor Leila Alinaghian, Director of the Full-time MBA and Professor of Business Relations and Impact. Cranfield School of Management (SOM)'s Full-time MBA program has been ranked 9th in the UK, 27th in Europe, and 88th globally in the 2023 Financial Times rankings. The program also ranked number one in the UK for sector diversity, reflecting the diverse industry backgrounds of its students and for its carbon footprint and net-zero achievements. The carbon footprint ranking placed Cranfield's Full-time MBA 17th globally.

The redesign placed a stronger emphasis on RME, with one of the eleven intended learning outcomes being: "Demonstrate a critical understanding of social, environmental, and ethical issues affecting businesses, and the ability to develop innovative and effective solutions related to environmental sustainability and social impact in a business context."

Growing master's-level apprenticeship portfolio unlocks more flexible professional development with a Responsible Management Education focus

Cranfield School of Management (SoM) is proud to offer a portfolio of master's-level apprenticeships that support both individual and organisational development. Aimed at individuals already in, or planning to move into, strategic roles within their organisations, a Level 7 apprenticeship represents the highest level of apprenticeship available in the UK. Studying for an apprenticeship offers working professionals a unique opportunity to gain higher-level education, practical experience and career advancement in a structured and supportive environment.

Cranfield SoM recently launched apprenticeship programs, including the 'Senior Investment and Commercial Banking Professional Apprenticeship' through the MSc in Sustainable Banking and the 'Senior People Professional Apprenticeship' through the MSc in Strategic Human Resource Management. A recent Ofsted report rated Cranfield University's apprenticeship offerings as 'good' in all areas during a full inspection. The report commended the University for its high-quality teaching, impactful industry connections, excellent facilities and strong support for apprentices. Cranfield SOM has expanded executive education opportunities through apprenticeships, enabling direct influence on business and management practices via its executive students.

Cranfield School of Management and School of Water, Energy, and Environment Launch Inclusive Part-Time MSc Sustainability, Bridging Disciplines and Enhancing Work-Based Skills

In March 2022, Cranfield School of Management (SoM) partnered with the School of Water, Energy, and Environment (SWEE) to launch a 2 ½ year part-time MSc in Sustainability designed to equip learners with work-based skills and competencies to create more sustainable organisations. The course aligns with the Institute for Apprenticeships and Technical Education's master's-level Sustainability Business Specialist apprenticeship standard. It fosters sustainability competencies through an inclusive and diverse teaching environment, recognising that such diversity is key to developing sustainability skills.

Since its launch, the course has attracted over 165 learners from a wide range of backgrounds: more than half are female, their ages range from 22 to 55, and they bring between 2 and over 20 years of workplace experience. These learners represent diverse disciplines, from engineering to finance, and work in sectors ranging from defence to social housing across private, non-profit and government organisations.

The course is designed to be inclusive and accessible, with live online teaching sessions every other Friday, complemented by annual residentials. The part-time nature of the course and eligibility for apprenticeship-levy funding make it possible for those who might not have been able to access, afford, or take time off for postgraduate study to pursue higher education, including those with parenting or caregiving responsibilities.

Learners collaborate in diverse learning sets, applying their learning to their specific work challenges. Diversity in teaching is enhanced by bridging disciplinary silos, drawing on expertise from both the SOM and the SWEE. This course is the first at Cranfield University to be co-owned and co-delivered by two schools, fostering collaboration between diverse faculty members to bridge knowledge gaps, share resources, and offer different perspectives on sustainability challenges and solutions.

Diversity, equity, and inclusion are central to the course curriculum, linking the Sustainable Development Goals (SDGs) to a holistic view of sustainability. Topics include social equity, workplace diversity and inclusion, economic prosperity, and long-term environmental health and well-being. This integrated view of sustainability extends and contextualises the knowledge, skills, and behaviours outlined in the apprenticeship standard, particularly concerning diversity and inclusion.

The course's assessment strategy is designed to align with the learners' diverse backgrounds, teaching methods, and intended learning outcomes. The strategy emphasises practical application, with regular checkpoints for self-reflection, peer and tutor reviews, and continuous feedback. Assessments are diverse, including group presentations with peer feedback, quizzes, case study reflections, reflective reports, client briefs, innovation proposals, risk assessments, cost-benefit analyses, videos or podcasts, and future scenario development.

Nine out of fourteen module assessments require learners to apply their knowledge to their own organisations. The course concludes with a 60-credit work or practice-based thesis, allowing learners to address sustainability-related challenges or opportunities within their organisations.

Executive Education (non-award bearing programmes)

Executive Education is a vital pillar for the School of Management (SoM) and is run by a dedicated team - Cranfield Executive Development (CED). Initially primarily focused on SoM based programmes, more recently, CED has developed a pan-University value proposition, leveraging Cranfield's technical expertise across various disciplines. A prime example is Centrica, where initial training for the top 100 senior leaders expanded to include Cranfield's expertise in hydrogen and energy. The executive non-award bearing programmes are split into three areas: open programmes, customised programmes, and apprenticeship programmes. In the 2023/24 financial year, 500 delegates attended open programmes, with 20% in C-suite positions and the remainder in mid-senior roles. Over 880 delegates have participated in customised programmes.

Open programmes are short courses designed to enhance the skills and knowledge of professionals from various industries and backgrounds. These programmes are open to individual participants or employees from different organisations rather than being tailored for a specific company. They cover a wide range of topics, including leadership development, strategic management, finance, marketing, and sustainability. The top open programme clients are Jaguar Land Rover, Expro, Wood plc, Master Innholders, and NFU Mutual.

New additions to the open programme portfolio during this reporting period include 'Leading Sustainability' and 'THRIVE: Passion, Purpose, Performance'. The Leading Sustainability programme equips delegates with the skills to drive effective sustainability initiatives, while THRIVE offers leaders a reflective and forward-looking experience to enhance their impact and fulfilment.

Moreover, a new portfolio of online open programmes with micro-credentials has been introduced, focusing on sustainable learning solutions and utilising technology and inclusivity over three levels - bronze, silver, and gold. Cranfield delivers transformative personal and professional development. Cranfield Online's stackable courses in business and management enable individual self-study to advance personal career progression, support organisations with employee development, and build in-house capability and expertise. By the end of 2023, the bronze-level 'Sustainable Business' module was launched. The course covers various aspects of sustainable business practices, including strategy development, implementation, and impact measurement, aiming to enhance participants' expertise in creating and managing sustainable business solutions.

Customised programmes are bespoke executive education courses explicitly designed to meet the unique needs and objectives of individual organisations. Unlike open programmes, which are available to professionals from any company or industry, customised programmes are developed in close collaboration with a single organisation to address its specific challenges, goals, and strategic priorities. CED's largest customised clients by revenue are HRDF, Centrica, Qatar Energy, and Shell, each contributing over £500,000 annually. Other significant clients include Urenco, Kier, Qatar Gas, ADNOC, BAE Systems, EDF Energy, and Dole.

One recent client example is Kier Group, a leading provider of infrastructure, construction, and property development services in the UK. Cranfield provides leadership development programmes across middle and senior management within Kier. The programmes focus on enhancing fair and ethical leadership practices, supporting Kier's goal of becoming a great place to work with purposeful jobs for their employees. Kier is focused on becoming a more diverse organisation, and currently, 100% of participants from ethnic minority backgrounds who have been through Cranfield's 'Building Leaders' programme have been promoted. Additionally, 47% of women who have completed Cranfield's 'Raising Leaders' programme have also been promoted. Within the 'Building Leaders' programme, there is a focus on personal, environmental, and social sustainability. Participants take part in Cranfield's 'Exploring Sustainable Futures' simulation. Following this powerful exercise, they are challenged to apply their learning by implementing more sustainable and ethical solutions to strategic challenges, which are presented to the Kier CEO at the end of each programme.

In the apprenticeship segment, a new blended, non-award-bearing programme, the Senior Leader Executive Programme (SLEP), has been created. The SLEP at Cranfield SoM is a comprehensive apprenticeship designed for experienced professionals aiming to advance their leadership

capabilities. The programme combines academic learning with practical application, focusing on strategic leadership, change management and organisational transformation. It is tailored to develop high-level leadership skills and is delivered through a blend of face-to-face and online sessions, enabling participants to apply their learning directly to real-world challenges within their organisations. A new 'Sustainable Business' module has been added that supports apprentices in their role as change agents in the context of the sustainability agenda, including connections to strategy, marketing, and organisational resilience. This also features the experiential learning tool, the 'Exploring Sustainable Futures' simulation.



RME is in the signatory's educational vision, so that it drives the signatory's business model and all educational efforts, courses, programs, degrees, and non-degrees

Public Media

Title: 'Our Education Strategy' video

Description: Video ' Our Education Strategy' explaining how Cranfield's values feed into its Education Strategy

Date: 21/10/2024

Language: British English

Sharing Rights: Public

Author: Cranfield University

Published Date: 01/10/2022

Degree Of Recognition: National

Media Name: YouTube

Media Type: Video

Duration: 2 minutes 21 seconds

URL:

• <https://www.youtube.com/watch?v=D-1mpYSJNqo>

Cranfield School of Management's Commitment to Responsible Management Education: Driving Our Educational Vision and Business Model

Impact Purpose

At Cranfield School of Management (SoM), Responsible Management Education (RME) is central to our educational vision and serves as a foundational element of our business model. This commitment ensures that all our educational efforts—including courses, programs, degrees, and non-degree offerings—are designed to equip future leaders with the knowledge and skills necessary to make ethical, sustainable, and socially responsible decisions in a complex global landscape.

Impact Statement

By integrating Responsible Management Education (RME) principles into every aspect of our educational framework, Cranfield School of Management (SoM) empowers graduates to address pressing global challenges with a focus on sustainability, ethics, and social responsibility.

Key elements of Cranfield SoM's vision for responsible management

Cranfield School of Management (SoM)'s educational vision around RME centres on developing leaders who are equipped to make ethical, sustainable, and socially responsible decisions in today's complex business environment. The university integrates RME principles into its curricula, research, and institutional practices, aiming to foster a culture of sustainability and ethical leadership among its students and faculty.

Key elements of Cranfield SoM's vision for responsible management include:

- Sustainability focus: Embedding sustainability concepts across all programs ensures that future leaders understand the importance of environmental stewardship and sustainable business practices.
- Ethical leadership development: Promoting ethical decision-making and integrity, preparing students to navigate moral challenges and foster ethical cultures within their organisations.

Date published

Nov. 7, 2024

Applicable Date Range

Sept. 1, 2022 - Dec. 31, 2023

Owner

Gabriela Pearson

Contributors

Gabriela Pearson

Sharing rights

Public

Language

British English

Country

United Kingdom

Subjects

Responsible
Management
Education

- Social responsibility: Encouraging a commitment to societal well-being by integrating social responsibility into learning outcomes and encouraging community engagement.
- Integration with global frameworks: Aligning with international initiatives such as the United Nations' Principles for Responsible Management Education (PRME) and the United Nations Sustainable Development Goals (SDGs) to incorporate universal values into education and research.
- Global business school accreditations: In its other global accreditations, particularly AACSB and EQUIS, social responsibility and ethics, responsibility, and sustainability serve as central pillars. These accreditations specifically evaluate the program content, learning goals, course management, and overarching strategy. Through this accreditation, the school is recognized as a global leader in developing educational strategies that advance these key principles of social responsibility, ethics, and sustainability.
- Research and innovation: Conducting cutting-edge research on topics like corporate responsibility, sustainability, and ethical management to contribute to global knowledge and inform teaching.
- Experiential learning: Offering practical experiences, such as simulations and projects, where students apply responsible management theories to real-world scenarios.
- Interdisciplinary approach: Leveraging Cranfield's expertise in technology and engineering to address complex challenges at the intersection of business, society, and the environment.

By prioritising these elements, Cranfield SoM aims to produce graduates who are proficient in management skills and deeply committed to positively impacting society and the planet. Cranfield recognises that RME is essential for long-term business success and global sustainability.



Courses with RME in the course-level learning goals (excluding PhD)

Learning Object

Title: Module Descriptor for Supply Chain Strategy and Sustainability module

Description: Module Descriptor for Supply Chain Strategy and Sustainability module

Date: 21/10/2024

Language: British English

Sharing Rights: Private

Department: School of Management

Learning Object Subject: Supply Chain Strategy and Sustainability

Educational Level: Post Graduate

Learning Outcome: Knowledge of Supply Chain Strategy and Sustainability

Interactivity Type: Interactive

Description: Module Descriptor for Supply Chain Strategy and Sustainability module

MODULE DESCRIPTOR

Module title: Supply Chain Strategy and Sustainability		Module SITS code: M-L/SCSS		Credit rating: 10		
Is this module offered as part of an EngD or other Research Degree Programme(s)?	No	Title of EngD or other Research Degree Programme(s) to include Thematic Area: N/A enter here				
Is the module offered as part of an award of another Higher Education provider (UK or International)?	No	Details of Institution(s) and Award(s) this contributes to: enter here				
Module used by: List All Courses (Module owner 1st)¹ <i>Indicate if Course is AP by inserting AP against the course title</i> AP	Please give details below on a course by course basis					
	Module Type Compulsory / Elective	Pre-requisite modules	Site(s) of delivery	Assessment summary²		
				Type³	Weighting⁴ %	Minimum Mark⁵
	Logistics and Supply Chain Management	Compulsory	N/A	Cranfield	ICW	100%
Procurement and Supply Chain Management	Compulsory	N/A	Cranfield	ICW	100%	40%
Exec Logistics and Supply Chain Management	Compulsory	N/A	Cranfield / Online	ICW	100%	40%
Full details of Assessment and Feedback						
Assessment	Summative / Formative⁶	What am I expected to do?	How will feedback be provided?	When will I receive feedback?		
In-class discussion and exercises	Formative	- you will be asked to prepare, in advance, for a number of classroom discussion sessions - contribute to group discussion	Verbally within classroom following debate	Instant feedback from group debate		
SC Game	Formative assessment - group assessment completed through	Working in teams to run the simulation and achieve the objectives of improving the performance of the	Town Hall sessions at key milestones in the simulation	At various milestones throughout the running of the simulation.		

¹ Enter course name in boxes below – e.g., the primary owner of the module 1st and subsequent courses thereafter.

^{AP} AP Denotes courses provided by Cranfield University to the MoD as part of the Academic Provider contract

² 10 Credit modules should be designed (re-designed) to allow assessment through a single independent summative assessment. Deviations will require approval by the School Director of Education.

³ Assessment Methods: AO- Attendance only; ICW – Individual Coursework; GCW – Group Coursework; IPRES – Individual Presentation; GPRES – Group Presentation; IPRAC – Individual Practical; GPRAC – Group Practical; IPROJ – Individual Project (>20 credits); GPROJ – Group Project (>20 credits); EX – Examination; RP – Reflective Portfolio; OR- Viva Voce examination; THESIS - thesis

⁴ For multi-part assessments the weighting here should be 100% and the type should be MULTI; details of how the weighting is broken down should be given in the 'Full details of assessment' box. Multipart assessments should only be included in courses where there is a clear androgogical reason and where each element forms part of a continuous learning and assessment experience for students.

⁵ (A mark of ≥50% is required to pass the assessment; where the stated minimum mark is 40%, a mark of 40-49% will be compensated by good performance in other modules providing that the overall average is ≥50%, a mark of <40% will require the assessment to be re-taken; where the stated minimum mark is 50%, a mark of <50% will require the assessment to be re-taken.

⁶ Formative feedback is defined in the senate Guide to Assessment of Taught Courses: Design and Feedback

MODULE DESCRIPTOR

	participation in the Global Supply Chain Game in the form of a presentation given by each group at the end of the game where all group members participate).	organisation's supply chain.		
Poster session	Formative	<p>Work in teams to develop an A1 sized poster on the topic allocated to your team.</p> <p>Be available at the poster session to explain the teams ideas and research on the topic</p> <p>Go and look at other teams posters and ask about their poster and topics</p>	<p>Verbally during the poster session from peers and Faculty feedback related to your poster quality and content.</p> <p>General feedback from looking at and questioning other teams about their posters and listening to their explanations on their topic</p>	During the poster session
Individual assignment	Summative	A case based individual assessment set at the end of the module (ICW).	Individualised feedback through the VLE	20 working days after submission
Learning Method(s) and Delivery Mode(s)	<p>The general approach taken in delivering the module is that learning is focussed around formal lecture room sessions, case studies and the and the simulated supply chain game.</p> <p>During the teaching sessions the student will:</p> <ul style="list-style-type: none"> Participate in discussion and question the lecturer on the basis of the pre-learning material and presentations. Apply the knowledge by means of group discussions on the case studies presented and team working during the supply chain game simulation. <p>Post session opportunities include:</p> <ul style="list-style-type: none"> The assessments that form an important part of the module. The ability to discuss points arising out of any of the sessions with the lecturer concerned. 			
Student Workload (Hours)	Contact Time Total	20 Hours	16 Hours Exec	Of the notional work time indicate how many

MODULE DESCRIPTOR

	On-line Content Of which Practical Work = (Lab/Field/Visits) Independent Learning Time	4 Hours Exec 0 Hours 80 Hours	hours take place prior to module delivery: 0 Hours
	Total Notional Learning Hours	100 Hours	
Rationale/Aim ⁷	<p>This module is intended to provide you with a sound foundation to the course by introducing the main concepts and principles that underpin Logistics and Supply Chain Management, including the important issue of sustainability.</p> <p>The module is called ‘Supply Chain Strategy & Sustainability’ and presents the fundamental principles of contemporary logistics and supply chain management within a business context. This unit will explore the ways in which good practice in these fields can contribute to achieving sustainable competitive advantage. Overarching aspects of Supply chain sustainability are explored, such as corporate responsibility and ethics. Further, the Global Supply Chain Game will enable students to understand through an interactive and competitive business game the principles of building an efficient global sourcing and supply chain under conditions of uncertainty so as to achieve high levels of profit and product availability.</p> <p>Global marketplaces are characterised by shortening product life cycles, increasing product variety, and highly variable demand that is difficult to forecast. The module explores how the competitive landscape is constantly changing, and the role of logistics and supply chain management in meeting the challenges raised. Research from Cranfield faculty is integrated with our own case studies, originating from a network of companies in a range of sectors to demonstrate particular concepts around agile and lean supply chains.</p>		
Module Intended Learning Outcomes⁸	<p>On successful completion of this module a student should be able to:</p> <ol style="list-style-type: none">1. Analyse and debate the basic principles underlying supply chain management and understand how the performance of an organisation’s supply chain is impacted by alignment between functions, strategy and partners in the supply chain and changing customer demands and supply chain risks.2. Understand approaches to measuring the lead-time gap and evaluate ways to improve it, including the application of lean thinking.3. Evaluate how agile supply chains can be applied in practice to provide high variety and customised products and how they can be combined with lean approaches in a segmented approach to deliver high performing supply chains.4. Evaluate approaches to supply chain integration, both internally and externally, distinguishing supply relationships from arm’s length to Joint Ventures.5. Evaluate the concepts of sustainable development, sustainable retailing, corporate responsibility, environmental impact and ethics.		
Syllabus/Indicative content	The module comprises the following content:		

⁷ generic content, skills and relevance to the industry sector

⁸ There should normally be no more than five Intended Learning Outcomes per 10 credit module. It is not necessary for all ILOs to be assessed on every assessment instance but all ILOs should be assessable.

MODULE DESCRIPTOR

	<ul style="list-style-type: none">• Supply chains and competitive advantage introduces the principles of logistics and supply chain management and the potential impact on a focal firm's competitive position and its organisational vision and performance.• Supplier relationships covers the different types of supplier relationships from arm's length transactional to Joint Ventures, explores the nature of collaboration between supply chain members and supplier networks.• Managing the lead-time and lean thinking explains how to measure and improve lead-time gap and describes the implementation of lean thinking, identifies the seven deadly wastes and a number of tools and techniques to reduce waste in the supply chain.• Agile supply chains are necessary to thrive in volatile demand situations experienced in many markets today. This session compares and contrasts agile with lean, provides a framework for agile supply chains, including capabilities and practices to improve agility.• Variety challenge focuses on proliferating product ranges and strategies that can be employed to deal with this, such as mass customisation, form postponement and design for the supply chain.• Segmented supply chain strategy explores how supply chain strategy can be differentiated to meet different customer needs, and new market strategies/business models.• Integrating the supply chain explores internal integration between functions and external integration between supply chain members, integrations effect on firm performance and how it can be improved.• Sustainable retail analyses sustainability issues in relation to the retail supply chain, examines sustainability practices followed by major retailers and discusses sustainability of omni / online retail supply chain• Introduction to supply chain sustainability concepts and examines some of the global trends impacting on the sustainability of supply chains and discusses some of the strategies to improve the performance of SCs against the triple bottom line (i.e. environmental, social, and economic/technological implications).• Corporate responsibility and ethics: Understand the business case for major brands to convert to sustainable sourcing and addresses the challenges of aligning suppliers behind a major market transformation effort.
Indicative reading	Reading lists are available for courses and modules through the reading list tab in Canvas. They can also be accessed through the Library website.

Learning Object

Title: Module Descriptor for Green and Sustainable Finance module

Description: Module Descriptor for Green and Sustainable Finance module

Date: 21/10/2024

Language: British English

Sharing Rights: Private

Department: School of Management

Learning Object Subject: Green and Sustainable Finance

Educational Level: Post Graduate

Learning Outcome: Knowledge of Green and Sustainable Finance

Interactivity Type: Interactive

Description: Module Descriptor for Green and Sustainable Finance module

MODULE DESCRIPTOR

Module title: Green and Sustainable Finance		Module SITS code:		Credit rating: 10		
Is this module offered as part of an EngD or other Research Degree Programme(s)?	No	Title of EngD or other Research Degree Programme(s) to include Thematic Area: N/A				
Is the module offered as part of an award of another Higher Education provider (UK or International)?	No	Details of Institution(s) and Award(s) this contributes to: N/A				
Module used by: List All Courses (Module owner 1st)¹ <i>Indicate if Course is AP by inserting AP against the course title</i> AP	Please give details below on a course by course basis					
	Module Type Compulsory / Elective	Pre-requisite modules	Site(s) of delivery	Assessment summary²		
				Type³	Weighting⁴ %	Minimum Mark⁵
Management and Corporate Sustainability	Compulsory	N/A	Cranfield	RP	100%	40%
Full details of Assessment and Feedback						
Assessment	Summative / Formative⁶	What am I expected to do?	How will feedback be provided?	When will I receive feedback?		
Reflective portfolio – 100% Individual reflective report	Summative: an individual report reflecting on the experience of the group project Formative: students will undertake a group project (GPRES) on which they will receive feedback.	Individual report (RP) reflecting on the challenges associated with developing and applying metrics for Green and Sustainable Finance. Not exceeding 1,500 words in total. Group Presentation (GPRES) applying green finance principles to the evaluation of sustainability of a selected case.	Via the VLE for RP In class for GPRES.	Normally within 20 working days of submission deadline. In class.		

¹ Enter course name in boxes below – e.g., the primary owner of the module 1st and subsequent courses thereafter.

AP AP Denotes courses provided by Cranfield University to the MoD as part of the Academic Provider contract

² 10 Credit modules should be designed (re-designed) to allow assessment through a single independent summative assessment. Deviations will require approval by the School Director of Education.

³ Assessment Methods: AO- Attendance only; ICW – Individual Coursework; GCW – Group Coursework; IPRES – Individual Presentation; GPRES – Group Presentation; IPRAC – Individual Practical; GPRAC – Group Practical; IPROJ – Individual Project (>20 credits); GPROJ – Group Project (>20 credits); EX – Examination; RP – Reflective Portfolio; OR- Viva Voce examination; THESIS - thesis

⁴ For multi-part assessments the weighting here should be 100% and the type should be MULTI; details of how the weighting is broken down should be given in the 'Full details of assessment' box. Multipart assessments should only be included in courses where there is a clear androgogical reason and where each element forms part of a continuous learning and assessment experience for students.

⁵ (A mark of ≥50% is required to pass the assessment; where the stated minimum mark is 40%, a mark of 40-49% will be compensated by good performance in other modules providing that the overall average is ≥50%, a mark of <40% will require the assessment to be re-taken; where the stated minimum mark is 50%, a mark of <50% will require the assessment to be re-taken.

⁶ Formative feedback is defined in the senate Guide to Assessment of Taught Courses: Design and Feedback

MODULE DESCRIPTOR

Learning Method(s) and Delivery Mode(s)	<p>Green and Sustainable Finance is an emerging, complex topic of increasing importance for all organisations regardless of sector and size. The module adopts a blended approach to learning to provide an opportunity of exploring this topic from several perspectives, consisting of:</p> <ul style="list-style-type: none"> • Formal lecture room sessions • Case studies • In-class exercises • Guest speakers 		
Student Workload (Hours)	Contact Time Total	20 Hours	Of the notional work time indicate how many hours take place prior to module delivery: 0 Hours
	Of which Practical Work = (Lab/Field/Visits)	0 Hours	
	Independent Learning Time	80Hours	
	Total Notional Learning Hours	100 Hours	
Rationale/Aim ⁷	<p>The aim of the Green and Sustainable Finance module is to develop students' awareness of the ways in which finance and financial services are increasingly integrated into and central to Environmental, Social and Governance (ESG) criteria and in supporting sustainable economic growth. In particular, the module is designed to deliver insight into the role finance can and must play in the transition to a more sustainable economy as well as of the wider national and international regulatory and enabling frameworks.</p>		
Module Intended Learning Outcomes⁸	<p>On successful completion of this module a student should be able to:</p> <ol style="list-style-type: none"> 1. Describe the drivers, strategic implications, risks and opportunities posed by social and environmental challenges for financial systems, including the associated and emergent regulatory framework, financial and capital markets, asset management, public sector policy formation and investment decisions. 2. Describe and critique the emerging theories and practice of sustainable finance and investment as a basis for transition to a more sustainable economy. 3. Critique the existing financial system, policy tools, the ethics of business and finance in society and potential for positive social and environmental impact. 4. Demonstrate practical skills and confidence in understanding key green finance principles, how these are applied in the evaluation and analysis of organisational sustainability and applied to devise mitigation strategies. 5. Understand and explain the vision of green and sustainable finance, its associated products and services and the opportunities and challenges for mainstreaming green finance. 		
Syllabus/Indicative content	<p>Over the duration of the module, students will engage with the following key ideas and concepts:</p> <ol style="list-style-type: none"> 1. Introduction to (sustainable finance): What is the purpose of finance? The big picture: international drivers, national and international policy landscape (Paris Agreement, European Commission's Action Plan on Financing Sustainable Growth, Task Force on Climate-Related Financial 		

⁷ generic content, skills and relevance to the industry sector

⁸ There should normally be no more than five Intended Learning Outcomes per 10 credit module. It is not necessary for all ILOs to be assessed on every assessment instance but all ILOs should be assessable.

MODULE DESCRIPTOR

	<p>Disclosures etc). Regulatory environment and industry response. Systemic risk and investment decision making. Different initiatives globally, e.g.: World bank initiative, UK green finance strategy; disclosure practices and disclosure legislation; EU 2021 sustainable finance disclosure mechanism with 32 metrics against which companies will be ranked, measured and punished.</p> <ol style="list-style-type: none"> 2. Green finance and financial instruments: Organisations' fiduciary duty; Financing instruments for low carbon and alternative energy projects such as green & social impact bonds, blended finance, catastrophe bonds and others. 3. Responsible/impact investing: Responsible or sustainable investing involves integrating social and environmental performance into the investment process. Institutional investors and asset managers; firm level; individuals including high net worth individuals including shareholder activism; stranded assets. Styles of responsible investment. Taxonomy of types. 4. Reinventing capitalism? Business ethics and the purpose of the firm. Exploring challenges to an economic system whose detractors would argue has created and continues to support an imbalanced system in which wealth and power are migrating to a minority elite while simultaneously propagating environmental harm. Who is the stakeholder? Who is the company there for? Consumer and stakeholder activism (Legal forms, B Corps). Making the business case: the sustainability impact on profitability. 5. Understanding risk: Understand the relationship between risk and return, and the impact on sustainable finance. Identifying, evaluating and mitigating the risk to firms of social and environmental externalities. Business planning for resilience. Valuing externalities & internal intangibles (regulatory). Green/Sustainable project/business analytics. Climate-related financial risks, and other environmental and sustainability risks. Asset valuation and climate risk. Assets at risk – reclassification of assets for companies. 6. Environmental valuation: Efforts at 'putting a number on it'. What does sustainability cost, what are the opportunities, how are they measured and reported, who takes what notice and why. Increasing the transparency of companies on their environmental, social and governance (ESG) policies. Tools: EP&L; KPMG true value method; SROI 7. Development finance and social investment: Inclusive finance, through microfinance, gender finance and small and medium enterprise (SME) lending, and relevant regulation. Understanding mechanisms in the social investment market. What are venture philanthropy funds financing and how? Capital flows for a sustainable future. SDGs and finance. 8. Role of the public sector: The role of the public sector and government in sustainable finance: the actors and the law, covering such diverse issues as sanctions law, immunities and aspects of state aid, environmental and social law in financial transactions. The science of climate change and the role of the financial system 9. Green and sustainable FinTech: eg blockchain, financial instruments etc
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MODULE DESCRIPTOR

Indicative reading	Reading lists are also available for courses and modules through the reading list tab in Canvas. They can also be accessed through the Library website.
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Learning Object

Title: Module Descriptor for Leading Sustainable Business module

Description: Module Descriptor for Leading Sustainable Business module

Date: 06/11/2024

Language: British English

Sharing Rights: Private

Department: School of Management

Learning Object Subject: Leading Sustainable Business

Educational Level: Post Graduate

Learning Outcome: Knowledge of Leading Sustainable Businesses

Interactivity Type: Interactive

Description: Module Descriptor for Leading Sustainable Business module

MODULE DESCRIPTOR

Module title: Leading Sustainable Business (SLA-EMBA)		Module SITS code: MXM-LSUB		Credit rating: 10		
Is this module offered as part of an EngD or other Research Degree Programme(s)?	No	Title of EngD or other Research Degree Programme(s) to include Thematic Area: N/A <small>enter here</small>				
Is the module offered as part of an award of another Higher Education provider (UK or International)?	No	Details of Institution(s) and Award(s) this contributes to: N/A				
Module used by: List All Courses (Module owner 1st)¹ <i>Indicate if Course is AP by inserting AP against the course title</i> <small>AP</small>	Please give details below on a course by course basis					
	Module Type Compulsory / Elective	Pre-requisite modules	Site(s) of delivery	Assessment summary²		
				Type³	Weighting⁴ %	Minimum Mark⁵
Executive MBA	Compulsory	N/A	Cranfield/ Grant Thornton	GCW	100%	50%
Full details of Assessment and Feedback						
This module has an integrated assessment with the Strategic Operations Management module						
Assessment	Summative / Formative⁶	What am I expected to do?	How will feedback be provided?	When will I receive feedback?		
Group discussion and Assignment related to learning by doing activities and case studies	Formative	Research and prepare, in advance, for a number of classroom learning by doing activities, case studies and discussion sessions - contribute to group discussion	Verbally within classroom following debate Written summary feedback from module leader	Instant feedback from group debate and group tasks related to learning by doing activities. In time to aid the preparation of the assignment.		
Assignment-related group presentations	Formative	Group presentation to cover tools and techniques related to your assignment. Contribute to group debate.	Verbally within classroom following debate	Instant feedback from group debate. In time to aid the preparation of the assignment.		
GCW	Summative	Each learning team is required to produce a reflective report (3000	Written feedback via Turnitin	Within 20 working days of submission		

¹ Enter course name in boxes below – e.g., the primary owner of the module 1st and subsequent courses thereafter.

^{AP} AP Denotes courses provided by Cranfield University to the MoD as part of the Academic Provider contract

² 10 Credit modules should be designed (re-designed) to allow assessment through a single independent summative assessment. Deviations will require approval by the School Director of Education.

³ Assessment Methods: AO- Attendance only; ICW – Individual Coursework; GCW – Group Coursework; IPRES – Individual Presentation; GPRES – Group Presentation; IPRAC – Individual Practical; GPRAC – Group Practical; IPROJ – Individual Project (>20 credits); GPROJ – Group Project (>20 credits); EX – Examination; RP – Reflective Portfolio; OR- Viva Voce examination; THESIS - thesis

⁴ For multi-part assessments the weighting here should be 100% and the type should be MULTI; details of how the weighting is broken down should be given in the 'Full details of assessment' box. Multipart assessments should only be included in courses where there is a clear androgogical reason and where each element forms part of a continuous learning and assessment experience for students.

⁵ (A mark of ≥50% is required to pass the assessment; where the stated minimum mark is 40%, a mark of 40-49% will be compensated by good performance in other modules providing that the overall average is ≥50%, a mark of <40% will require the assessment to be re-taken; where the stated minimum mark is 50%, a mark of <50% will require the assessment to be re-taken.

⁶ Formative feedback is defined in the senate Guide to Assessment of Taught Courses: Design and Feedback

MODULE DESCRIPTOR

		words) analysing the strategy and the management of Operations within an organisation of their choice.		
Learning Method(s) and Delivery Mode(s)	The Module Leader will be supported, whenever possible, by at least one additional member of faculty to provide contrasting perspectives. In addition, Visiting Fellows and Associates will offer students up-to-date industrial perspectives on the topics discussed. <u>Classroom</u> based teaching will comprise conventional lectures (including Visiting Fellow and Associates), case studies, class discussions and group exercises. <u>Blended learning</u> : Before the module begins, students will assess the current state of sustainability in their organization through internal interview(s). Other pre-work will include watching videos, reading supplementary papers and reports, providing written reflections and completing quizzes.			
Student Workload (Hours)	Contact Time Total	16 hours classroom 4 hours blended	Of the notional work time indicate how many hours take place prior to module delivery: 40	
	Of which Practical Work = (Lab/Field/Visits) Independent Learning Time	80 Hours		
	Total Notional Learning Hours	100 Hours		
Rationale/Aim ⁷	We are all becoming painfully aware of the urgency of taking action on climate change, biodiversity loss, hyper-social inequality and the other myriad social and environmental challenges we face today. We know that only the businesses that respond decisively to them will survive. This module will equip business leaders with the awareness and capabilities they require to steer their businesses towards contributing to positive change whilst reducing costs, managing risk, increasing trust and driving long term sustainable growth.			
Module Intended Learning Outcomes⁸	On successful completion of this module a student should be able to: 1 Identify global social environmental and economic issues and relate how these present both challenges and opportunities to business 2 Analyse business responses to these challenges and opportunities and assess the capabilities they require to respond effectively 3 Classify the stakeholder groups businesses can work with to develop and implement their sustainability strategies and compare collaboration approaches 4 Consider the role of personal leadership in an organization's values, strategic direction and ability to execute its sustainability strategy 5 Critically assess the content and reporting of a businesses' sustainability strategy; recommend improvements and identify barriers to change and approaches to overcoming these			
Syllabus/Indicative content	<ul style="list-style-type: none">• Online pre-work			

⁷ generic content, skills and relevance to the industry sector

⁸ There should normally be no more than five Intended Learning Outcomes per 10 credit module. It is not necessary for all ILOs to be assessed on every assessment instance but all ILOs should be assessable.

MODULE DESCRIPTOR

	<ul style="list-style-type: none">• Assessment of the current state of sustainability in students' own organization• Videos introducing key concepts and theories• Reflection and quizzes• Sustainability challenges and opportunities• Business's role in addressing these• Drivers for action / stakeholder pressures• Business purpose• Strategy and planning • Exploring sustainable futures• Sustainable innovation• Circular economy• Collaboration and partnerships• Leadership• Sustainability performance• Looking to the future
Indicative reading	Reading lists are available for courses and modules through the reading list tab in Canvas. They can also be accessed through the Library website.

Integrating Responsible Management Education in Modules Through General Programmes and Specialist Programmes

Impact Purpose

To embed Responsible Management Education (RME) into Cranfield School of Management (SOM)'s graduate programs, equipping future leaders with the skills to address global challenges through sustainable and ethical business practices.

Impact Statement

Cranfield School of Management (SoM)'s curriculum integrates Responsible Management Education (RME) across both specialist and general management programs, with a focus on embedding sustainability and ethical leadership through compulsory modules, innovative courses and ongoing audits to ensure alignment with current industry needs and sustainable practices

Summary

Courses in this section refer to modules within degree-bearing programmes at Cranfield School of Management (SOM). At Cranfield SOM, accredited modules typically consist of 100 hours of learning with 16-20 hours of face-to-face or online teaching. As part of the actions taken by the Responsible and Sustainable Management Education (R&SME) Committee, an audit of modules was conducted across the graduate education portfolio to assess and track the role of Responsible Management Education (RME) in the curriculum. Upon reviewing all 212 modules, at least 36% explicitly included RME or sustainability in their intended learning outcomes (ILOs) and/or syllabus content. Over the next year, the R&SME Committee will continue this project to identify further opportunities for explicitly integrating RME.

Compulsory Responsible Management Education Modules Across General Management Programmes: Integrating Sustainability and Ethical Leadership at Cranfield School of Management (SOM)

Responsible Management Education (RME)-specific modules are compulsory not only in specialist sustainable management programmes but also in general management courses. This

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Environmental
Economics,
Sustainable Supply
Chain Management

allows every single Cranfield management graduate to have a high standard of understanding of their role as responsible managers.

For example, the 'Leading Sustainable Business' module was introduced as a compulsory component for over 150 students in the full-time and executive MBA programmes. This module equips business leaders to tackle pressing issues such as climate change, biodiversity loss and social inequality. Students learn to identify challenges and opportunities, analyse business responses, assess stakeholder collaboration and understand the role of personal leadership. Additionally, they critically evaluate sustainability strategies, propose improvements and identify barriers to change.

Some student feedback includes:

"A great breadth of content and ideas, some informative and inspiring guest speakers and lots of opportunity to relate our learnings back to our own workplaces.",

"I really enjoyed that the module addressed challenges I am facing with influencing change within the organisation now and provided me with skills to immediately tackle some of these issues. The module leader's understanding of the reality of the corporate world made the module's content applicable to real life and sparked some interesting debate in the breakout sessions."

In addition, the 'Investing for Environmental and Social Impact' module is now compulsory in the MSc Finance programme, with 85 students enrolled during the reporting period. This module integrates ESG criteria into financial decision-making, focusing on how impact investors achieve both environmental and social goals alongside financial returns. Aimed at students pursuing careers in financial services, it covers finance, public policy and investment management, exploring traditional and alternative risk management approaches, green finance and the impact of sustainability on investment decisions.

In the 'Supply Chain Management' module for the MSc Management and MSc Management and Leadership programs, students gain insights into supply chain principles, strategies and performance, with a strong focus on sustainability. Two of the five intended learning outcomes are specifically dedicated to evaluating and improving sustainability in supply chains. Students learn to assess the role of technology in competitive strategy and sustainability, as well as how to enhance supply chain integration to improve performance in terms of time, cost, quality, resilience and sustainability.

The 'Organisational Behaviour: Application' module is taught in the Management MSc programme, as well as in more specialised

programmes. It is based on the premise that organisational success depends on understanding and managing diverse interpersonal dynamics. The module explores key concepts from organisational behaviour, psychology and sociology, with a focus on inclusion and diversity. Students learn to apply these theories to foster inclusive work environments, assess the impact of diversity on team dynamics and develop strategies for personal and professional growth.

“The pre-assignment was good, it allowed group members to brainstorm, learn more about each other in return strengthening relationships and fostering teamwork.”

“Very interesting content about the importance of organisational politics and how pivotal it is to be politically engaged in the future of students' careers. The different leadership theories explained, with their upsides and downsides, made it clear that there is not a single ‘type’ meant to be a leader.”

A new module, ‘Global Business Environment (GBE)’, taught on the MBA, is now part of the MSc in Accounting and Finance program and plays a crucial role in advancing the Sustainable Development Goals (SDGs). This course provides insights into how businesses operate within and influence broader socio-economic and ecological contexts. By exploring international markets, corporate governance and ethical business practices, it directly contributes to SDG 8 (Decent Work and Economic Growth) by promoting sustainable economic practices and inclusive growth. It also supports SDG 9 (Industry, Innovation, and Infrastructure) by encouraging innovative solutions and resilient infrastructure development. Understanding global supply chains and corporate social responsibility fosters responsible consumption and production (SDG 12) and emphasises environmental stewardship (SDG 13). Additionally, the course addresses the role of businesses in reducing inequalities (SDG 10) and promoting gender equality (SDG 5), highlighting how ethical and sustainable business strategies can create more equitable and inclusive economic systems. Overall, the module prepares future business leaders to integrate the SDGs into their strategic decisions, fostering a sustainable global economy.

Innovative and Current Curriculum: Cranfield School of Management's New Sustainability Specialist Modules for Specialist Programmes

Cranfield School of Management (SoM) keeps courses up-to-date and current, which requires constant innovation and change. The modules offered reflect the needs of business and industry, and the research interests of staff.

The 'Green and Sustainable Finance' module ran for the second time in 2022 on the MSc in Management and Corporate Sustainability. The aim of the 'Green and Sustainable Finance' module is to develop students' awareness of the ways in which finance and financial services are increasingly integrated into and central to Environmental, Social and Governance (ESG) criteria and in supporting sustainable economic growth. In particular, the module is designed to deliver insight into the role finance can and must play in the transition to a more sustainable economy, as well as the wider national and international regulatory and enabling frameworks.

Some student feedback:

'The size of the cohort was perfect for the discussion and having the lead of the course in each module allowed continuity and open discussion. Also, the lecturer's knowledge was clear and very dynamic during the four-hour session. Having speakers helped a lot in the conversation and knowing the industry perspective was very fascinating'.

'Great experience, (module tutor) she did her best to introduce the topics to us and invited many guest lecturers for a better view of how green finance actually works from the industry perspective.'

Together with academics from our technical school, Cranfield SOM has developed several new sustainability-focused modules for the MSc in Sustainability. One such module, led by the School of Water, Energy and Environment, is 'Principles of Sustainability'. This module explores frameworks for managing global ecosystems, including the Sustainable Development Goals, Natural Capital, Ecosystem Services and the Circular Economy. Students critically evaluate these approaches and their real-world applications, with a focus on resource use, ecosystem services and sustainability strategies. Upon completing the module, students will critique key sustainability concepts, assess natural capital and ecosystem service approaches for decision-making and evaluate strategies to enhance system resilience. They also explore how the circular economy presents commercial opportunities and apply a per capita approach to analyse resource synergies in case studies.

Some student feedback:

"The first day of lectures was amazing! Starting to understand all the principles of the system was such a great start to the course."

"The content was really insightful, and I really liked the use of examples and book references. I appreciated how the conversation in the chat was embraced by the lecturers, and

the content was adapted to accommodate the questions and applications from different students' industries."

Another newly launched specialist Responsible Management Education (RME) module is 'Economics of Sustainability'. This module equips senior managers with the skills to build effective business cases for sustainability initiatives. It focuses on economic appraisal techniques, such as cost-benefit analysis and discount rates, to demonstrate the value of sustainability projects. Students learn how to communicate sustainability, assess risks and influence stakeholders effectively.

Some student feedback:

"Amazing lecturer. Made the course really interesting, engaging and relevant to us in our roles! The course was taught at a good pace, with plenty of time for discussion and examples. I can't believe how much I enjoyed economics!"

"For me, this subject is one of the most important in being able to engage with my business. The course content matched my high expectations and hopes for this course!"



The signatory's pedagogical approach, which includes RME in all degree program design and pedagogical innovations

Pedagogical Innovations to Create Engaging Learning Experiences

Impact Purpose

Cranfield School of Management (SoM) takes a diverse approach to learning, catering to a wide range of learners and learning styles. This emphasis on diversity supports Cranfield University's vision of creating a distinctive Cranfield learner.

Impact Statement

Faculty are encouraged to develop and implement both physical and digital learning innovations to foster an engaging learning environment.

Summary

Cranfield University's vision is that its learners will be renowned and valued for their distinctive skills and capabilities. The supporting education strategy, which informs Cranfield School of Management (SoM)'s school-specific goals, outlines how specialised courses, innovative academic practices, an excellent learning environment, and a connected learner journey make this vision a reality. In our mission to 'transform the practice of management around the world by creating and disseminating applied knowledge', Cranfield SoM uses different pedagogies that tend to be applied and experiential to address the diversity of its learners.

A broad range of physical and digital tools, along with different teaching materials, are used by lecturers to make learning more accessible, engaging, and suited to various learning styles. These include interactive glossaries, images, videos, case studies, simulations, and games. Learners' suggestions are also being considered, such as incorporating audio-only materials (e.g., podcasts) that can be accessed while travelling or walking. Asynchronous learning tools include discussion boards, where students can comment on pre-learning resources, share ideas, and ask questions about module content. Synchronous learning incorporates live polls, quizzes, and Q&A sessions to check understanding and encourage a wider range of learners to engage and contribute.

Enhancing Student Experience Through Simulations: The K2 'Against All Odds' Exercise in Developing Resilient, Responsible Managers

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A priority area of our education strategy is to improve the experience of all our students, enhance the quality of education, and develop an inclusive learning environment that suits a diversity of learners. These are delivered to our students on graduate and executive programs, and the Cranfield Executive Development team to clients. Cranfield Business Simulations offer experiential learning solutions to enhance strategic thinking, decision-making, leadership, and collaboration in a risk-free environment.

One example is the K2 simulation, developed and run by Professor Elmar Kutsch and Dr Kate Davis from the Action, Execution and Implementation, and Organisational Resilience and Change Leadership Centre. The K2 "Against All Odds" simulation is an immersive, action-based team-building and organisational development exercise. It is inspired by the real-life tragedy of 31 July 2008, on K2, where 11 out of 32 climbers lost their lives. This simulation recreates the intense challenges and critical decision-making scenarios the climbers faced, offering a powerful learning experience. It is particularly effective for organisations operating in volatile, uncertain, complex, and ambiguous (VUCA) environments. Participants navigate high-stakes situations, making strategic decisions under pressure while working cohesively as a team. This fosters resilience, enhances problem-solving skills, and builds stronger, more adaptable teams capable of thriving in unpredictable environments.

From September 2022 to December 2023, the K2 simulation was conducted with 56 teams of project managers in the civil service sector, involving 280 participants. The simulation helps students become more responsible managers by immersing them in a realistic, high-stakes environment that requires critical management skills. It contributes to their development in several key areas:

1. Decision-making under pressure: Students learn to make informed decisions quickly, an essential skill for responsible management.
2. Team collaboration: The simulation emphasises the importance of teamwork, teaching students how to communicate effectively, delegate tasks and support team members.
3. Risk management: Participants face scenarios that require them to assess risks, weigh options and balance short-term gains with long-term sustainability.
4. Leadership skills: Students step into leadership roles, guiding their teams through complex challenges and building confidence and leadership acumen.
5. Ethical considerations: Ethical dilemmas in the simulation encourage students to consider the broader impact of their decisions, promoting responsibility and integrity.

6. Adaptability and resilience: By navigating unpredictable situations, students develop the adaptability and resilience essential for managing real-world challenges.

Another example of our simulations is the Exploring Sustainable Futures game, an immersive experience to accelerate learning through an experiential, transformational journey to the future. This game has been played with over 2,000 post-graduate students, executives and academics since 2018, has been recognised by the Financial Times as an impactful learning experience and showcased at COP26. The simulation encourages players to take a more responsible approach to work and life through interactive role-playing, encouraging a systems-thinking approach and a long-term perspective. Participants assume different societal roles, addressing sustainability challenges and working together to create collective value. This approach fosters critical reflection, empathy, and emotional engagement, helping managers better understand the connection between business and society. The experience builds their capability to lead sustainable change in their organisations, equipping them with essential skills for promoting sustainability.

In Company Projects: Applying Workplace-based Pedagogy to Bridge the Gap between Academic Learning and Professional Practice

Cranfield School of Management (SoM) connects students with companies to address real workplace challenges and opportunities. Workplace-based pedagogy aims to bridge the gap between academic learning and professional practice, preparing students for the realities of their chosen careers.

In the 'Creating Sustainable Organisations' module, for example, British retailer Pets at Home tasked students with critically evaluating their sustainability strategy and proposing research-informed improvements. Both executives from Pets at Home and participating students found the experience "inspiring" and "beneficial."

Every year, marketing module leaders collaborate with companies to help solve real marketing problems. For example, this year, students worked with Heineken, while last year, they partnered with Tefal. Module leaders also identify non-profit institutions annually to help solve marketing problems. In the past, we have supported Surfwell and MIND BLMK.

The 'Social Entrepreneurship' module, part of MCS/MENT and the MSc Sustainability apprenticeship, hosts charity workshops where charities set challenges for the students. In 2023, Cranfield SoM invited a charity to challenge students with securing fundraising and growth in the current economic

climate. Students presented their proposed solutions back to the charity.

During the recent reporting period, Cranfield MBA students engaged in a diverse range of internships and consultancy projects. These initiatives spanned various industries, including fintech, sustainable energy, supply chain management and healthcare. Key projects included developing strategies for CSR and ESG funding with ZeroPA, advancing sustainable facilities management with Serco and enhancing e-waste recycling practices with Lambda Energy. Interns also focused on social impact reporting with Colab-8 Consulting and sustainability reporting with Cubico Sustainable Investments. Consultancy projects addressed issues such as consumer patterns for Harry Specters, the impact of carbon emissions on airline pricing with Cirium, and optimising service delivery for Check Ups Med. Additionally, interns worked on reducing CO2 emissions at Bureau Veritas Nigeria and developing a social impact model for the construction sector. These projects collectively highlight Cranfield's commitment to impactful, real-world problem-solving and sustainable business practices.

Participatory Learning Interventions

In addition to the simulations and industry projects, Cranfield School of Management (SoM) offers diverse participatory learning interventions that actively engage and challenge learners. The 'Sustainable Value Creation' tool (Yang, Vladimirova, & Evans, 2017) encourages students to challenge the status quo and harness their collective diversity of thought to propose solutions that create environmental, social and economic benefits.

As part of the 'Sustainable and Circular Supply Chain' module, students participate in an innovative web-based business simulation game called 'The Fresh Connection', developed by game-based learning provider Inchainge. This game responds to the growing demand for businesses to transform their operations. In the simulation, the fictional e-bike manufacturer Blue Connection hires a new management team to transition its linear value chain to a circular model. Teams face real-world dilemmas where cross-functional understanding and collaboration are key to success as they work to move the company from a 'take-make-dispose' production model to a circular one.



Topics in various courses at the discretion of the professor

Learning Object

Title: Assessment Rubrics of Leading Sustainable Business/ Strategic Operations Management module

Description: Assessment Rubrics of Leading Sustainable Business/Strategic Operation Management modules

Date: 21/10/2024

Language: British English

Sharing Rights: Private

Department: School of Management

Learning Object Subject: Leading Sustainable Business and Strategic Operations Management

Educational Level: Post Graduate

Learning Outcome: Completing the assessment successfully

Interactivity Type: Assessment

Description: Document detailing the assessment marking rubrics for these modules

Leading Sustainable Business module: Individual written proposal							
Assessment criteria	% of Mark	Excellent 80-100%	Very good 70-79%	Good 60-69%	Satisfactory 50-59%	Poor 40-49%	Very poor 0-39%
Max score per category for 30% section		30	23.7	20.7	17.7	14.7	11.7
Coherent, credible proposal <ul style="list-style-type: none"> •Good argumentation for the proposed innovation (fit with strategic priorities, benefits to business and stakeholders) •Understanding of next steps required to implement including leadership support •Demonstrating commercial awareness to propose innovation which delivers will social and /or environmental and economic returns 	30%	Develops coherent, logical, relevant and innovative proposal Exceptional understanding of the implementation success factors and challenges Demonstrates exceptional critical evaluation and commercial awareness.	Well-developed argument and justified proposal. Good understanding of the implementation success factors and challenges Good evidence of critical evaluation and commercial awareness.	Develops good arguments which could have been further elaborated or clarified. Some gaps in consideration of implementation. Demonstrates some critical thinking and commercial awareness.	Develops some arguments but at a superficial level. Pieces of the proposal are not well connected. Some implementation issues have been discussed. Limited critical thinking or commercial awareness	Development of argument is weak and/or a purely descriptive account throughout. Superficial understanding of key implementation issues. Proposal not supported with critical thinking or commercial awareness.	Very limited flow or coherence between the pieces of the proposal. No awareness of key implementation issues. The proposal is judged not to be credible.
Application of course learning <ul style="list-style-type: none"> •Shows an understanding of the material and tools/frameworks covered in the module •Applies the tools in an appropriate manner to a specific company and innovation 	30%	Applies material and tools/frameworks appropriate for the context demonstrating excellent understanding of course learning. Perfect application of all tools/frameworks, no flaws.	Uses appropriate tools/frameworks intelligently, could be challenged over choices. Good use of course learning. Very good application of all frameworks, minor flaws only.	Demonstrates knowledge and understanding of the course material and tools/frameworks. The application is largely correct however there are errors or omissions in their use.	Demonstrates limited knowledge and understanding of the material and tools/frameworks. There are regular and important errors and/or omissions in application.	Demonstrates inadequate knowledge and understanding of the material and tools/frameworks. Provides superficial application with significant errors and/or omissions.	Does not use recognisable material or tools/frameworks from course or other credible source. Analysis mostly based on intuition and judgment.
Max score per category for 20% section		20	15.8	13.8	11.8	9.8	7.8
Identification and use of relevant data from appropriate sources <ul style="list-style-type: none"> •Identifies appropriate sources of data and applies this data effectively •Identifies the nature of the data and the source and evaluates the reliability of the source and data 	20%	Extensive use of data from multiple sources throughout to support analysis. Where data cannot be obtained, educated assumptions, informed by available data, are present. Data is assessed critically and a determination of its impact on the proposal discussed.	Demonstrates very good effort to collect and use appropriate data. Where data cannot be obtained, this is acknowledged. The report acknowledges data limitations and their impact on the analysis.	Demonstrates a sound / basic effort to collect and use data appropriately with few errors. There is little assessment of the quality of data or attempt to "fill in blanks" with judgements based on the data available.	Demonstrates a basic effort to collect and use appropriate data. Limitations in explanation or justification. There is little assessment of data quality or basis for assumptions that need to be made where data is not available.	Limited data is used to inform the analysis — frameworks. No assessment of data quality or awareness of its potential implications upon the plan.	Demonstrates little effort to collect and use data. No discussion of data quality or its implications.
Quality of presentation <ul style="list-style-type: none"> •Coherence and flow •The outcome of each section of the proposal generates implications that influence the subsequent sections •Clarity, flow, good illustrations 	20%	Exceptional structure and clarity of expression. Illustrations, figures and tables enhance the presentation and are 100% appropriate. Referencing clear, relevant and consistent. Almost error-free.	Language fluent, thoughts and ideas clearly expressed. The structure is very coherent and good use of visuals, tables etc. Relevant referencing, with few errors.	Logical structure but not fully coherent and the flow can be challenging at times. Errors in tables, figures at times. Relevant referencing but with some errors.	Language understandable, meaning apparent but not explicit, grammar and/or spelling poor. Often tables and illustrations add little or are poorly explained. Inconsistent referencing.	Very difficult to follow the structure, writing or argument. Visuals often inappropriate and fail to add anything to the report. Inconsistent referencing with some errors.	Almost Incomprehensible. No meaningful structure. Inconsistent or absent referencing. We have no idea from where the ideas or data originates — if there is any data.

Learning Object

Title: Reading List for Organisational Behaviour module

Description: Reading List for Organisational Behaviour module

Date: 21/10/2024

Language: British English

Sharing Rights: Private

Department: School of Management

Learning Object Subject: Organisational Behaviour

Educational Level: Post Graduate

Learning Outcome: To provide reading material for module

Interactivity Type: Reading

Description: List of Books and Journals that must be read for this module plus suggested additional reading

Organisational Behaviour: Application (CURRENT)

[View Online](#)

M-T/OBA ; MSc in Management ; MSc in Management and Corporate Sustainability ; MSc in Management and Entrepreneurship, MSc Management and Human Resource Management ; Richard Kwiatkowski

11 items

Introduction to OBA (1 items)

Pre-Session Preparation

Fifth discipline fieldbook: strategies and tools for building a learning organization, by Peter M. Senge; Charlotte Roberts; Richard B. Ross; Bryan J. Smith; Art Kleiner, 1994

[Book](#) | **Essential** | Read: 'The Ladder of Inference', pp. 242-246.

Introduction to OBA (3 items)

Optional Background Materials

Organizational Behaviour, by David A Buchanan; Andrzej A. Huczynski, 2019

[Book](#) | **Essential** | Read: Chapter 1 'Explaining Organizational Behaviour', pp. 2-36.

Fundamentals of organizational behaviour: principles and applications for improving workplace performance, by Chia-Yu Kou-Barrett, 2024

[Book](#) | **Essential**

Fundamentals of organizational behaviour: principles and applications for improving workplace performance, by Chia-Yu Kou-Barrett, 2024

[Book](#) | **Essential**

Personality (3 items)

Optional Background Materials

Organizational Behaviour, by David A Buchanan; Andrzej A. Huczynski, 2019

[Book](#) | **Further** | Read: Chapter 6 'Personality', pp. 176-210.

The Myers Briggs type indicator: a critical review and practical guide, by Rowan Bayne, 1995

[Book](#) | **Further** | Read: 'Why psychological type?', pp. 1-16.

Psychological types at work, by Rowan Bayne, 2004

[Book](#) | **Further** | Read: pp. 151-164.

The Team (2 items)

Optional Background Materials

Team roles at work, by R. Meredith Belbin, 2022

[Book](#) | [Further](#)

Organizational Behaviour, by David A Buchanan; Andrzej A. Huczynski, 2019

[Book](#) | [Further](#) | Read: Chapter 11 'Group Structure', pp. 345-379.

Managing People (2 items)

Employee trust and workplace performance - in Journal of Economic Behavior & Organization, by Sarah Brown; Daniel Gray; Jolian McHardy; Karl Taylor, 2015-08

[Article](#) | [Essential](#)

Answerable for what? role of accountability focus in line manager implementation - in Human Resource Management, by Rebecca Hewett; David Sikora; Jeremy Brees; Rowan Moelijker, 2024-03

[Article](#) | [Essential](#)

Embedding Responsible Management Education Through Specialist Sessions and Cross-Disciplinary Modules

Impact Purpose

Cranfield School of Management (SoM) integrates responsible management concepts through module topics, case studies, specialised sessions within general modules and Responsible Management Education (RME) - focused assessments at the discretion of each professor.

Impact Statement

Cranfield School of Management (SoM) faculty prioritises Responsible Management Education (RME) by actively addressing sustainability, ethics and Sustainable Development Goals (SDGs) across various management disciplines and assessments, ensuring quality education in responsible management.

Summary on Embedding Responsible Management Education Through Specialist Sessions and Cross-Disciplinary Modules

Besides offering specialised modules on sustainability, Cranfield School of Management (SoM) integrates Responsible Management Education (RME) into the curriculum rather than treating it as a standalone subject. Since the last PRME report, the faculty has intentionally further embedded RME throughout various modules by adding specialist sessions focused on RME and creating cross-disciplinary integration through joint assessments. The Responsible and Sustainable Management Education (R&SME) Committee, the governing entity at SoM that oversees RME, tracks and encourages the inclusion of RME topics across all modules. Examples from 2022-2023 demonstrate how lecturers have consistently emphasised RME in module topics.

Specialist Sessions Highlighting Responsible Management Education in Modules

In line with Cranfield School of Management (SoM)'s vision to be a world-leading management school in responsible management thinking and practice, significant efforts have been made in recent years to embed Responsible Management Education (RME) across the various modules offered by the School. Below

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are some examples that demonstrate how this is being achieved. Several compulsory modules within the Marketing and Leadership MSc programme address PRME issues. For example, 'Evaluating Marketing Effectiveness' provides students with the knowledge and skills to develop and assess strategic marketing plans while considering financial and ethical outcomes. This module includes strategic marketing planning with a systems-thinking approach, evaluating high-performance strategies, developing Corporate Social Responsibility programs, and understanding marketing ethics and their impact on stakeholders and society. The module 'Understanding Markets and Competitors' provides students with the knowledge and skills to evaluate how markets and competition affect an organisation's ability to develop and deliver marketing strategy. This is achieved by using analytical frameworks, tools and techniques to responsibly inform decision-makers. Students also gain knowledge on ethical issues concerning markets and competitors to support responsible behaviour.

The 'Integrated Marketing Communication' module leader invited the Director of Curriculum and Assessment of the Institute for Advertising Ethics to present a session on "The Importance of Studying Ethics in Advertising." This module also adopts several case studies which have a strong RME focus, including a case study on the Pan Norway "StopTheWedding" campaign, which explores gender equality issues (SDG 5), a case study on the United Colours of Benetton's "UNHATE" campaign and the AIDS David-Kirby campaign, which addresses "Marketing Communications Targeting Vulnerable Groups" (SDG 10).

The Organisational Behaviour module introduces students to key concepts in organisational behaviour, psychology, and sociology to understand how people influence the success of organisations and address several Sustainable Development Goals (SDGs). For instance, the stress and well-being sessions relate to SDG 3 (Good Health and Well-being), while the Equality, Diversity, and Inclusion (EDI) session addresses SDG 5 (Gender Equality). Ethical leadership and personal development sessions support SDG 8 (Decent Work and Economic Growth), and the ethics session aligns with SDG 16 (Peace, Justice, and Strong Institutions). Sessions focus on understanding human behaviour, interpersonal relationships, and organisational dynamics, which are critical for fostering ethical and sustainable practices. By teaching concepts like leadership, diversity, emotional intelligence, and organisational change, the module encourages managers to make decisions that consider the well-being of employees, promote inclusivity, and respond effectively to external challenges. This understanding helps leaders create more responsible, people-centric management strategies that benefit both the organisation and wider society, aligning with principles of responsible management.

The 'Family Business Management' module is a compulsory course in the MSc in Management and Entrepreneurship program, focusing on managing and growing established family businesses. Although RME is not explicitly mentioned in the module's intended learning outcomes, it includes several case studies to explore the role and importance of governance and responsible management within family businesses from business ownership and family perspectives. Additionally, students are required to apply various theoretical models to their family businesses, discuss these with their peers, and then reflect on the implications and the steps they should take moving forward.

As part of the 'Leadership in Action' module, the full-time MBA students have worked with the Chair of a high-tech environmental and civil protection technology business. Using a "detective story" format that combines story-telling, role-play and discussion, students experienced the different stages of a severe bribery crisis - from discovery to management to resolution. At every stage, they were challenged to reflect not just on the threat to the firm and its commercial situation but also on the environmental consequences, the political, social and economic effects on the global community of countries served by the business, and the human dilemmas around governance and decision making.

Cross-Disciplinary Responsible Management Education Integration through Joint Assessments

Responsible management education (RME) topics often span different management areas, and Cranfield School of Management (SOM) integrates RME across modules through joint assessments. For instance, the module leaders for 'Strategic Operations Management' and 'Leading Sustainable Business' collaborated on a joint assessment for the Executive MBA. This assessment requires students to analyse the current operations of a selected organisation and propose improvements or innovations that align with its sustainability and operations strategy. Students can choose organisations from around the world, including non-profits with product sales. They then prepare a professional report for the board, examining the organisation's operations and sustainability strategies, followed by recommendations for improvement.

This assignment encourages students to apply real-world scenarios, bridging theory and practice to understand how sustainability integrates into business operations. By evaluating operations and sustainability strategies, students develop critical analysis skills, enhancing operational efficiency while considering environmental and social impacts. They learn to emphasise the

strategic role of operations in achieving competitive advantage and sustainability, ensuring that improvements align with broader business goals. This joint assessment fosters collaboration hones professional reporting skills and provides practical experience in making recommendations that balance economic, social and environmental considerations.

1. The PRME Signatory Member involves the following elements of RME in its research endeavors. Mark all that apply.



Responsibility-related conferences

Event

Title: 25th Anniversary Conference of the Agile Supply Chain Research Club

Description: Event aiming to improve supply chain practice through sharing the output of Cranfield University's research and providing a cross sector, collaborative forum where promising supply chain practices could be shared. The conference focussed on 'Supply Chain Challenges and Opportunities' and covered the following themes: Supply chain risk and resilience, People are our most important asset, Supply chain digitalisation, Sustainability and decarbonisation, Collaborative supply chains and relationship management.

Date: 09/10/2024

Language: British English

Sharing Rights: Public

Event Date Range: 27/11/2023 - 27/11/2023

Location: Cranfield University Campus

Speakers: Emeritus Professor Martin Christopher (Cranfield), Dr Thomas Schulte (Bosch, Senior VP, Head of Governance Supply Chain Management and Procurement), Kieron O'Connor (Sony Playstation, Senior Supply Chain Risk and Security Manager)

Description: Event aiming to improve supply chain practice through sharing the output of Cranfield University's research and providing a cross sector, collaborative forum where promising supply chain practices could be shared. The conference focussed on 'Supply Chain Challenges and Opportunities' and covered the following themes: Supply chain risk and resilience, People are our most important asset, Supply chain digitalisation, Sustainability and decarbonisation, Collaborative supply chains and relationship management.

URL:

• <https://www.cranfield.ac.uk/som/research-clubs/agile-supply-chain-research-club/25th-anniversary-conference>

Event

Title: Human Relations 75th Anniversary Conference

Description:

Human Resources conference held in London in April 2023

Date: 09/10/2024

Language: British English

Sharing Rights: Public

Event Date Range: 19/04/
2023 - 21/04/2023

Location: London

Speakers: Gianpiero and
Jennifer Petriglieri

Description: The main purpose of the event was to bring together a diverse group of scholars who share an interest in social relations at work, broadly defined. Most of the conference consisted of paper presentations in streams convened by Associate Editors of Human Relations.

URL:

• [https://
www.humanrelationsjournal.
org/conference-proceedings-
human-relations-75th-
anniversary/](https://www.humanrelationsjournal.org/conference-proceedings-human-relations-75th-anniversary/)

Examples of responsibility-related conferences that Cranfield School of Management engages with

Impact Purpose

Faculty across the Cranfield School of Management (SoM) actively participate in responsibility-related conferences by organising committees, presenting papers and leading professional development workshops. Some notable examples from the reporting period are outlined in this section.

Impact Statement

Cranfield SoM conducts research into more responsible management and educational practices, sharing its findings and best practices with educators and practitioners through conferences.

Summary

Cranfield SoM actively demonstrates its leadership in Responsible Management Education (RME) through its involvement in organising and hosting impactful conferences and workshops. Notably, Dr Deirdre Anderson contributed to the 9th International Community, Work and Family Conference in Rio de Janeiro, focusing on inclusive communities, work, and family dynamics. Additionally, Cranfield hosted the 25th Anniversary Conference of the Agile Supply Chain Research Club, featuring expert speakers discussing vital supply chain themes, including sustainability and resilience. The institution also supports professional development in RME by conducting workshops for educators and executives led by Professor Emma Parry. Moreover, Cranfield SoM scholars present their research at prestigious conferences, addressing key topics in entrepreneurship, sustainability, and supply chain management. Through these initiatives, Cranfield underscores its commitment to fostering a culture of ethical leadership and promoting sustainable practices across various sectors.

Showcasing Cranfield School of Management leadership in organising and hosting conferences with a Responsible Management Education focus

Dr Deirdre Anderson, Director of the Gender, Leadership and Inclusion Research Centre, Cranfield School of Management (SoM), was a member of the organising committee for the 9th International Community, Work and Family Conference, held in

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Gabriela Pearson

Contributors

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Country

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Subjects

Entrepreneurship,
Human Resources,
Responsible
Management
Education, Corporate
Social Responsibility
(CSR), Sustainable
Supply Chain
Management

Rio de Janeiro, Brazil. This conference brought together a global multidisciplinary community of scholars and practitioners to contribute to debates in the community, work and family fields while stimulating further research towards a more inclusive future. The conference theme was "Inclusive Community, Work and Family: Imagining Global Futures Through Local Contexts." Dr Anderson had specific responsibility for organising the doctoral sessions in collaboration with several other universities worldwide.

On 27 November 2023, Cranfield SoM hosted the 25th Anniversary Conference of the Agile Supply Chain Research Club, which aims to improve supply chain practices by sharing Cranfield University's research outputs and providing a cross-sector collaborative forum for the exchange of promising supply chain practices. The conference focused on 'Supply Chain Challenges and Opportunities' and featured an impressive line-up of speakers, including Emeritus Professor Martin Christopher (Cranfield), Dr Thomas Schulte (Bosch, Senior VP, Head of Governance Supply Chain Management and Procurement), and Kieron O'Connor (Sony PlayStation, Senior Supply Chain Risk and Security Manager). The conference addressed themes such as supply chain risk and resilience, the importance of people, digitalisation, sustainability and decarbonisation, and collaborative supply chains and relationship management. The conference was well attended by 75 representatives, and an evening Gala Dinner was held, where awards were presented to those who had made significant contributions to the club over its 25-year history: Emeritus Professor Martin Christopher OBE, Emeritus Professor Richard Wilding OBE, Visiting Professor Alan Waller OBE, and Sean Culey (Head of Value Chain at the Manufacturing Technology Centre).

Cranfield School of Management's Contribution to Advancing Inclusive Education and Professional Development

A chapter has been accepted in the British Academy of Management's Compendium of Knowledge on Inclusive Learning and Teaching Practice in Business Schools. Course Directors Dr Rosina Watson and Dr Kenisha Garnett reflect on how to deliver interdisciplinary and inclusive professional education for sustainability, drawing on their experience in designing and running Cranfield's part-time MSc in Sustainability. By iterating between their reflections, supported by evidence from learners, faculty, staff, and employers, and existing literature, they developed a multi-level framework for embedding inclusive learning and teaching at the individual, course, institutional and societal levels. Their focus on meeting the needs of professionals attracts learners who are representative of society and capable of creating immediate positive impacts within their

organisations. They emphasise that institutional enablers are crucial for enhancing diversity through interdisciplinarity while considering the societal level, encouraging educators to think about their programmes' broader context and impact. The team identifies key lessons and best practices for the future development of inclusive professional learning experiences at Cranfield and beyond.

A book chapter setting out the theoretical underpinnings and design and features of the Exploring Sustainable Futures game (Read more in Principle 3), and presenting data and analysis on the early evaluation of its impact on players, entitled "Teaching Sustainability: More than Just a Game" was published in the Handbook on Teaching and Learning in Operations Management (Edward Elgar) (Watson R, Adams G & Borrelli R., 2024).

Another way Cranfield SoM contributes to responsibility-related conferences is through leading professional development workshops for educators and executives. Professor Emma Parry, Head of the Changing World of Work Group, is a recognised expert in Human Resource Management (HRM) and plays a leading role in several global research projects in this area. A few notable workshops she has led include the "Understanding the Future Workforce" workshop for the Ministry of Defence (26 September 2022), the "Future of Work" session for the CIPD Police Forum HRM Head of Profession Workshop (26 October 2022), a workshop on "Innovation in Managerial Education" at SIMA (Italian Academy of Management) 'Festival of Work' (2-3 February 2023), and a keynote on the Future of Work for the ACEDE Spanish Academy of Management (26 June 2023).

Showcasing Impactful Research: Cranfield School of Management Scholars at Leading Conferences on Entrepreneurship, Sustainability and Supply Chain Management

The presentation of research papers plays a pivotal role in disseminating knowledge and fostering discourse. The following narrative encapsulates the diverse array of research topics presented by Cranfield SoM scholars at esteemed conferences, particularly highlighting their contributions to fields such as entrepreneurship, sustainability, innovation, and management. We have highlighted notable examples where our academics presented at conferences with a focus on Responsible Management Education (RME):

- • **Entrepreneurship:** Richard Adams presented "An Adapted Dilemma Game for Social Enterprise Pedagogy" at the Responsible Management Education Research Conference. This innovative approach emphasised experiential learning through dilemma-based scenarios,

equipping future leaders with the skills to navigate complex ethical and managerial challenges. At the ISBE (Institute for Small Business and Entrepreneurship) conference, Zimu Xu presented a compelling paper titled "Entrepreneurial Resilience in Times of Crisis: Evidence from China in the Era of COVID-19". This research explored the adaptive strategies and resilience demonstrated by Chinese entrepreneurs during the pandemic, offering valuable insights into crisis management and recovery. At the BAM (British Academy of Management) conference, Richard Adams and Zimu Xu co-presented "Entrepreneurs and the Climate Emergency: Exploring the Micro-Foundation of Pro-NetZero Actions Among SMEs," investigating grassroots initiatives by SMEs to combat the climate crisis.

- **Sustainable Business:** At the 75th Anniversary Conference of Human Relations held in London, Annette Yunus-Pendrey presented "Going Back to My Roots: Stability Despite Liminality in the Search for Meaningful Work", which examined career stability amidst transitions. Rosina Watson discussed "The Role of Sustainable and Responsible Management Education in Training Responsible Future Leaders in an Age of Uncertainty". Miying Yang provided insights with "Insights from History on the Parallel Digital and Sustainable Transitions", drawing lessons from past industrial transitions to inform current practices.
- **Logistics, Procurement and Supply Chain Management:** The Logistics team participated in the 27th Annual Conference of The Chartered Institute of Logistics and Transport (UK) – CILT(UK), where they presented research on sustainability in supply chains, focusing on workers' rights, tax tariffs, and emission regulations. At the 31st Euroma Conference, they redefined social sustainability in response to recent supply chain disruptions, examining supplier development decisions that enhance sustainability performance.



Responsibility-related regular research seminars

Event

Title: 25th Anniversary Conference of the Agile Supply Chain Research Club

Description: Event aiming to improve supply chain practice through sharing the output of Cranfield University's research and providing a cross sector, collaborative forum where promising supply chain practices could be shared. The conference focussed on 'Supply Chain Challenges and Opportunities' and covered the following themes: Supply chain risk and resilience, People are our most important asset, Supply chain digitalisation, Sustainability and decarbonisation, Collaborative supply chains and relationship management.

Date: 09/10/2024

Language: British English

Sharing Rights: Public

Event Date Range: 27/11/2023 - 27/11/2023

Location: Cranfield University Campus

Speakers: Emeritus Professor Martin Christopher (Cranfield), Dr Thomas Schulte (Bosch, Senior VP, Head of Governance Supply Chain Management and Procurement), Kieron O'Connor (Sony Playstation, Senior Supply Chain Risk and Security Manager)

Description: Event aiming to improve supply chain practice through sharing the output of Cranfield University's research and providing a cross sector, collaborative forum where promising supply chain practices could be shared. The conference focussed on 'Supply Chain Challenges and Opportunities' and covered the following themes: Supply chain risk and resilience, People are our most important asset, Supply chain digitalisation, Sustainability and decarbonisation, Collaborative supply chains and relationship management.

URL:

• <https://www.cranfield.ac.uk/som/research-clubs/agile-supply-chain-research-club/25th-anniversary-conference>

Responsibility-related Regular Research Seminars

Impact Purpose

Cranfield School of Management (SoM) regularly hosts research seminars to disseminate research and practitioner-facing research clubs to ensure that research is driven by industry needs.

Impact Statement

SoM takes its responsibility to make a positive societal impact through research seriously, and engaging with industry and academics to share this is a core activity.

Summary - Responsibility-related Regular Research Seminars

SoM engages in conceptual and empirical research to advance understanding of the role, dynamics and impact of corporations in creating sustainable social, environmental, and economic value. Cranfield SoM hosts research seminars and practitioner research clubs to disseminate this research focused on improving supply chain resilience, sustainability and humanitarian logistics.

Enhancing Resilience and Sustainability: Cranfield School of Management's Seminar Series on Humanitarian Logistics and Supply Chain Innovation

The Centre for Logistics and Supply Chain, one of the six centres within Cranfield SoM, hosts a regular online research seminar series. These webinars and panel discussions focus on improving resilience and sustainability within supply chains. A recent topic was Humanitarian Logistics, which explored humanitarian supply chain operations and how they help build efficient system designs for delivering goods and services to regions affected by disaster and conflict. This publicly available webinar gave current students, alumni, and interested individuals insights into the challenges of building humanitarian systems while managing chaos and ensuring survival in resource-scarce, insecure environments. A practitioner offered advice on overcoming barriers in humanitarian relief operations. A key takeaway was the need to shift the discourse around refugee crises and humanitarian relief operations towards opportunities for positive social change. Organised by Professor Emel Aktas, the speakers included both academics and an industry guest

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Subjects

Responsible Management Education, Corporate Social Responsibility (CSR), Sustainable Supply Chain Management

speaker formerly with The Office of the United Nations High Commissioner for Refugees (UNHCR).

Practitioner Research Clubs: Driving Innovation and Business Outcomes

Cranfield SoM hosts several practitioner research clubs, which are industry-sponsored forums that enable participants and their organisations to influence the school's research agenda and contribute to the production of reports and articles in professional outlets. Cranfield SoM continues to engage actively and successfully with Research Club members, leading to impressive business outcomes and innovations during the last reporting period.

For instance, the Agile Supply Chain Research Club (ASCRC), founded in 1998, is part of Cranfield SoM's Centre for Logistics, Procurement and Supply Chain Management. The club aims to improve supply chain management practices by creating a collaborative forum where member companies and faculty can share knowledge and experience. The club provides a forum for industry and academic professionals to discuss and address current challenges and innovations in supply chain management. It emphasises themes such as supply chain risk, resilience, digitalisation, sustainability, and decarbonisation. The club aims to foster cross-sector collaboration and improve supply chain practices through shared research findings and best practices. In 2022, Supply Chain Sustainability was voted the second most important challenge by member companies, and in 2023, it was voted the top challenge. In June 2023, a full-day collaborative event on sustainability, decarbonisation, and circular supply chains was held, featuring representatives from companies like Nestlé, Systemiq, Climate-KIC, and Circulor, alongside Cranfield academics. At the ASCRC conference in November 2023, sustainability remained a key focus, with both Bosch and DHL sharing their progressive approaches. During the reporting period, the number of member companies ranged from 12 to 14.

In 2023, the Strategic Marketing Forum promoted responsible business practices through events addressing topics like greenwashing, employee brand advocacy, and modern advertising's influence on social and cultural behaviours. They also emphasised the importance of strategic communications, stakeholder engagement and managing customer relationships effectively. These initiatives are aimed at helping businesses adopt ethical marketing strategies and avoid misleading claims. Some sessions from 2023 that focussed on Responsible Management Education (RME) topics include: 'Strategy, Stories and Purpose: How do the stories of your organisation help or hinder?' by Professor Kevin Morell, Rowlands Chair in

Transformational Strategy at Cranfield SoM, and 'Greenwashing - how "dirty" firms are given an unspoken social license to pollute and to lie about it' by Pavlos A Vlachos, Chair in Sustainability at Alba Graduate Business School.



Research funding specifically related to responsibility

Responsible Management Education-Related Research Projects at Cranfield School of Management (SoM)

Impact Purpose

Supported by our research strategy, Cranfield School of Management (SoM) has made steady progress in increasing research income. This section provides an overview of funding from various councils, as well as notable examples of Responsible Management Education (RME) focused projects.

Impact Statement

Several key projects have been awarded funding to address critical challenges, offering innovative solutions and policy recommendations that drive sustainable development and social resilience.

Cranfield School of Management (SoM)'s Research Excellence: Advancing Research Impact and Income Goals

Cranfield SoM's research output has seen notable improvements, ranking 7th in the UK (out of 108 Business and Management Schools submitted) in the 2021 Research Excellence Framework (REF) for research impact. This progress is underpinned by a new Research Strategy (2023–2030) aimed at enhancing research quality and international collaboration. Frequent impact-related events are organised to showcase the requirements for achieving REF4 impact, and activities (e.g. research and consulting projects, applied work with industry and key stakeholders) that could generate impact are continuously monitored.

In addition to improving our research impact ranking, we have set a Key Performance Indicator (KPI) to increase research income per full-time equivalent from €12,000 (2022 baseline) to €18,000 (2027 target). These KPIs have been implemented widely across Cranfield SoM and subsequent targets are developed for each Centre. Substantial progress has been made with this KPI over recent years, as in 2019, Cranfield SoM generated a total research income of €1,225K, rising to €1,444K in 2023. Based on 80 staff members, this research income in 2023 already meets the 2027 target, with an average income per full-time equivalent of €18.05K.

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Management
Education

Highlighting Key Research Achievements: New Doctoral Training Programmes and Significant Funding for Impactful Projects

Cranfield SoM is now involved with two Centres for Doctoral Training / Doctoral Training Programmes funded by the Engineering and Physical Sciences Research Council (EPSRC) and the Economic and Social Research Council (ESRC), respectively. These programmes will address contemporary challenges such as sustainability, the climate emergency, digital social sciences, and net-zero aviation. PhD students will be recruited and supervised by Cranfield SoM staff.

SoM has secured significant funding for various research projects over recent years, including large projects supported by UK and European Research Councils such as the Biotechnology and Biological Sciences Research Council (two projects), ESRC (four projects), EU (five projects), EPSRC (two projects), Innovate UK (three projects), as well as the UK Ministry of Defence/DSTL (numerous projects) and DEFRA/UK Government departments. Local stakeholders, such as SEMLEP, have also provided funding in addition to the Doctoral Programmes mentioned earlier. These projects are primarily applied, working closely with stakeholders and reflecting SoM's research ethos of impactful, interdisciplinary research that addresses societal and business challenges such as sustainability, diversity, and operational efficiencies.

Overview of Key Research Projects Advancing Responsible Management Education: Focus on Supply Chains, Sustainable Food Systems, and Well-being

During this reporting period, several significant research projects have been initiated, addressing crucial issues with a Responsible Management Education (RME) focus, ranging from supply chain resilience to sustainable food systems and employee well-being. These projects collectively address critical challenges, offering innovative solutions and policy recommendations that promote sustainable development and social resilience. Below is an overview of some of these projects, their objectives, and the funding that supports them:

- The ReSChape project, awarded £274,000 and active from October 2022 to September 2025, aims to reshape global supply chains by analysing the impacts of social, economic and environmental changes, including those caused by the COVID-19 pandemic. The team addresses challenges such as productivity divergence and strategic supply access, proposing models that emphasise resource efficiency,

closed-loop systems, and humanitarian approaches. Additionally, the project aims to develop innovative tools for monitoring and assessing trade patterns, analysing income inequalities, and promoting decent work and social cohesion. The goal is to formulate policy scenarios that ensure fair, inclusive, and sustainable global value chains.

- Another key project is "Realigning UK Food Production and Trade for Healthy and Sustainable Diets," funded at £178,000, which researches how to align food production and trade with public health and sustainability goals in the UK.
- The ECOREADY project awarded £735,000, focuses on ecological resilience in Europe's food system, with an emphasis on consumer-driven policies and socio-ecological strategies. The team is establishing an Observatory and a network of 10 Living Labs to develop resilience strategies.
- Meanwhile, the "Co-production of Healthy, Sustainable Food Systems for Disadvantaged Communities" project, funded at £505,000, empowers citizens from diverse backgrounds to co-develop food products, supply chains, and policy frameworks that ensure access to affordable, healthy, and sustainable diets.
- In the "UK Farm Assurance Schemes and Food Production Standards" project, funded by DEFRA, researchers are identifying farm assurance schemes in England and Wales that meet higher environmental standards and assessing their impact at both farm and global levels.
- Lastly, the Exploring Sustainable Futures Game project, funded with a £45,000 grant from Research England, examines the game's impact on sustainability education, with research conducted from January to July 2023.



Faculty members must report their responsibility-related research publications regularly

Public Media

Title: Sustainability Related Research Webpage

Description: Webpage highlighting and giving details about sustainability related research being carried out by Cranfield University

Date: 21/10/2024

Language: British English

Sharing Rights: Public

Author: Cranfield University

Media Name: Cranfield University Website

Published Date: 31/12/2023

Degree Of Recognition: International

Media Type: Webpage

Duration: 1

URL:

- <https://www.cranfield.ac.uk/campaigns/green-economic-recovery/leadership-and-management>

Enhancing Research Impact: Utilising Platforms for Responsibility-Related Publications and Sustainable Development Goals Mapping at Cranfield School of Management

Impact Purpose

To enhance the visibility and impact of responsibility-related research at Cranfield School of Management (SoM) by utilising the Current Research Information System (CRIS) and mapping contributions to the Sustainable Development Goals (SDGs).

Impact Statement

By encouraging faculty to use the Current Research Information System (CRIS) for updating research activities and mapping Sustainable Development Goals (SDGs) contributions, Cranfield School of Management aims to improve the accessibility, recognition, and global impact of its research through enhanced visibility in rankings and databases like Scopus.

Enhancing Research Impact: Utilising Platforms for Responsibility-Related Publications and SDG Mapping at Cranfield School of Management

To report responsibility-related research publications, faculty at Cranfield SoM are encouraged to regularly update the Current Research Information System (CRIS), a platform used to collect, manage, and disseminate research-related information. The CRIS is linked to Cranfield Library Services, and a project is underway to map the Sustainable Development Goals (SDGs) addressed by each piece of research. Cranfield Library Services has issued a Guidance Note on affiliation keywords to ensure that Cranfield's research across the 16 different subject areas is recognised in the rankings. This can be achieved by using the keywords employed by the Times Higher Impact Rankings to identify relevant research within the Scopus database.

Moreover, CRIS helps faculty and researchers maintain their profiles, update research activities, and ensure that their work is accurately represented and accessible both internally and externally. It is often linked to research performance evaluations, rankings, and integration with databases like Scopus, which assists in tracking and enhancing the university's research impact and visibility.

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Subjects

Responsible
Management
Education, Corporate
Social Responsibility
(CSR)



Research awards for responsibility-related research

Public Media

Title: Sustainability leader wins Abbie Griffin High Impact Award

Description: Sustainability leader wins Abbie Griffin High Impact Award

Date: 09/10/2024

Language: British English

Sharing Rights: Public

Author: Cranfield University

Published Date: 04/10/2023

Degree Of Recognition: International

Media Name: Cranfield University Website

Media Type: Press Release

Duration: 1 page

URL:

• <https://www.cranfield.ac.uk/som/press/sustainability-leader-wins-abbie-griffin-high-impact-award>

Public Media

Title: Wiley - Top Downloaded Article

Description: Award for one of the top downloaded articles from the Wiley Online Library

Date: 11/10/2024

Language: British English

Sharing Rights: Public

Author: Wiley Author Services

Degree Of Recognition: National

Media Name: Wiley Author Services

Published Date: 31/12/2022

Media Type: Press Release

Duration: 1 page



WILEY

Top Downloaded Article

Congratulations to:



Miying Yang

Whose paper was one of the most downloaded* during its first 12 months of publication in:

BUSINESS STRATEGY AND THE ENVIRONMENT

A framework of digital technologies for the circular economy:
Digital functions and mechanisms

**Among work published in an issue between 1 January 2022 – 31 December 2022.*

Honouring Excellence in Responsibility-Related Research: Highlights of Recent Award-Winning Contributions

Impact Purpose

To recognise and celebrate the contributions of Cranfield School of Management (SoM) researchers whose award-winning work advances sustainability, innovation, and responsible management practices.

Impact Statement

Recent awards received by Cranfield SoM faculty recognise and elevate the visibility of these scholars' efforts, demonstrating the real-world impact and academic recognition their research has garnered

High Impact Award for Innovation in Sustainable Business

Dr Rosina Watson, Head of the Sustainable Business Group and Associate Professor of Sustainability at Cranfield School of Management (SoM) won the 2023 Abbie Griffin High Impact Award for a research article on environmental innovation in business. The paper, "Harnessing Difference: A Capability-Based Framework for Stakeholder Engagement in Environmental Innovation", was co-authored with Emma K. McDonald, Hugh N. Wilson, and Palie Smart and published in 2017 in the Journal of Product Innovation Management (JPIM). The Abbie Griffin High Impact Award is presented to the authors of a JPIM article that has made the most significant contributions to the theory and practice of innovation management. The JPIM is an interdisciplinary, international journal that advances theoretical and managerial knowledge of innovation management and product development.

Commenting on the accolade, Dr Watson said: "As a former sustainability practitioner turned academic, the impact of my research on encouraging more sustainable management practices, particularly through innovation, is very important to me, and I am delighted that this paper is being read and used by so many other academics." The award was presented during the 2023 PDMA (Product Development and Management Association) conference in New Orleans, held from 16-17 September 2023.

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Responsible
Management
Education, Corporate
Social Responsibility
(CSR), Sustainable
Development, Social
Entrepreneurship

Award-Winning Research on Sustainability in Supply Chains

Dr Enrico Fontana was awarded the 2023 ISM Best Supply Chain Paper Award. This prestigious recognition, sponsored by the Institute for Supply Management (ISM), highlights Dr Fontana's groundbreaking research in the field of Supply Chain Management. Dr Fontana, in collaboration with Dr Mohammad Atif from EDC Paris Business School, received the award for their outstanding paper titled "Sub-suppliers' Customer Share of Production and Sustainability Compliance in Apparel Supply Chains". The paper was selected from a highly competitive field of entries following a rigorous four-step evaluation process. Dr Fontana's work stood out for its significant contribution to the field, offering valuable insights into sustainability compliance within apparel supply chains. The research addresses critical issues faced by sub-suppliers and their role in sustainability, providing both theoretical advancements and practical implications for industry managers.

Highly Downloaded Research on Digital Technologies for the Circular Economy

Dr Miying Yang authored a paper titled "A Framework of Digital Technologies for the Circular Economy: Digital Functions and Mechanisms," which was one of the most downloaded papers during its first 12 months of publication in Business Strategy and the Environment.

Event

Title: i2i Ideas to Innovation

Description: i2i Ideas to Innovation event

Date: 24/10/2024

Language: British English

Sharing Rights: Public

Event Date Range: 01/11/2023 - 13/01/2023

Location: Cranfield University Campus

Speakers: Stephanie Hussels

Description: An event designed for ambitious individuals looking to unlock their entrepreneurial and creative potential. This programme encourages delegates to consider the social and economic relevance of their research.

URL:

• <https://www.cranfield.ac.uk/som/events/i2i>

Driving Research Excellence and Faculty Development at Cranfield School of Management: A Vision for Transformative Management Research

Impact Purpose

To create a robust support framework that fosters research excellence, career development, and interdisciplinary collaboration, ensuring Cranfield faculty and researchers are empowered to produce impactful, ethical, and innovative research.

Impact Statement

Cranfield School of Management (SoM) is committed to becoming a top employer for faculty passionate about advancing management practice. Through initiatives like the Early Career Researcher Network, Research and Innovation Office (RIO), and key annual conferences, Cranfield fosters an environment that promotes impactful research, professional growth, and ethical research methodologies.

Summary

Part of Cranfield SoM's vision is to be an employer of choice for faculty who are passionate about transforming the practice of management. Across the University, researchers and faculty are supported at every step of their journey, led by the Research and Innovation Office (RIO), whose mandate is to provide outstanding research and innovation support to Cranfield and our strategic partners. The office also leads initiatives that support research excellence and increase the wider impact of Cranfield's research. Notably, the Early Career Researcher Network and the Cranfield Doctoral Network Annual Conference serve as cross-school initiatives promoting interdisciplinary exchange of ideas while ensuring that ethical methodologies and practices are upheld across the University.

The Research and Innovation Office supports PhD students, researchers and faculty through guidance, development and funding

Cranfield University's Research and Innovation Strategy (2022-2027) aims to position the university as a global leader in applied research and sustainable innovation. It emphasises collaboration with industry and government, enhancing

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Subjects

Responsible Management Education, Corporate Social Responsibility (CSR), Eco-design

researcher development, promoting diversity, and commercialising research. The strategy seeks to expand Cranfield's influence, aligning with its corporate plan to deliver research with real-world impact.

The Research and Innovation Office (RIO) leads work towards this strategy as it supports researchers by providing expert guidance on securing funding for research projects. They assist with the development of collaborative partnerships, both within the university and with external stakeholders. Additionally, RIO provides support for contract negotiation, financial management, and compliance with funding regulations, ensuring researchers have the resources and tools needed to manage their projects successfully from start to finish.

One example of awards dispensed to support Early Career Researchers, in particular, is when, in November 2023, our Research and Innovation Office invited submissions for the Early Career Research (ECR) Exploratory Impact Awards. These awards provide up to £5,000 to support ECRs in forming external partnerships and collaborations, helping to foster long-term impact and knowledge exchange in line with Cranfield's Research and Innovation Strategy. Applicants can engage in activities such as building new partnerships, organising events and developing impact plans. Funded by Cranfield's Engineering and Physical Sciences Research Council (EPSRC) Impact Accelerator Account, these awards target Lecturers and Senior Research Fellows, excluding PhD students and senior academics.

Empowering Early Career Researchers: Development, Networking, and Knowledge Sharing at Cranfield University

The cross-school Early Career Researcher (ECR) Network aims to provide support, development, and networking opportunities for research staff at Cranfield University. All ECRs are encouraged to join the Cross-School ECR Network Microsoft Teams group, which is regularly updated with opportunities and discussions. The network hosts a monthly webinar series showcasing the work being undertaken by ECRs at Cranfield and an annual symposium featuring poster sessions, career development workshops, and sustainability challenges.

A few notable sessions hosted by the ECR Network include a talk by Professor Simon Croom, Visiting Professor and internationally respected researcher, advisor, and teacher in the field of supply chain management, titled 'Conscious Sourcing – How social justice and ESG strategies are operationalised through the procurement multiplier'. Another featured session was with Dr Alessandro Giudici, who shared research on 'Orchestrating Inclusive Transformation: Evidence from Social Intermediaries in Sub-Saharan Africa'.

Advancing researchers' careers through internal conferences and seminars

All researchers across Cranfield University are members of the Cranfield Doctoral Network, which looks to enrich the experience of our researchers, including those who are based off-site. Its activities are complimented by extensive resources offered through the Doctoral Researchers' Core Development (DRCD) programme.

During the reporting period, the Cranfield Doctoral Network Annual Conference took place on 11-13 September 2023 as an in-person event in the Vincent Building. Focused on career development, the event provided research students and staff with opportunities to network and engage in professional development. Highlights included a keynote by Dr John Loizou, Director of Jaylambda Ltd and an independent space systems engineering consultant to industry and government, particularly within the satellite navigation systems field. Sessions covered career insights from early career researchers, personal development plans, and academic journeys. The conference facilitated research collaboration and career advancement.

Good Research Practice Week (11–15 September 2023) was a virtual event series aimed at staff and research students, promoting ethical and high-quality research practices. Last year's programme included sessions on research integrity, ethics, and data management.

Key sessions included:

- Collaboration in Research: Focus on partnerships and research security
- Responsible Impact and Innovation
- Getting Research Funded: Practical Tips for Early Career Researchers
- AI in Research: Exploring AI's role in research
- Diversity and Inclusion in Research: Addressing equity and inclusivity

Wider Impact and Career Support

The Bettany Centre for Entrepreneurship hosts an annual programme, Ideas to Innovation (i2i), designed for ambitious final-year PhD and post-doctoral researchers looking to unlock their entrepreneurial and creative potential. This programme encourages research students to consider the social and economic relevance of their research. Ideas to Innovation (i2i) originated as 'Enterprisers' from a collaboration between the Cambridge-MIT Institute in 2002 to explore how the entrepreneurial spirit and innovative methods in entrepreneurship education can drive economic development. It has run over 44

times since its inception. This three-day residential programme is designed for second and third-year PhD students and Early Career Researchers, enhancing both their professional and personal development. In 2023, 27 PhD students participated in this extracurricular programme.



PhD-level courses with course-level RME learning goals

Learning Object

Title: Annual Statement on Research Integrity 2023

Description: Annual Statement on Research Integrity 2023

Date: 21/10/2024

Language: British English

Sharing Rights: Private

Department: Cranfield University

Learning Object Subject: Research Integrity

Educational Level: Post Graduate

Learning Outcome:
How to carry out research ethically and with integrity

Interactivity Type: Real-time

Description: Document detailing the procedures and policies in place to ensure that students carry out research ethically and with integrity



Annual Statement on Research Integrity 2023

Section 1: Key contact information

Question	Response
1A. Name of organisation	Cranfield University
1B. Type of organisation: higher education institution/industry/independent research performing organisation/other (please state)	Higher Education
1C. Date statement approved by governing body (DD/MM/YY)	24 April 2024
1D. Web address of organisation's research integrity page (if applicable)	Research ethics and integrity (cranfield.ac.uk)
1E. Named senior member of staff to oversee research integrity	Name: Professor Leon Terry
	Email address: researchoffice@cranfield.ac.uk
1F. Named member of staff who will act as a first point of contact for anyone wanting more information on matters of research integrity	Name: Alicen Nickson
	Email address: alicen.nickson@cranfield.ac.uk

Section 2: Promoting high standards of research integrity and positive research culture. Description of actions and activities undertaken

2A. Description of current systems and culture

Please describe how the organisation maintains high standards of research integrity and promotes positive research culture. It should include information on the support provided to researchers to understand standards, values and behaviours, such as training, support and guidance for researchers at different career stages/ disciplines. You may find it helpful to consider the following broad headings:

- Policies and systems

The University has specific policies regarding ethics and integrity as well as a Process for implementing and monitoring research integrity, which sets out specific responsibilities for the University, researchers, supervisors and students. It includes details on how to raise concerns in relation to scientific misconduct or breaches of research integrity and the process for investigation. Ethics and integrity related policies are reviewed on an annual basis. The University has a single online ethics system which is used across the University by staff and students undertaking research. Students are required to provide evidence of ethical approval as part of their thesis submission.

- Communications and engagement

Regular communications via the University's ebulletins, research student inductions and presentations are undertaken reminding staff and students of the University's policy that all research must be submitted for ethical review prior to commencement of data collection. Online training courses on ethics and integrity and research data management are available for all staff and students.

- Culture, development and leadership

The University aims to promote a positive research culture where all research is undertaken with integrity including the planning and conduct of research, the recording and reporting of results and the dissemination, application and exploitation of findings. Through the University's Ethics Committee and Research Committee policies are reviewed annually to ensure they remain current and fit for purpose. Under the University's Excellence in Scholarship programme, we provide 1-2-1 formative review of outputs which includes feedback on integrity related matters such as data accessibility statements.

The University's Research and Innovation Strategy encourages a research culture that promotes the articulation of intellectual contribution for useful application. This

includes prioritising the integrity of our research and associated data and will be addressed through the ongoing implementation of the new Strategy for 2022-2027.

- **Monitoring and reporting**

The University's Research Ethics and Integrity Committee (CUREIC) meet three times per year. They report annually to Senate and provide an interim report in September each year. The annual report is shared with Council who approve and sign of the University's Annual Statement on Research Integrity following Senate approval. 10% of ethics applications at all risk levels are audited each month to check they have been assigned the appropriate risk level and have been completed correctly. Where any concerns are picked up, applicants are contacted where they may be asked to provide additional information.

2B. Changes and developments during the period under review

Please provide an update on any changes made during the period, such as new initiatives, training, developments, also ongoing changes that are still underway. Drawing on Commitment 3 of the Concordat, please note any new or revised policies, practices and procedures to support researchers; training on research ethics and research integrity; training and mentoring opportunities to support the development of researchers' skills throughout their careers.

Cranfield University's Research Ethics and Integrity Committee

In September 2023, the University's Senate approved a proposal to expand the remit of the Ethics Committee to specifically oversee our delivery of the concordat commitments and the wider support and development of research integrity at Cranfield. The changes provide an appropriate forum within which to facilitate considered and cross-University discussions on matters relating to research integrity.

In broadening the committee's remit, membership was expanded to include both Library and technical representation.

At the first meeting, under the new remit, it was agreed to establish a Research Integrity Working Group to undertake a detailed review of current policies relating to research integrity and the processes to support the level of integrity we wish to uphold including how we embed them into our culture.

A separate working group will also be established to review the University's current provision in relation to education and training with the aim to update existing training material as well as developing new methods of education for staff and students.

As part of the University's Research and Innovation Strategy, work has continued on defining a new revised Cranfield definition of research culture which will reinforce the

University's commitment to delivering research to the highest academic rigour. An action plan has been approved identifying specific activities for the year ahead. Actions include:

- Increasing variety of mechanism for dissemination of policies and processes for existing and new staff
- Cross-centre events to promote sharing of best practice
- Inclusive and representative evaluations of staff perceptions to improve research culture
- Review mentorship and leadership training processes

Research Ethics Policy

Changes were made to the Research Ethics Policy which now provides additional guidance on:

- Clear advice on the process where a researcher has moved to Cranfield but has undertaken data collection at their previous institution.
- Clear statement that ethical approval is required where individuals are working with secondary data.
- Clearer guidance specifying that projects may require approval over several ethics applications, for example where there are significant changes to a projects requiring an updated review.
- New exemption where research projects based solely on literature reviews will no longer have to obtain ethical approval.

Human Tissue Committee

The University's Human Tissue Committee, reporting into CUREIC, main purpose is to examine, advise and implement norms and any changes in regulatory, training, health and safety, administrative and level matters to do with the engagement with human tissue samples at Cranfield University. In 2023, the Committee developed and published new guidance to support researchers, including:

- Human Tissue Policy
- Human Tissue Quality Manual
- Working with Human Tissue at Cranfield University – Guidance
- Sample Handling and Storage Standard Operating Procedure

UKRIO Self-assessment for Research Integrity

The Research Governance Team used the UKRIO self-assessment tool in order to identify gaps in policy and processes. In 2024 an Research Integrity working group will be established to build on the findings from the self-assessment.

University's Research Ethics System updates

During 2023, several updates were made to the University's Research Ethics System (CURES). Some improvements were designed to tackle recurring issues picked up during the auditing of applications, others to improve supervisor's awareness of how student projects were progressing through the ethical approval system.

A new sub-form was also introduced to enable applicants, whose project title had changed after they had secured ethical approval, allowing them to generate a new approval letter to reflect a change in title. Any changes to the project, including methodology still require a new application to be completed. Updates were made to the University's thesis template which now includes a placeholder for both taught and research students to include confirmation of ethical approval in their thesis.

2C. Reflections on progress and plans for future developments

This should include a reflection on the previous year's activity including a review of progress and impact of initiatives if known relating to activities referenced in the previous year's statement. Note any issues that have hindered progress, e.g. resourcing or other issues.

Cranfield made good progress against the plans for future developments detailed in the previous year's report, some of which are detailed in section 2b above.

In September 2023, the University held a week long series of events under the heading of Good Research Practice. The events were held online and open to all staff and students. Topics included Good Practice in Research – How and why it matters; Responsible impact and innovation; What is Trusted Research; Security in Research; AI in Research; Open Access Research; Understanding your IP; Research Ethics; Data and Reproducibility; Managing your data; Diversity and inclusion in research.

2D. Case study on good practice (optional)

Please describe an anonymised brief, exemplar case study that can be shared as good practice with other organisations. A wide range of case studies are valuable, including small, local implementations. Case studies may also include the impact of implementations or lessons learned.

Section 3: Addressing research misconduct

3A. Statement on processes that the organisation has in place for dealing with allegations of misconduct

Please provide:

- a brief summary of relevant organisation policies/ processes (e.g. research misconduct procedure, whistle-blowing policy, bullying/harassment policy; appointment of a third party to act as confidential liaison for persons wishing to raise concerns) and brief information on the periodic review of research misconduct processes (e.g. date of last review; any major changes during the period under review; date when processes will next be reviewed).
- information on how the organisation creates and embeds a research environment in which all staff, researchers and students feel comfortable to report instances of misconduct (e.g. code of practice for research, whistleblowing, research misconduct procedure, informal liaison process, website signposting for reporting systems, training, mentoring, reflection and evaluation of policies, practices and procedures).
- anonymised key lessons learned from any investigations into allegations of misconduct which either identified opportunities for improvements in the organisation's investigation procedure and/or related policies / processes/ culture or which showed that they were working well.

The University has in place a number of policies and procedures to deal with allegations of misconduct which are subject to annual review. During 2023, policies were reviewed and updated where necessary.

In 2024, the Research Integrity Working Group will be undertaking a detailed review of the University's Research Integrity Policy and the Process for Implementing this Policy which details the procedure for dealing with allegations of academic misconduct.

Following a previous recommendation to make research integrity and ethics training mandatory for all staff and students undertaking research, the University's Research Ethics and Integrity Committee have established an Education and Training Working Group to review the current training provision. Once this group have completed their review a recommendation will be taken to the University Executive to request ethics and integrity training becomes mandatory for all individuals undertaking or involved in research at Cranfield.

Following completion of academic misconduct investigations during 2023, the following improvements have been made:

The University has rolled out new training on export control. It has also put in place a new self-assessment tool on Trusted Research for International Collaborations to support staff in making informed decisions around international research collaborations.

The Authorship Policy was reviewed extensively during 2023 with an update published at the end of the year. Plans to communicate the updated policy and raise awareness are being developed and will continue to be highlighted as part of the ongoing work on Excellence in Scholarship.

More generally it has become apparent that there is a general lack of understanding of the University's policies which is resulting in some of them not being actively "lived".

During 2024 a review of how policies are presented internally will be undertaken including how we can simplify key messages and make them easy to both understand and follow as well as providing clear guidance on how staff can ask for additional support and guidance.

3B. Information on investigations of research misconduct that have been undertaken

Please complete the table on the number of **formal investigations completed during the period under review** (including investigations which completed during this period but started in a previous academic year). Information from ongoing investigations should not be submitted.

An organisation's procedure may include an initial, preliminary, or screening stage to determine whether a formal investigation needs to be completed. These allegations should be included in the first column but only those that proceeded past this stage, to formal investigations, should be included in the second column.

Type of allegation	Number of allegations			
	Number of allegations reported to the organisation	Number of formal investigations	Number upheld in part after formal investigation	Number upheld in full after formal investigation
Fabrication				
Falsification				
Plagiarism				
Failure to meet legal, ethical and professional obligations				
Misrepresentation (eg data; involvement; interests; qualification; and/or publication history)	1	1		0
Improper dealing with allegations of misconduct				
Multiple areas of concern (when received in a single allegation)				
Other*				
Total:	1	1	0	0
*If you listed any allegations under the 'Other' category, please give a brief, high-level summary of their type here. Do not give any identifying or confidential information when responding.				
<i>[Please insert response if applicable]</i>				

Supporting Cranfield School of Management (SoM) researchers to create impact through high-quality and robust research practices

Impact Purpose

Research integrity and ethics are prioritised in organisational practices and integrated into all teaching and learning provided to research students.

Impact Statement

Cranfield School of Management (SoM) is committed to ensuring that every research student is motivated to understand the impact of their research and knows how to conduct it with integrity.

Building Ethical Research Excellence: Cranfield University's Comprehensive Induction and Training for Doctoral Researchers

Cranfield University is a research-intensive, postgraduate institution with a mission to develop leaders in technology and management. By partnering with business and government, the university delivers transformational research, postgraduate education and professional development, unlocking the potential of people and organisations.

In line with this mission, all new research students are required to attend a global induction that includes sessions on the Doctoral Researcher Core Development (DRCD), the principles of research, plagiarism, research ethics and integrity, and the progress review process. Cranfield School of Management (SoM) ensures that all researchers receive training in ethics and integrity.

The aim of this training is to develop well-rounded, ethical researchers capable of conducting impactful and respected research, ensuring that Cranfield SoM researchers carry out their work with integrity while making genuine contributions to knowledge.

Empowering Doctoral Researchers: Cranfield School of Management's Enhanced DRCD Programme and New Focus on Equality, Diversity, and Inclusion

Date published

Nov. 7, 2024

Applicable Date Range

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Gabriela Pearson

Contributors

Gabriela Pearson

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Public

Language

British English

Country

United Kingdom

Subjects

Responsible
Management
Education

All Cranfield researchers are enrolled in the Doctoral Researchers' Core Development (DRCD) programme, which focuses on enhancing essential skills for both research and career growth. It aligns with standards from QAA, UKRI, and Research Councils, offering training in responsible research, data management, problem-solving, project planning, research ethics, professional standards, communication, and impact. The programme is guided by the VITAE Research Development Framework, covering knowledge, personal effectiveness, research governance, and impact. It emphasises personal and professional growth through reflective practices, including creating a Professional Development Plan (PDP) and using the Development Needs Analysis (DNA) tool to identify and address skill requirements throughout the doctoral journey.

From September 2024, a revised DRCD Programme will be launched. Co-designed by Cranfield Library and the Research and Innovation Office (RIO), this programme will support and enhance students' research journeys, equipping them with essential skills and knowledge to conduct responsible and effective research. As part of Cranfield's ongoing commitment to responsible management research, a new session titled "Getting Started" on Equality, Diversity, and Inclusion will be introduced during the first week of the programme.

Ensuring Research Ethics: Cranfield School of Management's Ethics Module and the Path to Ethical Approval

Cranfield SoM's research ethics module introduces researchers to essential ethical principles and standards, ensuring that all research adheres to appropriate ethical guidelines. After completing the module and passing the assessment, researchers are eligible to submit their research proposals through the Cranfield University Research Ethics System (CURES) for ethical approval.

Research ethics extend beyond medical ethics or working directly with humans or animals. It covers a wider scope, ensuring that all research is conducted with integrity and has a meaningful impact. Cranfield SoM researchers strive to produce outstanding work that is widely respected and cited in their field. Ethical behaviour includes following health and safety regulations and reporting results accurately. Even if research does not involve direct work with humans or data collection (such as surveys and interviews), Cranfield University requires all research projects to undergo ethical approval. Additionally, many professional institutions require their members to demonstrate basic ethical awareness. By completing the Research Ethics module, researchers at Cranfield SoM are better equipped to conduct ethical, impactful, and respected research.

Upholding Research Integrity: Cranfield School of Management's Commitment to Ethical Standards and Public Trust

Cranfield SoM ensures that all researchers consider the impact of their work on society and the broader research community. Cranfield University publishes an annual compliance report for its funders and the general public, demonstrating its support for staff and students in upholding research integrity.

Cranfield SoM is committed to making new discoveries, contributing to knowledge and producing results that influence researchers worldwide. The institution recognises its responsibility to the wider research community, the public and its funders to ensure the accuracy and integrity of its research. This commitment requires research to be conducted in a way that others can trust both the methods and the findings.

Maintaining research integrity involves upholding both scientific and professional ethics. Researchers must avoid misconduct such as cheating, plagiarism, data falsification, and involving humans or animals in research without formal ethical approval.

The UK has a longstanding reputation for excellence in research and public trust, but this reputation must be actively maintained. To this end, the UK government, through Universities UK, has published 'The Concordat to Support Research Integrity'. As a member of Universities UK, Cranfield University and its researchers adhere to the principles and commitments of this Concordat, upholding the highest standards of research integrity.

All Cranfield SoM researchers are required to complete an online learning module on Research Integrity via Canvas. This resource covers the importance of research integrity, the five principles of the Concordat, and how to support one another in maintaining honest and professional research practices. This module ensures that Cranfield SoM researchers conduct their work with integrity, making meaningful contributions to knowledge.

1. The PRME Signatory Member partners with business, government, civil society and academia to advance responsibility-related education, research, or practice in the following ways. Mark all that apply.



Dialoguing: bilateral or multilateral conversations with external communities

Learning Object

Title: Part-time working after The Pandemic

Description: Part-time working after the pandemic: The impact of the flexible furlough scheme

Date: 21/10/2024

Language: British English

Sharing Rights: Private

Department: School of Management

Learning Object Subject: Part-time working after The Pandemic

Educational Level: Post Graduate

Learning Outcome: Knowledge about part-time working after The Pandemic

Interactivity Type: Reading

Description: Results of research into how part-time working has changed as a result of The Pandemic and the impact of the flexible furlough scheme

URL:

• <https://www.cranfield.ac.uk/som/expertise/changing-world-of-work/the-future-of-part-time-working/esrc-report-part-time-working-after-the-pandemic>

Recent research from Cranfield School of Management found that managers learnt how to manage part-time working more effectively and became more open to requests to work part-time as a result of using the flexible furlough scheme.

The research examined employers' experiences of using the Coronavirus Job Retention Scheme (CJRS), specifically the 'flexible furlough' part of the scheme where staff could be used on a part-time basis and furloughed for the remaining time as their business recovered from the effects of the Covid-19 pandemic. Data were collected through an employer survey, conducted in collaboration with the CBI, and semi-structured interviews with managers at two time points.

Part-time working is important since it can increase workforce participation among those who are unable or unwilling to work full-time. In the UK approximately one in four workers work part-time, however there is evidence that more people would like to work part-time but are unable to access it.

Findings

In addition to the CJRS's intended purpose of protecting jobs, the research found important unintended, positive, consequences from its implementation.

First, through using the scheme managers learnt how to manage part-time working more effectively.

- Almost forty percent (39.7%) indicated that using flexible furlough had helped line managers to design and manage part-time working more effectively. Typically, this involved more effective matching of workload to hours worked and dealing with gaps in availability.

Second, experience of using the scheme challenged managers' perception about the feasibility of part-time working, leading to greater openness to it.

- More than forty percent (42.1%) indicated that use of the scheme made line managers more open to part-time working, with an increased willingness to consider requests to work part-time from employees and potential recruits.

Third, other experiences during the pandemic increased managers' openness to part-time working.

- Thirty percent (30.4%) reported a 'trickle down' effect from widespread working from home, leading to a greater openness to part-time working and similar numbers (28.7%) agreed that changes to their business model prompted by the pandemic had fostered greater openness to part-time working.

Managers' openness to part-time working was also influenced by perceived changes in demand for part-time working, including more people wanting to work fewer hours for a better work-life balance. More recently, labour shortages were seen as an important driver for increased openness to part-time working.

Improved managerial capability in managing part-time working, taken together with increased openness to part-time working, created a resource which offers potential for change and which can be harnessed in response to challenges such as increasing workplace diversity, responding to labour shortages and avoiding redundancies in challenging business circumstances.

Recommendations from the findings

Our findings suggest a need to reconsider the relationship between work and non-work in contemporary society and recognise that time not spent in paid work may be used to make other contributions to society and the economy, such as caring and volunteering activities which support families and communities. Our specific recommendations to facilitate the greater availability of part-time working are:

1. Practical guidance for employers on managing part-time working effectively.

Using the flexible furlough scheme provided an opportunity for employers to experiment with part-time working and this helped them learn how to manage part-time working more effectively. It is important that these learnings are communicated to wider audiences who did not use the scheme.

The guidance should cover:

- how to design work for part-time working, including at higher skill levels and for quality jobs
- creating a culture that encourages dialogue about preferred working hours. It should not be assumed that a lack of requests signals a lack of demand, since some employees may be hesitant to ask for part-time working, especially in workplaces where it is not common.

This guidance could usefully be publicised through Government organisations such as ACAS and through professional and industry groups.

2. Interventions to encourage employer innovation and experimentation with part-time working.

The learning identified in this research happened as part of a response to a crisis. Employers should be encouraged to experiment with different ways of organising work, outside of extreme circumstances, to foster learning, in the same way that businesses are encouraged to innovate with product and service development. A pilot scheme covering different jobs and industry sectors would allow employers to assess the costs and benefits of part-time working over a designated period of time. The approach used in the UK trial of the four-day week in 2022 could act as a model.

3. Greater understanding of worker demand for part-time working.

Greater understanding of worker demand for part-time working is required to facilitate wider participation in work and contribute to job satisfaction and productivity. Existing largescale surveys which ask about working hours preferences (e.g. ONS) are limited in scope since they do not take account of respondents' perceptions of the opportunities available to them. For example, part-time working may be seen as only being available in lower skill jobs. Further research is also needed on the demand for part-time working among the economically inactive, particularly older workers.

The full report is available to download at
www.cranfield.ac.uk/som/expertise/changing-world-of-work/the-future-of-part-time-working

This research was funded by the Economic & Social Research Council (ESRC) as part of UK Research & Innovation's rapid response to Covid-19 (ES/W001306/1, The Coronavirus Job Retention Scheme and Employer Perceptions of Part-time Working: the implications for economic recovery and future working).

Collaborative Dialogues: How Cranfield School of Management Advances Responsible Management Through Engagement with External Communities

Impact Purpose

To highlight how Cranfield School of Management (SoM) fosters responsible management by actively engaging in dialogues with external communities, including business, government, civil society and academia.

Impact Statement

Cranfield SoM's contributions to practitioner conferences, mentorship programs, SME collaborations, and industry research clubs exemplify its commitment to advancing responsible management. Cranfield bridges the gap between academic insights and practical applications by fostering bilateral and multilateral dialogues, empowering ethical leadership and driving sustainable business practices across diverse sectors.

Summary

Cranfield SoM promotes responsible management by engaging in bilateral and multilateral dialogue with external communities, including businesses, government, civil society and academia. Faculty share insights and gain diverse perspectives through practitioner conferences, creating a reciprocal exchange on responsible business practices. Mentorship programmes, such as the Career Mentoring Programme, foster ethical leadership by connecting alumni with students. Furthermore, initiatives like BGP Advisory Boards and the Green Business Network enable SMEs, academics, and industry professionals to collaboratively develop sustainable strategies. These activities promote collaboration, sustainable approaches, and stakeholder engagement across sectors.

Contributing to the Conversation: How Cranfield School of Management Engages with Industry and NGOs Through Panels

Cranfield School of Management (SoM) actively contributes to practitioner conferences as panel members or speakers, engaging directly with industry leaders and NGOs. These bilateral conversations, at an international, national and local level, allow Cranfield to share academic insights while gaining practical

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Owner

Gabriela Pearson

Contributors

Gabriela Pearson

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Subjects

Business Administration, Entrepreneurship, Responsible Management Education, Corporate Social Responsibility (CSR), Ethical Leadership, Social Entrepreneurship, Sustainable Supply Chain Management

perspectives and fostering a mutual exchange of ideas. This interaction is key to promoting responsible business practices, as it helps to align cutting-edge research with real-world applications, encouraging businesses to adopt more sustainable and ethical strategies. Below are examples of how faculty across Cranfield SoM engage with various external communities.

Dr Chibuzo Ejiogu, Reader (Associate Professor) in Human Resource Management, was the Country Reportage Lead (Nigeria) for the World Health Organization (WHO) Global School on Refugee and Migrant Health 2023: Sustainable Development Goals, Working Conditions and Migrant Health. The aim of the session was to understand the relevance of working conditions to the health of refugees and migrants. The video reportage produced by Dr Chibuzo Ejiogu ("Anna's Story") and Chibuzo's Q&A session highlighted the captivating story of survivors of modern slavery and human trafficking and how these are related to working conditions and health outcomes. This featured high-level partnerships and stakeholders in delivering this session. The session was chaired by Santino Severoni, Director, Department of Health and Migration, WHO headquarters, and the high-level message was delivered by Gilbert Hounoubo, Director-General, International Labour Organisation.

Professor Leila Alinaghian, Professor of Business Relations and Impact and Director of the full-time MBA, continues to collaborate with intermediaries and professional bodies such as Social Enterprise UK and Supply Change to evaluate the overall impact achieved to date and to advance the social impact movement in the UK. She was an invited panel member and moderator at the Buy Social Corporate Challenge Peer Learning session, hosted by Social Enterprise UK, in April 2023, and an invited speaker at Procurement Leaders, the world's largest and most valued procurement network and intelligence platform, alongside Johnson & Johnson, in September 2023.

At a more local level, Cranfield SoM is proud to routinely partner with local organisations. One recent example of local engagement is Dr Deirdre Anderson's involvement in International Women's Day 2023. Dr Anderson, Director of the Gender, Leadership and Inclusion Research Centre, was invited to participate in a roundtable on Global Women's Entrepreneurship, a hybrid community meeting hosted at MK. She also spoke at a local Milton Keynes Community and Women in Enterprise event, a public gathering to bring together women in business.

Building Bridges Through Dialogue: The Role of Mentoring and Coaching in Shaping Responsible Leadership

The Cranfield Career Mentoring Programme is a cross-university service that serves as an excellent example of how bilateral

conversations with external communities can promote responsible management education and practice. By connecting experienced alumni with current students for personalised mentorship, the programme enables valuable dialogue where mentors share industry insights, career advice, and best practices. This direct interaction provides students with a practical understanding of real-world challenges and ethical considerations. It fosters responsible leadership development as mentees learn to navigate complex business environments with guidance from experienced professionals.

While students across the university are eligible for this programme, the Executive-in-Residence programme is uniquely offered in addition to the MBA students. In this unique experience, senior alumni share their expertise with current MBA students through one-to-one meetings, offering strategic insights across multiple industries. The programme runs annually and is co-led by the Alumni Relations and Development Team and the Careers Team. It provides senior-level alumni with meaningful engagement and face-to-face contact with the current full-time MBA cohort, and it provides students with a chance to gain insight from alumni with significant business experience. In 2023, six new alumni joined, conducting 44 meetings that provided strategic insights across various industries, including Technology, Consultancy, Manufacturing, Financial Services, Energy, Infrastructure, Automotive, Logistics and Supply Chain, Telecoms and Retail. Students praised the experience for enhancing their career perspectives and networking opportunities. This exchange not only enhances the students' career development and networking opportunities but also allows alumni to stay connected and provide meaningful mentorship. Such direct dialogue between experienced professionals and future managers fosters the practical application of responsible business principles and enriches the learning experience.

SMEs and Academia Partnerships: A Two-way Dialogue

Another way Cranfield SoM influences responsible business practice through dialogue is by engaging with SMEs in meaningful partnerships. For example, the Business Growth Programme (BGP) Advisory Boards provide past participants of the Business Growth Programme, the oldest owner-manager programme in the UK, with ongoing training, support, and mentoring, building on Cranfield's unique approach to owner-managed businesses. These boards consist of a series of regional groups, each chaired and facilitated by an experienced member of the BGP teaching staff. Between September 2022 and December 2023, approximately 27 BGP alumni were members of the advisory board.

The BGP Board at Cranfield SoM exemplifies how multilateral conversations with external communities can promote responsible management education and practice. The Board, composed of experienced business professionals and alumni, collaborates with participating entrepreneurs and managers to provide strategic insights, feedback, and guidance. This multilateral dialogue ensures that knowledge is exchanged both ways, with participants gaining practical expertise and the Board benefiting from new perspectives. Such collaboration fosters responsible business growth by combining real-world experiences with academic insights to create sustainable strategies.

In 2023, Cranfield SoM was also given the opportunity to take over the Green Business Network to ensure this vital source of knowledge exchange and community engagement was preserved. The Green Business Network is a specialist community that takes a cross-sector approach to addressing sustainability challenges, linking industry, academia, and policymakers. Funding from Central Bedfordshire Council enables academics, practitioners, and policymakers to network and exchange knowledge around sustainability themes. Approximately 30 people attend the quarterly events.

Co-Creating Knowledge: Cranfield School of Management's Practitioner Research Clubs Driving Sustainable Innovation

Cranfield SoM's practitioner research clubs are industry-sponsored initiatives that enable participants and their organisations to influence the school's research agenda and contribute to the production of reports and articles for professional outlets. SoM continues to actively and successfully engage with Research Club members and, during the last reporting period, has generated a range of impressive business outcomes and innovations (e.g., a White Paper with DHL, a roadmap for introducing hydrogen-powered vehicles for Luxfer Gas Cylinders, and a platform to develop new solutions to improve energy efficiency for Jacobs Engineering Group). There are currently seven active research clubs, and below are updates from two of them.

The Agile Supply Chain Research Club (ASCRC) was founded in 1998 and is located within Cranfield SoM's Centre for Logistics, Procurement and Supply Chain Management. The aim of the Club is to improve the practice of supply chain management by creating a collaborative forum where member companies and faculty can share knowledge and experience. In 2022, supply chain sustainability was voted by member companies as the second most important challenge, and in 2023, it was voted as the most important. In June 2023, a full-day collaborative event

was held on sustainability, decarbonisation and circular supply chains, where representatives from different companies, including Nestle, Systemiq, Climate-KIC and Circulor, came together with Cranfield academics and presented their approaches on this topic. At the ASCRC conference in November 2023, sustainability was again a hot topic, with both Bosch and DHL sharing their progressive approaches. During the reporting period, the number of member companies ranged from 12 to 14.

In 2023, the Strategic Marketing Forum promoted responsible business practices through events addressing topics like greenwashing, employee brand advocacy, and modern advertising's influence on social and cultural behaviours. They also emphasised the importance of strategic communications, stakeholder engagement, and managing customer relationships effectively. These initiatives are aimed at helping businesses adopt ethical marketing strategies and avoid misleading claims. Some sessions from 2023 that focussed on Responsible Management Education (RME) topics include: 'Strategy, Stories and Purpose: How do the stories of your organisation help or hinder?' by Professor Kevin Morell, Rowlands Chair in Transformational Strategy at Cranfield SoM, and 'Greenwashing - how "dirty" firms are given an unspoken social license to pollute and to lie about it' by Pavlos A Vlachos, Chair in Sustainability at Alba Graduate Business School.



Informing: knowledge translation and dissemination

Event

Title: Venture Day 2023

Description:

Annual event connecting entrepreneurs, SME owners, investors, and academia for a day of learning and networking.

Date: 11/10/2024

Language: British English

Sharing Rights: Public

Event Date Range: 31/10/2023 - 31/10/2023

Location: C

Description: Surviving and Thriving in Difficult Times Celebrating its 15th year, VentureDay is Cranfield University's annual entrepreneurship conference connecting entrepreneurs, SME owners, investors, and academia for a day of learning and networking. This unique conference brings together key stakeholders in the entrepreneurial ecosystem to discuss topics including how to embed innovation in the business, supporting mental health, fundraising under challenging times, and keeping ahead in digital.

Speakers: Jerry Ejikeme, Mary McKenna, Denise McQuaid

URL:

• <https://cranfield.shorthandstories.com/ventureday2023/>

Event

Title: Cranfield Alumni Conference

Description: Cranfield Alumni Conference - A Resilient Future:
Building organisational and societal resilience

Date: 11/10/2024

Language: British English

Sharing Rights: Public

Event Date Range: 19/05/
2023 - 19/05/2023

Location: Cranfield
University Campus

Speakers: Lord Karan
Bilimoria, Paul Williams,
Richard Archdeacon,
Anita Mendiratta, Lord
Toby Harris

Description: A Resilient
Future: Building
organisational and
societal resilience

URL:

- [https://www.cranfield.ac.uk/
alumni/communications/
alumni-news/2023/0127-
alumni-conference-highlights](https://www.cranfield.ac.uk/alumni/communications/alumni-news/2023/0127-alumni-conference-highlights)

Event

Title: Global Women's Entrepreneurs Roundtable 2023
#EmbraceEquity

Description: Global Women's Entrepreneurs Roundtable 2023
#EmbraceEquity

Date: 11/10/2024

Language: British English

Sharing Rights: Public

Event Date Range: 03/09/
2023 - 03/09/2023

Location: Milton Keynes
Innovation Hub MK: U

Speakers: Dr. Akintoye
Akindele, Chairman of
Platform Capita

Description: Cranfield University joined the world to commemorate International Women's Day through a Global Women's Entrepreneurship Roundtable #EmbraceEquity. The hybrid event which was jointly organized by the Gender Leadership and Inclusion Research Centre (GLIC) and Bettany Centre for Entrepreneurship held at the Milton Keynes Innovation Hub MK: U and alongside virtual participation from individuals from various countries including the USA, Nigeria, Switzerland, and Uganda.

URL:

- <https://blogs.cranfield.ac.uk/bettany-centre-for-entrepreneurship/global-womens-entrepreneurs-roundtable-2023-embraceequity/>

Event

Title: Women in Leadership

Description: Four leading European business schools joined forces to host the second virtual 'Women in Leadership' event, giving practical tips to help women navigate their careers into leadership positions.

Date: 11/10/2024

Language: British English

Sharing Rights: Public

Event Date Range: 16/02/2023 - 16/02/2023

Location: Online

Description: Four leading European business schools have again joined forces to host the second virtual 'Women in Leadership' event, giving practical tips to help women navigate their careers into leadership positions.

Speakers: Professor Sue Vinnicombe CBE, Dr Deirdre Anderson, Hetty Brand-Boswijk, Professor Gianluca Carnabuci, Dorothy Grandia, Lisa Umenyiora

URL:

- <https://www.cranfield.ac.uk/som/press/women-in-leadership-achieving-your-next-steps-top-business-schools-join-forces>

Partnering to Inform: Knowledge Translation and Dissemination of Responsible Management at Cranfield School of Management

Impact Purpose

To showcase how Cranfield School of Management (SoM) engages with various sectors to promote responsible leadership through impactful events, commissioned research and knowledge dissemination.

Impact Statement

Cranfield SoM actively fosters a culture of responsible leadership by connecting academia with industry, government and civil society through events, collaborative research and practical knowledge sharing. This commitment supports sustainable practices, inclusivity, and ethical governance across multiple sectors.

Summary

SoM promotes responsible leadership by hosting key events that connect academia, business, and civil society. Initiatives such as VentureDay and the Alumni Conference emphasise ethical leadership and sustainability, while commissioned reports address challenges related to inclusivity and governance. Furthermore, our short-form content creation, including the Knowledge Hub and external contributions, facilitates the dissemination of research and best practices, empowering professionals to drive positive change within their organisations. Through these efforts, Cranfield actively engages with various sectors to advance responsible leadership.

Advancing Responsible Leadership: Cranfield School of Management's Engagement Through Key Events

Cranfield School of Management (SoM) engages with businesses, government, civil society, and academia by hosting a range of events, both online and on campus. The following examples from the reporting period highlight Cranfield SoM's commitment to promoting responsible and accountable management education and practice.

The Bettany Centre for Entrepreneurship at Cranfield SoM organises the annual Cranfield VentureDay, which connects business leaders and entrepreneurs to explore sustainable and

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Owner

Gabriela Pearson

Contributors

Gabriela Pearson

Sharing rights

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Subjects

Business
Administration,
Entrepreneurship,
Responsible
Management
Education, Corporate
Social Responsibility
(CSR), Sustainable
Development, Ethical
Leadership, Social
Entrepreneurship,
Sustainable Supply
Chain Management

ethical leadership. The event includes panels, workshops, and networking opportunities focused on responsible business models that balance profitability with social and environmental impact. Cranfield SoM academics participate in panels alongside experienced entrepreneurs, blending theory and practice to encourage managers and entrepreneurs to adopt more responsible practices, driving positive change in business operations and leadership approaches. In June 2023, the theme was "Surviving and Thriving in Difficult Times," with an emphasis on sustainability. The Centre also runs a public speaker series, where entrepreneurs share personal insights, offering attendees valuable learning and networking opportunities. One such speaker was Steve Frost, a local entrepreneur and founder of WorkBuzz, an online SaaS platform that enables companies to gather real-time employee feedback and build positive workplace cultures.

The 2023 School of Management Alumni Conference brought together 130 alumni, faculty, and guests to focus on helping organisations thrive in a rapidly changing environment and society. The theme of the conference was "Resilience," framed around the five capitals (natural, social, human, financial, and manufactured capital). Dr. Chibuzo Ejiogu led the session on Human Capital and Resilience, while Dr. Lyn Lanka presented on Social Capital and Resilience. This conference supports Cranfield SoM's alumni by keeping them connected to current research and academic thinking, which is then translated into actionable insights for their work and businesses.

Cranfield's Professor Sue Vinnicombe CBE (a global leader and advocate for change in women's rights), Dr Deirdre Anderson (Director of The Gender, Leadership and Inclusion Centre at Cranfield SoM) run an annual women leader's event with three other business schools each Spring for potential women leaders. [Women in Leadership](#) (WIL) is a collaboration between four global business schools: Cranfield School of Management (United Kingdom) and Rotterdam School of Management Erasmus University (Netherlands). ESMT Berlin (Germany) and Imperial College Business School (United Kingdom). The event aims to inspire, connect and empower women leaders across industries. It fosters leadership development by providing opportunities for networking, learning, and sharing experiences. The event encourages women to excel in leadership roles, highlights key challenges they face, and offers strategies for overcoming barriers. With a focus on personal and professional growth, WIL strives to build a supportive community and advocate for gender equality in leadership positions across various sectors.

The Sustainable Business group runs the Sustainability Network Speaker Series, a public platform that allows Cranfield students, faculty, staff, alumni, industry partners, and sustainability

enthusiasts to learn from thought leaders across all sectors. The series explores hot topics in sustainability and the challenges and opportunities of embedding sustainability in various industries. Sessions held between September 2022 and December 2023 covered topics such as "The Sustainable Business Imperative: Turning Concern into Action" and "Can Marketing Save the Planet?". "CITIZENS: How the Key to Fixing Everything is All of Us", "The Chain Reaction: Are Sustainable Solutions in Short Supply?", "How are Sustainability and Net Zero Driving Innovation in the Food Sector?" and the "Green Week Launch Event: How Can Entrepreneurship Help Drive Sustainability?" Since the last PRME submission, the Sustainable Business LinkedIn group, which connects with this community, has grown from 1,000 to 2,000 followers and serves as a touchpoint for sustainability practitioners, professionals, students, and alumni.

Reports Commissioned to Foster Inclusivity, Sustainability, and Ethical Leadership in Business

This chapter covers examples of reports commissioned by bodies that aim to create practical, research-backed solutions to foster inclusivity, environmental sustainability and improved corporate governance across their respective sectors, ultimately advancing ethical and strategic leadership in the business community.

[Part-time working after the pandemic](#) report led by Professor Claire Kelliher was published in January 2023. In collaboration with the Confederation of British Industry, the research team conducted nearly 500 interviews with employers. The report was rewritten for organisational application and shared in an article in [The Conversation](#). The article illustrates how academics at Cranfield University are engaging with external communities to promote more inclusive management practices, particularly regarding part-time work. By working with employers and the Confederation of British Industry, the research informs practical solutions for improving flexible working. This dialogue between academia and businesses helps to address real-world challenges, such as managing workload and multi-skilling. The researchers' findings encourage companies to adopt more sustainable work practices, aligning employee needs with organisational goals, ultimately contributing to the creation of more responsible managers.

In October 2022, Cranfield launched a report commissioned by the Financial Reporting Council on leadership barriers for minority ethnic groups aimed to directly inform strategies for enhancing trust and equity in organisations. "Navigating the barriers to senior leadership for people from minority ethnic

groups in FTSE 100 and FTSE 250 companies". Dr Deirdre Anderson, Director of the Gender, Leadership and Inclusion research centre and lead author of the report, said:

"Our research shows that it's essential for organisations to continue to build trust among their employees. Not only will this encourage self-identification against all diverse demographics, it will also provide accurate and complete data for monitoring progress against race and ethnic equality goals. This will help organisations expand on existing good practice and continue to dismantle the existing structural barriers towards greater equity."

CEO of the FRC, Sir Jon Thompson, said:

"With the power of these personal insights and experiences that go beyond the data, I hope this report can help advance the conversation about how to successfully increase diversity in senior positions on boards and create sustainable pipelines of diverse talent to fill both executive and non-executive roles."

Dr Emmeline Cooper, Lecturer in Sustainability, supported the British Fashion Council's Institute of Positive Fashion with the research underpinning ["Designing the Green Transition" report](#) by the Institute of Positive Fashion. It addresses challenges in developing a circular fashion system, focusing on sustainable design, sourcing, and manufacturing. Recommendations include regulatory actions such as tax incentives, digital product passports, and investing in recycling technology. The report stresses the need for collaboration across the supply chain to minimise environmental impact and meet net-zero targets by 2050, highlighting opportunities for innovation and sustainable growth.

Turning Knowledge into Action: Sharing Research Insights Through Blogs and Multimedia

Cranfield SoM has produced a series of blogs and short-form content based on research and academic thought leadership that is in line with its mission of turning knowledge into action. Below are examples of how knowledge is shared through blogs, podcasts, and other short content to support professional growth and responsible leadership.

During the reporting period, several Cranfield academics disseminated their research through blogs, podcasts, and online articles. Writing for Developing Leaders Quarterly, Dr Rosina Watson explored the essential skills managers need to lead effectively towards sustainability, emphasising the importance of systems thinking, long-term strategic planning, and stakeholder

engagement in embedding sustainability within business practices. Dr Tamira King, Senior Lecturer in Strategic Marketing and Sales, appeared as a guest on a legal podcast from Gowling WLG, alongside representatives from LUSH, discussing the topic of suburban resurgence and the "15-minute city" trend in retail. Dr Rosina Watson recorded two episodes on "The Evolution of ESG in Business" and "Navigating ESG" as part of leading business services and communication company Paragon UK's "People, Planet, Partners, Prosperity" podcast series.

The Knowledge Hub at Cranfield SoM is a resource platform providing insights, research, and expert commentary on various business topics. It features articles, blogs, reports, and videos from Cranfield's faculty, focusing on subjects such as leadership, management, innovation, sustainability, and business growth. The Knowledge Hub aims to support professionals, entrepreneurs, and academics by offering practical advice, analysis of current trends, and cutting-edge research findings that can be applied in various business contexts. It serves as a valuable tool for staying informed about new developments and best practices in the field of management and business.

The Business Growth Programme (BGP) at Cranfield SoM is designed for owner-managers and entrepreneurs aiming to scale their businesses effectively. It provides a structured approach to help participants develop growth strategies, improve profitability, and achieve sustainable business expansion. Participants benefit from a community of practice, sharing their stories at various events, which are recorded and shared online. Entrepreneurs sharing their experiences actively promote responsible leadership by allowing others to learn from real-world challenges, including how to handle ethical dilemmas, successes, and setbacks. This sharing fosters a supportive community, motivating leaders to focus on long-term social, environmental, and ethical goals. Successful examples demonstrate that responsibility and profitability can coexist, challenging misconceptions about business trade-offs. Moreover, public storytelling fosters accountability and provides practical tools, encouraging other entrepreneurs to adopt responsible leadership and drive collective societal progress.

For example, Tim Hopkins shared his vision for Land App, a business he founded in 2015 to transform the understanding and valuation of agriculture globally. His aim is to align the global land economy for a prosperous future, emphasising the use of technology to support nature as a means of mitigating risk against climate change. People are attracted to the company because of its strong sense of purpose and vision, which were strengthened by Tim's participation in the BGP.



Problem solving: joint problem-solving with external partners in a purposeful relationship

Public Media

Title: Hult Competition Press Release

Description: A group of innovative Cranfield University students, The Innovious team, reached the final six of the Hult Prize.

Date: 11/10/2024

Language: British English

Sharing Rights: Public

Author: Cranfield University

Degree Of Recognition: International

Media Name: Cranfield University Website

Media Type: Press Release

Duration: 1 page

Published Date: 07/09/2023

URL:

- <https://www.cranfield.ac.uk/press/news-2023/innovious-set-to-shine-at-impact-g20x>

Joint Problem-Solving for Responsible Business: How Cranfield School of Management Engages External Partners to Address Real-World Challenges

Impact Purpose

By integrating academic expertise with real-world challenges, the Cranfield School of Management (SoM) fosters innovation and problem-solving that addresses societal needs while promoting sustainable business practices.

Impact Statement

Through joint research, internships, and consultancy projects, Cranfield SoM empowers students and partners to develop actionable solutions that enhance operational efficiency, improve sustainability and promote ethical practices.

Summary

A distinctive feature of Cranfield University's technology-management focus, combined with its emphasis on post-experience education, is that its schools are deeply practice-oriented and centred on understanding real-world problems. At Cranfield SoM, there is a deliberate emphasis on being not just about business but for business. The School's essence lies in engaging with the world beyond academia to create a positive impact on both business and wider society.

Cranfield SoM adopts a partnership approach to its research and teaching, delivering co-produced programmes and customised executive education, where clients' needs are embedded in the curriculum and programme design and are often co-delivered. This approach ensures the School remains exceptionally close to practice in what it delivers to students, particularly through student company projects. Additionally, the research conducted at Cranfield SoM is highly applied and impactful, achieved through Knowledge Transfer Partnerships (KTPs) and research projects.

Solving Business Challenges: Cranfield's Research and Innovation Office Drive Innovation and Sustainability through Collaborative Partnerships

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(CSR), Ethical
Leadership, Social
Entrepreneurship

The Research and Innovation Office (RIO) at Cranfield University provides support throughout the research lifecycle, focusing on collaboration with external partners to solve problems and innovate. It facilitates funding, commercialisation and partnership opportunities and ensures compliance and governance. RIO engages with external partners through knowledge exchange, joint research projects, and innovation activities, fostering purposeful relationships to maximise research impact and business growth.

RIO runs the Knowledge Transfer Partnership (KTP) at Cranfield- a UK program that links businesses with academic institutions and graduates to drive innovation, improve efficiency, and develop new products. Projects are typically 12-36 months long, partly funded by government grants, with businesses contributing the rest. Cranfield University supports businesses through the KTP process, from idea development to project management. The program aims to transfer knowledge and foster business growth.

During the reporting period, 13 Knowledge Transfer Partnership (KTP) projects were live, and five new KTP projects were awarded to faculties across the university. These KTPs focus on enhancing business sustainability and responsible practices by introducing innovative technologies, improving operational efficiency, and reducing environmental impacts. Examples include the development of predictive maintenance systems for corrosion management, reducing obsolescence risks, and enhancing digital capabilities for more efficient resource use. Projects such as the collaboration with Yara UK on sustainable fertiliser directly support eco-friendly practices. These initiatives demonstrate a commitment to responsible, future-focused business operations through advanced technology and sustainability.

A recent example from Cranfield SoM was in 2023 when Professor Ying Xie, Professor in Supply Chain Analytics, became the Principal Investigator and Academic Supervisor in a KTP to develop a novel Events Environmental Sustainability Platform. This focusses on creating an environmental sustainability platform for events management, helping companies verify their greenhouse gas emissions and recommending ways to reduce them. In partnership with Julia Charles Event Management Ltd and funded by Innovate UK, the project aims to promote responsible business practices by aligning emission verifications with sector standards, ultimately reducing the environmental impact of events.

Empowering Responsible Business: How Cranfield School of Management Uses Internships and Consultancy Projects to Solve Real-World Challenges in Partnership with Industry

Several of Cranfield's general management programmes place significant emphasis on internships to enhance the student experience by providing practical, real-world exposure. These internships enable students to apply theoretical knowledge to solve actual business problems. They help develop critical skills such as problem-solving, communication, and teamwork while also expanding professional networks and improving employability. This hands-on learning approach ensures that students are better prepared for their future careers, making their education more impactful and closely aligned with industry needs.

The recent projects completed by full-time MBA students highlight this focus on practical learning. The 'Transformation' MBA encourages problem-solving through experience-based learning. Students engage with real-world challenges from the outset by working on live projects. Key projects, such as the Business Analytics and Consulting Project and the International Consultancy Project, involve collaboration with client companies like EY, Siemens Gamesa, and the NHS. These projects immerse students in real business problems, enabling them to develop innovative, actionable solutions, fostering critical thinking, and sharpening problem-solving skills essential for navigating complex business environments.

The consultancy projects and internships associated with Cranfield's MBA focus heavily on responsible management practices. Examples from the reporting period include ZeroPA's internship, which explored how to leverage corporate social responsibility (CSR) and environmental, social, and governance (ESG) budgets for financial inclusion, as well as projects with Serco on sustainable facilities management, Lambda Energy on e-waste recycling, and Syngenta on reducing carbon footprints. Other initiatives, such as those with Crosslight Debt Advice and Check Ups Med, addressed financial literacy and healthcare access for vulnerable populations. These projects encourage MBA students to develop practical solutions that prioritise social impact, sustainability, and ethical business practices.

Cranfield's Level 7 apprenticeships are another example of problem-solving through partnerships, as they align academic programmes with industry needs. These apprenticeships involve collaboration with organisations to create tailored curricula that

address specific challenges. By combining workplace learning with academic theory, apprentices can apply their knowledge to real-world issues, fostering innovation and improving business practices. This partnership approach ultimately enhances the skills and effectiveness of the workforce. More information about the Management Apprenticeship programmes can be found in Principle 3 Teach.

Each module on these professional apprenticeship programmes is directly related to the student's role within their organisation, and work-based projects are designed to encourage students to solve the specific challenges faced by their companies. For example, the MSc in Sustainable and Digital Banking equips professionals with expertise in the rapidly evolving retail banking sector. It focuses on sustainable finance, digital innovation, and regulatory requirements, emphasising the integration of digital tools and strategies with responsible banking practices. The programme prepares students to tackle global challenges in finance, such as ESG factors and fintech developments. By bridging theory with practical application, this course empowers banking professionals to drive impactful change in the financial industry. As part of the MSc Retail and Digital Banking apprenticeship, the teaching team has supported apprentices in implementing work-based projects at various banks across the UK.

During the reporting period, some of the topics addressed included:

- Improvements to serving customers in financial difficulty.
- The use of behavioural science and alternative communication channels to encourage customers experiencing financial difficulty to engage with the bank and improve customer outcomes
- How the bank can increase its reach and better support financial capability in school-age children in the UK.
- How gambling activities can be reduced using customers' transactional and behavioural banking data relating to gambling
- How can the bank improve its efforts in providing financial literacy
- How can the bank improve its efforts in supporting the financial capability of young people?
- The impact of branch closures causing financial exclusion of certain factions of customers especially the old, vulnerable and people in remote areas.

Similarly, the Sustainability Business Specialist Apprenticeship with Sustainability MSc requires students to deliver a work-based project. The work-based project is defined and delivered in collaboration with the employer and academic supervisor, allowing the demonstration of sustainability principles in solving

a business challenge. It involves applying knowledge, skills, and behaviours learned within the workplace and should align with the individual's role and work context. Projects vary but may include developing a sustainability plan to enhance business efficiency by reducing waste or pollution, creating an integrated environmental management system, implementing continuous quality improvement, or leading a sustainability vision and fostering staff commitment to best practices. The first cohort will submit their projects in 2024.

Collaborative Research for Societal Impact

Several research groups at Cranfield SoM conduct research in collaboration with a range of external partners. While all research aims to address societal challenges, there are notable examples of collaborative research endeavours with various organisations. One key example is the Changing World of Work group, which examines the evolving work context and its implications on managing people and organisations. During the reporting period, the group undertook a significant number of research projects focused on human capability within the defence sector, though these remain anonymised for security reasons.

Richard Kwiatkowski, Professor of Organisational Psychology and Head of the Applied Psychology and Organisational Behaviour Group, led a cross-disciplinary team from SoM commissioned to produce a report on loyalty for a governmental organisation. This involved a rapid evidence assessment of the literature, guided by a steering group, and a series of focus groups using personal construct methodology with representatives from key populations. The final report is being utilised by the government and provides a more sophisticated analysis of the substrates, antecedents, modifiers, promoters, and consequences of loyalty in a complex, multivariate context. The report highlights that loyalty cannot be viewed in binary terms and has led to a more nuanced understanding of human, organisational, managerial, temporal, and interpersonal factors in this domain.

Emma Parry, Professor of Human Resource Management and Head of the Changing World of Work group, completed two pieces of research conducted in late 2022 and early 2023 that directly contributed to the Hawthornthwaite Review of Armed Forces Incentivisation (HRAFI). These studies broadly focused on improving the terms and conditions for military personnel, including aspects of Equality, Diversity, and Inclusion (EDI) and Decent Work. One of the studies explored the "moments that matter" in military careers, identifying critical stages where enhanced support could be provided. Additionally, Professor Parry has been involved in a NATO working group over the past few years, including the 2022-23 period, which focuses on Meaningful

Human Control in AI and Autonomous Systems (AS), relating to the responsible use of AI and AS.

For a comprehensive overview of Cranfield SoM's research projects, many of which are conducted in partnership with societal actors, please refer to Principle 4.



Acting: working collaboratively to enact change

Public Media

Title: Cranfield nominated innovator reaches Earthshot Prize finals

Description: UK company ENSO, nominated by Cranfield University, which creates tyres for electric vehicles that are more sustainable and reduce pollution, reaches 2023 Earthshot Prize finals.

Date: 11/10/2024

Language: British English

Sharing Rights: Public

Author: Cranfield University

Degree Of Recognition: International

Media Name: Cranfield University Website

Media Type: Press Release

Duration: 1 page

Published Date: 19/09/2023

URL:

• <https://www.cranfield.ac.uk/press/news-2023/cranfield-nominated-innovator-reaches-earthshot-prize-finals>

Public Media

Title: Cranfield University announces funding for six green technology projects

Description: Cranfield University announced the first six successful applicants to its Green Future Investments Ltd (GFIL) Technology Accelerator Fund, a programme designed to support technical and prototype developments of innovative technologies that address climate change challenges.

Date: 11/10/2024

Language: British English

Sharing Rights: Public

Author: Cranfield University

Degree Of Recognition: International

Media Name: Cranfield University Website

Media Type: Press Release

Duration: 1 page

Published Date: 27/03/2023

URL:

- <https://www.cranfield.ac.uk/press/news-2023/cranfield-university-announces-funding-for-six-green-technology-projects>

Partnerships and Programmes: Driving Change for SMEs, Green Innovation, and Regional Growth

Impact Purpose

To foster sustainable growth and innovation among SMEs, support entrepreneurship through tailored programmes, and leverage external partnerships to address environmental challenges

Impact Statement

Cranfield University's collaborative initiatives provide targeted support for SMEs, foster green technology innovations and enhance entrepreneurial capabilities. By offering scholarships, delivering growth-focused programmes and co-developing funding opportunities with partners, Cranfield empowers businesses to integrate sustainability, achieve commercial milestones and contribute to a greener future.

Summary

Cranfield University is leveraging external partnerships to drive change both regionally and globally. Initiatives include SME-focused executive education programme scholarships funded by local councils, redesigned programmes such as Ready for Net Zero Growth, and collaborations with philanthropic organisations like Green Future Investments Ltd. to support green technology innovations. The Bettany Centre for Entrepreneurship has also delivered impactful programmes such as Help to Grow, a UK government programme for SMEs that increasingly integrates mental health and sustainability throughout the modules. Grants and funds are supporting technology innovators, fostering commercialisation and decarbonisation efforts. These initiatives highlight Cranfield's commitment to sustainability, economic growth, and entrepreneurial support.

External partnerships to enact change within the region and beyond

A novel scholarship programme was launched, funded by local councils, to provide places for SMEs on a variety of Cranfield executive programmes. In response to local needs, the Ready for Scale programme was redesigned, and new programmes such as Ready for Net Zero Growth and Climate Action were introduced to help businesses integrate Net Zero into their growth strategies.

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Gabriela Pearson

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Entrepreneurship, Responsible Management Education, Corporate Social Responsibility (CSR), Ethical Leadership, Social Entrepreneurship, Eco-design

Following Cranfield School of Management's (SoM) Small Business Charter accreditation in late 2022, the Bettany Centre for Entrepreneurship, in partnership with the Small Business Charter and the UK government, has delivered two cohorts of the government-funded Help to Grow programme, with three more already scheduled. There has been an increased awareness and focus on the mental health of entrepreneurs, and the mental health and wellbeing of founders/owners, as well as sustainability and responsible management, are embedded across the 12 key topics covered in the programme.

Additionally, Cranfield SoM secured a capital grant scheme from Central Bedfordshire Council, offering 74 grants totalling £211k to support SMEs focused on growth and decarbonisation, running until March 2025. In this financial year, 333 SMEs have already participated in Cranfield SoM's executive programmes. The Small Business Charter Accreditation Panel praised Cranfield SoM and the Bettany Centre for their extraordinary and wide-ranging impact on Bedfordshire's SME infrastructure.

External Partnerships to Drive Green Technology Innovation among SMEs

In the past, entrepreneurship education and support for SMEs was mainly confined to the SoM, with limited promotion throughout the wider University. Recognising Cranfield's closeness to industry and its extensive expertise in technology, it was deemed ideal to rectify this by fostering the ideation and scaling of technical businesses. Over the past 1.5 years, the University has made significant strides and, in collaboration with Green Future Investments Ltd. (GFIL), has developed a three-stage process supporting businesses that positively impact the global climate through technological innovation. Cranfield and GFIL began collaborating in 2022 through their shared passion for addressing the climate emergency and environmental degradation.

A three-stage initiative was co-designed to support technology innovators along the entire commercialisation pathway.

The first stage, the GFIL-Future Frontiers Fund (FFF), is open to entrepreneurs with early-stage, game-changing ideas. A £10,000 grant, plus mentoring, supports progress towards 'proof of concept'. Thirty-five projects have received awards (more than 175 applications) during the reporting period. One recent example is Jess Redgrave from ClimaFibre, who worked on a sunflower fibre biorefinery for the fashion and textile market. As a result of accessing the fund, ClimaFibre's technology has progressed from experimental proof of concept to commercial lab validation, achieving key milestones such as optimising the

enzymatic process and developing replicable methodologies ideal for future development.

“My experience with the GFIL-FFF award has been invaluable in advancing my innovation to commercialisation, with the funding enabling me to elevate my work Technology Readiness Level from 3 to 4. The well-matched support and resources provided have significantly enhanced the project's scope and potential impact.” Jess Redgrave- Founder, ClimaFibre

The second stage, GFIL-Technology Accelerator Fund (TAF), provides £50,000 to take ideas from PoC to prototyping/ demonstration through access to Cranfield's academic expertise and pilot-scale test facilities. Twelve SMEs have received grants (more than 70 applications). A year on, Cohort 1 (six SMEs) has raised more than £4.5m in grants, more than £5.5m in investment and hired 21 new staff!

A participant in Cohort 2, James Dunce, connected with Frederic Coulon, Professor of Environmental Chemistry and Microbiology at Cranfield, as part of his application. His company, BravelyCultured, focuses on elucidating the structure of novel biosurfactants produced by marine microorganisms. Using Cranfield's Environment Analytical Facility, Forensic Institute Laboratory, and Nuclear Magnetic Resonance (NMR) spectrometer facility at Shrivenham, the project successfully gathered detailed data on these natural products. This technical support has helped advance BravelyCultured's work towards commercialising their biosurfactants, highlighting the value of academic-industrial partnerships in fostering innovation.

“The TAF has really helped us by connecting us with an academic group within Cranfield University who have a really good technical expertise in the chemical characterisation of a wide range of different molecules.” James Dunce- CEO, BravelyCultured

The third stage, GFIL-Cranfield Seed Fund (CSF), makes investments in early-stage cleantech businesses. Applicants for these funds must be seeking funds to develop a green product or service, and their businesses be aligned to the Sustainable Development Goals. Fifteen companies have received a share of £405,000, typically £25,000 convertible loans. They have gone on to raise over £5m in venture capital, and several investees are co-located at the University.

SAGES London, a start-up exploring how natural, food-waste derived dyes can be refined to produce dyes that are more vibrant and have commercial uses in other industries, accessed the Technology Accelerator Fund, and went on to be awarded funding from the Seed Fund.

"The Cranfield Seed Fund has been a game-changer for SAGES. Emerging from Cranfield's TAF program, the Seed Fund support allowed us to acquire critical equipment, propelling our innovative dye project closer towards commercialisation. Beyond the funding, it symbolises validation and confidence in our business and provides us with an invaluable network of expertise. We're extremely grateful for the support of Cranfield's Seed Fund and it will play an instrumental role in our journey, accelerating our path toward sustainability and success. Emily Taylor- CEO, SAGES

Empowering Change Through Collaboration: The Cranfield Executive Development Custom Programmes

Cranfield Executive Development, the professional learning arm of Cranfield SoM, delivers custom programmes that exemplify collaborative efforts to enact change by co-creating tailored leadership development initiatives with clients. This partnership allows organisations to address their unique challenges through targeted training, fostering skill development that aligns with their strategic goals. By working together, Cranfield and its clients ensure that the learning experiences are not only relevant but also impactful, facilitating sustainable transformation within the organisations involved.

A recent example of how this initiative has contributed to enacting change is the Cranfield and Dole plc programme on Sustainability and UN Principles. Since 2018, Cranfield University has partnered with Dole plc, a global leader in fresh produce, on the 8-month Key Talent Programme. Over five years, Dole has enrolled 75 participants from all divisions across 15 countries, strengthening its leadership pipeline and organisational engagement through sustainability and ethical leadership projects.

The programme outcomes include advancements in Sustainable Farming Practices, Waste Management & Packaging Innovation, Water Stewardship, Climate Action, Responsible Sourcing and Transparency & Food Safety, all aligned with the United Nations Sustainable Development Goals (SDGs). The programme design also embeds Equity, Diversity, and Inclusion (EDI) principles, which are supported by senior management and, as a result, influence the decision-making in the business. Diverse learning methods, including a real-world interactive business simulation demonstrating the importance of sustainability for business success, provide a safe space for participants to experiment and learn from failure, driving innovations aligned with Dole's sustainability objectives.

In a 2023 Key Talent Programme survey, the number of participants demonstrating increased impact on Focus Area Goals were:

- Climate Action: 63%
- Waste Management and Packaging Innovation: 76%
- Support People and Communities: 67%
- Be An Employer of Choice: 77%
- Develop a Safe, Inclusive, Equitable and Diverse Work Environment: 87%
- Responsible Sourcing: 86%

Leveraging National and Global Prizes to Foster Sustainable Futures: Cranfield's Contributions to Recognising Innovative Solutions that Enact Change

National and global prizes and awards play a crucial role in fostering a sustainable future by recognising and supporting innovative solutions to environmental challenges. These awards connect visionary projects with essential resources and recognition, creating a platform for collaboration among academia, industry and grassroots initiatives. Through these initiatives, groundbreaking ideas are amplified, encouraging collective action and sustainable practices. Here are some examples of faculty contributing to change by using their expertise to recognise these groundbreaking ideas and achievements.

Professor Sue Vinnicombe CBE, Professor of Women and Leadership, plays a key role in numerous judging panels and committees focused on leadership and diversity. She is a core judge for The Sunday Times Best Non-Executive Directors (NEDs) Awards, assessing criteria such as contribution to ESG, D&I and corporate governance. She also judges the Managing Partners Forum, focusing on environmental impact, and the Education section of "We Are The City" for recognising women leaders in the community. Additionally, Professor Sue Vinnicombe CBE is a member of the Parker Steering Committee, reporting on ethnic diversity in top UK boards, and serves on the Steering Committee for the Women in Finance Charter, which tracks women's progress into leadership roles in finance.

Cranfield University plays a vital role as a nominator for the Earthshot Prize, collaborating with a global network to identify and support innovative solutions addressing environmental challenges. Cranfield SoM contributes to this university-wide initiative through faculty judging. This involvement exemplifies active collaboration for a sustainable future, as it bridges academia, industry and grassroots initiatives, amplifying impactful ideas and encouraging collective action. By connecting

visionary projects with resources and recognition, Cranfield contributes to a broader movement toward sustainability and positive environmental change. Among the 15 global finalists for the 2023 Earthshot Prize was ENSO, a UK company nominated by Cranfield University for creating sustainable tyres for electric vehicles that reduce pollution. The Earthshot Prize seeks to scale innovative environmental solutions, with ENSO competing for the Clean Our Air category.



Governance: formalized rules of engagement that governs the type of resources exchanged, the desired outcomes or impacts, etc.

Cranfield Governance and formalised rules of engagement that govern the type of resources exchanged, the desired outcomes or impacts

Impact Purpose

This chapter articulates Cranfield University's governance framework and collaborative approach, designed to foster sustainable partnerships and drive mutual benefits among diverse stakeholders, enhancing the university's role as a leader in education and research.

Impact Statement

Cranfield University has established formal governance structures, policies, and committees to regulate resource exchange and ensure alignment with its strategic goals, academic standards, and legal requirements.

Overview of structure

Cranfield University's ambition is to be at the heart of a national and international collaborative network in which all partners mutually benefit. The aim is to become the partner of choice for all stakeholders, including academic institutions, industry, policymakers, charities, funders, and regional bodies.

To support this vision, Cranfield has formalised governance structures at the university level, established through frameworks, policies, and committees that dictate the rules of engagement for the exchange of resources and the desired impacts. These rules align with the university's strategic objectives, academic regulations, and legal requirements.

Key elements include:

- University governance structures: Cranfield operates under the oversight of its Council and Senate. The Council is responsible for financial, property, and human resource matters, while the Senate governs academic issues. These bodies ensure that resource allocation aligns with the university's goals and standards.
- Research and education committees: Various committees manage academic and research activities, such as the Research Committee and the Academic Practice and Education Excellence Group. These committees have formal guidelines for resource exchange, including funding allocation for research projects, academic collaborations, and staff development. The newly formed Responsible and

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Sustainable Management Education Committee in Cranfield SoM closely collaborates with other committees across the university, including the Energy and Environment Committee and the Athena Swan Charter Committee, amongst other sustainability and Equity, Diversity, and Inclusion (EDI) initiatives.

- Energy and Environment Committee: The Energy and Environment Committee at Cranfield University plays a key role in shaping and overseeing the university's environmental and sustainability strategies. The committee develops and monitors sustainability strategies related to energy use and environmental compliance, ensures adherence to legislation, oversees audits and reporting, and promotes awareness and best practices in energy conservation and sustainability within the Cranfield community.
- University Environmental Policy: Cranfield University's Environmental Policy commits to the sustainable management of environmental risks, impacts, and opportunities, in line with their ISO 14001:2015-certified Environmental Management System. The University aims to protect the environment, prevent pollution, and promote sustainability across research, education, and facilities management. This involves integrating environmental considerations into decision-making, adopting a lifecycle approach to address significant issues, and setting measurable objectives. The policy emphasises compliance with environmental legislation, fostering a culture of environmental excellence, continuous improvement, and preparedness for incidents. All staff, students, and stakeholders are encouraged to minimise resource use, report incidents, and contribute to pollution prevention and energy conservation. See our latest policy statements in the Practice section.
- Sustainable Procurement: Purchasing decisions have a significant impact on both people and the environment. These decisions involve considering where products come from, what they are made of, the conditions under which they are produced, and their disposal at the end of their life. The University's Environmental Policy guides all purchasing activities, aiming to support environmental protection and sustainable practices through teaching and research. This policy requires identifying social and environmental issues from the outset, integrating sustainability into supply chain processes, and minimising environmental harm where possible. Responsible procurement focuses on achieving long-term value, assessing the necessity of products or services, reducing packaging and transport, ensuring ethical production, and working with environmentally and ethically responsible organisations.

- Policies on resource exchange: These cover intellectual property rights, ethical standards, data protection, and collaboration agreements. Formal contracts govern external collaborations, ensuring that resource exchange leads to desired outcomes, such as innovation, knowledge transfer, and impact. One example is the environmental checklist for new research proposals, which is published on the intranet and supports researchers in assessing the environmental impacts of their projects and signposts on how to use the EEC to support them.
- Desired impacts: The resources exchanged are expected to result in measurable impacts, such as enhancing teaching quality, promoting research excellence, and contributing to industry collaborations. This is typically assessed through performance metrics, research outcomes, student satisfaction, and external recognition.

2. Indicate below whether your school is accredited, ranked, associated or member of any of the following institutions.

☒

 AACSB (Association to Advance Collegiate Schools of Business)

Public Media

Title: AACSB Accreditation Press Release

Description: AACSB Accreditation Press Release

Date: 21/10/2024

Language: British English

Sharing Rights: Public

Author: Cranfield
University School of
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Degree Of Recognition: Na
tional

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University Website

Media Type: Press
Release

Duration: 1 page

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School of Management retains prestigious AACSB accreditation

Published 07 Feb 2022

Press release number PR-SOM-22-08

The Association to Advance Collegiate Schools of Business (AACSB) Accreditation Board has re-accredited Cranfield School of Management for a further period of five years.

The decision means that Cranfield maintains its position as one of the elite business schools worldwide to hold a triple accreditation from AACSB, [AMBA](#) (the Association of MBA) and [EQUIS](#) (The European Foundation for Management Development's Quality Improvement System).

[Professor David Oglethorpe](#), Pro-Vice-Chancellor and Dean of Cranfield School of Management said: "Retaining the AACSB accreditation is recognition of our excellence in leadership development, real-world focus, societal impact and extensive industry relationships. The dedication of our talented staff is integral to our success, and this achievement is testament to their hard work."

The Accreditation Board was impressed with the successful development of the Mastership programmes, the well-aligned mission and aspiration of the School and the School's engagement with industry partners and alumni.

[AACSB accreditation](#) is known worldwide as the longest-standing, most recognised form of specialised accreditation that an institution can earn.

School of Management retains prestigious AACSB accreditation

Impact Purpose

To affirm Cranfield School of Management’s global excellence and commitment to impactful, industry-connected business education.

Impact Statement

Cranfield’s AACSB re-accreditation reinforces its elite status in global business education, showcasing its dedication to leadership, societal impact, and industry collaboration.

School of Management retains prestigious AACSB accreditation

The Association to Advance Collegiate Schools of Business (AACSB) Accreditation Board has re-accredited Cranfield School of Management for a further period of five years. The decision means that Cranfield maintains its position as one of the elite business schools worldwide to hold a triple accreditation from AACSB, AMBA (the Association of MBA) and EQUIS (The European Foundation for Management Development’s Quality Improvement System). Professor David Oglethorpe, Pro-Vice-Chancellor and Dean of Cranfield School of Management said: “Retaining the AACSB accreditation is recognition of our excellence in leadership development, real-world focus, societal impact and extensive industry relationships. The dedication of our talented staff is integral to our success, and this achievement is testament to their hard work.” The Accreditation Board was impressed with the successful development of the Mastership programmes, the well-aligned mission and aspiration of the School and the School’s engagement with industry partners and alumni. AACSB accreditation is known worldwide as the longest-standing, most recognised form of specialised accreditation that an institution can earn.

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Financial Times

Public Media

Title: Financial Times MBA Ranking

Description:

Financial Times Global Rankings for MBAs - Cranfield in Top 100 globally and Top 10 in the UK

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Cranfield School of Management's Full-time MBA ranked in the global top 100 and UK top 10 by Financial Times

Impact Purpose

To celebrate Cranfield's global recognition in MBA education, showcasing its commitment to career advancement, sector diversity, and sustainability.

Impact Statement

Cranfield's Full-time MBA ranking in the global top 100 and UK top 10 by Financial Times highlights the program's exceptional career impact, industry diversity, and sustainability focus, affirming its status among leading international MBA programs.

Cranfield School of Management's Full-time MBA ranked in the global top 100 and UK top 10 by Financial Times

- MBA ranked #9 in the UK in prestigious rankings
- Top 20 in Europe for career progression and value for money
- #1 in the UK for carbon footprint and net zero achievements
- #1 in the UK and 15th in the world for student cohort sector diversity

Cranfield School of Management's Full-time MBA programme (The Transformation MBA) has been ranked 9th in the UK, 27th in Europe and 88th in the world in the flagship 2023 [Financial Times rankings](#). The programme is also number one in the UK for sector diversity, which relates to the industry background of students, and for its carbon footprint and net zero achievements.

Assessing the university's net zero targets and carbon emission audits, the carbon footprint ranking placed Cranfield's Full-time MBA as 17th in the world.

Pro-Vice-Chancellor and Dean of Cranfield School of Management, Professor David Oglethorpe commented: "The Cranfield MBA has a significant and positive impact on our students' lives. This excellent ranking reflects not only our high-quality teaching and real-world impact but also Cranfield's diverse and international student body, which together create a vibrant and energising learning experience. I'm personally really pleased to see the high ranking for our carbon footprint and sustainability content on the MBA programme, as sustainability is something that the entire University is deeply committed to."

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Education

Diversity and value for money highly ranked

Diversity is highly rated in the 2023 rankings, with Cranfield's Full-time MBA ranked 7th in the world for its percentage of female students and placed in the global top 25 for the internationality of its students – 95% of whom come from outside the UK.

The programme's return on investment is also notable – with the Financial Times placing it in Europe's top 20 and 36th worldwide for value for money. The MBA is also top 20 in Europe for career progression and for its alumni network – one of the oldest MBA networks in Europe.

Transforming careers, networks, ambitions

Cranfield's Full-time MBA was recently redesigned and relaunched as [The Transformation MBA](#).

Dr Leila Alinaghian, Director of the Full-time MBA and Associate Professor (Reader) of Business Relationships and Impact, says that the ambitious programme continues to evolve:

"The Cranfield MBA is transformative in terms of people's careers, networks, knowledge and ambitions. It's why it's called The Transformation MBA. It's about so much more than the next rung on the career ladder; it's a deeply personal journey for each individual here. Our close industry links mean that students work with real clients, secure internships, spend a month abroad at another world-class European business school, and build an extensive and valuable network with our alumni events and speaker series. Our tailored career pathways and dedicated coaching really boosts their career trajectory and helps them to develop their own style of responsible leadership. The great result we have seen in the Financial Times ranking is proof that the reputation of The Transformation MBA at Cranfield continues to grow."

The Financial Times Full-Time MBA rankings are compiled using a series of criteria, with information drawn from alumni surveys and school data.



AMBA (Association of MBAs)

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School of Management receives AMBA re-accreditation

Published 17 May 2022

Press release number PR-SOM-22

Cranfield School of Management has been re-accredited by The Association of MBAs (AMBA) Accreditation Board for the maximum period of five years. AMBA accreditation denotes the highest standard of achievement in postgraduate business education. MBA students and graduates, Business Schools, and employers all recognise it as a gold standard.

[Professor David Oglethorpe](#), Pro-Vice-Chancellor and Dean of Cranfield School of Management said: “The AMBA accreditation is a real stamp of quality and I’m delighted that the talented and committed staff we have at Cranfield were recognised in the assessment. Cranfield is a place that is in tune with business. Our extensive relationships with industry only serve to strengthen the real-world focus that we have at Cranfield.”

The AMBA Accreditation Board commended Cranfield on its close engagement with business. The assessment praised Cranfield’s corporate partnerships with Grant Thornton, MetroBank and HSBC for master’s level delivery, and the School of Management’s significant contribution under the Apprenticeship Scheme. The flexibility and agility of the School were also commended, especially in how quickly the committed and engaged faculty respond to customer demands.

The decision means that Cranfield maintains its position as one of the elite business schools worldwide to hold a triple accreditation from [AMBA](#), [AACSB](#) (Association to Advance Collegiate Schools of

Business) and [EQUIS](#) (The European Foundation for Management Development's Quality Improvement System).

School of Management receives AMBA re-accreditation

Impact Purpose

To affirm Cranfield School of Management's exceptional quality in postgraduate business education and its close alignment with industry needs.

Impact Statement

Cranfield's re-accreditation by AMBA underscores its elite global status and commitment to practical, industry-connected business education, supported by strong corporate partnerships and agile faculty.

School of Management receives AMBA re-accreditation

Published 17 May 2022

Cranfield School of Management has been re-accredited by The Association of MBAs (AMBA) Accreditation Board for the maximum period of five years. AMBA accreditation denotes the highest standard of achievement in postgraduate business education. MBA students and graduates, Business Schools, and employers all recognise it as a gold standard. Professor David Oglethorpe, Pro-Vice-Chancellor and Dean of Cranfield School of Management said: "The AMBA accreditation is a real stamp of quality and I'm delighted that the talented and committed staff we have at Cranfield were recognised in the assessment.

Cranfield is a place that is in tune with business. Our extensive relationships with industry only serve to strengthen the real-world focus that we have at Cranfield." The AMBA Accreditation Board commended Cranfield on its close engagement with business. The assessment praised Cranfield's corporate partnerships with Grant Thornton, MetroBank and HSBC for master's level delivery, and the School of Management's significant contribution under the Apprenticeship Scheme. The flexibility and agility of the School were also commended, especially in how quickly the committed and engaged faculty respond to customer demands. The decision means that Cranfield maintains its position as one of the elite business schools worldwide to hold a triple accreditation from AMBA, AACSB (Association to Advance Collegiate Schools of Business) and EQUIS (The European Foundation for Management Development's Quality Improvement System).

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- <https://www.cranfield.ac.uk/som/press/cranfield-awarded-prestigious-small-business-charter-accreditation>

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Author: Cranfield University

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URL:

- <https://www.cranfield.ac.uk/som/press/cranfields-apprenticeship-provision-commended-by-ofsted>

Description of the relationship between the PRME Signatory Member and the identified institutions

Impact Purpose

To affirm Cranfield School of Management's commitment to high-quality small business support, entrepreneurship, and impactful apprenticeship education, recognised by the Small Business Charter and Ofsted.

Impact Statement

Cranfield's dual achievements—the Small Business Charter award and Ofsted's praise for its apprenticeship programs—underscore its leading role in supporting small businesses, fostering student entrepreneurship, and delivering high-quality, industry-aligned education that drives regional growth and career advancement.

Cranfield awarded prestigious Small Business Charter accreditation

In recognition of its wide-ranging support for small businesses, outstanding student entrepreneurship provision and dedicated work with small or medium sized enterprises (SMEs) to support growth in the local community, [Cranfield School of Management](#) has achieved the Small Business Charter Award.

The [Small Business Charter Award](#) is a national accreditation, assessed by small business leaders, and Cranfield School of Management now joins 63 other business schools who hold the award across the UK and Ireland.

"Simply extraordinary" work

Assessors praised Cranfield's crucial role in the local business infrastructure, and its dedicated entrepreneurial support. The University's programmes such as the [Business Growth Programme](#) and [Ready for Scale](#) are well attended by small business leaders.

The assessment summary noted: "The breadth and impact of Cranfield on SMEs, the community and its students are a credit to the school and broader university. It's evident that the School of Management and dedicated [Bettany Centre](#) play an important and holistic role in supporting the SME infrastructure within the Bedfordshire area. The impact from this work is simply extraordinary and wide ranging."

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Education, Ethical
Leadership

“This activity is based on a solid foundation of academic research, which provides fertile ground for creating impact and growing industrial relations. This DNA provides an excellent platform to build an SBC accreditation.”

The assessment team also noted Cranfield’s close relationships with businesses, partners and networks, and highlighted the University’s “thorough range of enterprise support for students.”

Recognises leading position in entrepreneurship

[Professor David Oglethorpe](#), Pro-Vice-Chancellor and Dean of Cranfield School of Management said: “I’m extremely proud of all the initiatives and valuable support that Cranfield provides to small businesses and our entrepreneurial students. To have this recognised by the Small Business Charter is a real achievement for everyone at the School of Management.

“It also endorses our leading position in entrepreneurship, for which we were ranked second in the UK and seventh in Europe for in the 2022 Bloomberg B-School rankings. We look forward to continuing our excellent work with entrepreneurs and SMEs through all our programmes.”

Barney Roe, Interim Chief Executive of the Chartered Association of Business Schools said: “We’d like to congratulate Cranfield School of Management on its Small Business Charter Award. The breadth and impact of Cranfield on SMEs, the local economy and its students are a credit to the school and its innovative programmes. It is evident that the School of Management, and the dedicated Bettany Centre, play an important and holistic role in the SME ecosystem in the Bedfordshire region, and we look forward to working closely with the school in the future as it continues to extend its impact.”

Cranfield School of Management will hold the accreditation for five years.

Cranfield's apprenticeship provision commended by Ofsted

Cranfield University’s apprenticeship offering has been praised by Ofsted inspectors following an initial monitoring visit. The report resulting from inspectors visiting in October 2022 highlighted the high-quality curriculum which is in tune with the needs of businesses, the support and expert staff that learners have access to, and the career progression that apprentices go on to achieve.

At the time of the monitoring visit, the university had 1,077 apprentices studying a range of higher apprenticeship standards in management, engineering and information technology. Both Level 6 degree apprenticeships delivered by MK:U, with Cranfield

as the academic partner, and Cranfield's postgraduate Level 7 apprenticeships were assessed.

The initial visit from Ofsted examined Cranfield's quality as an apprenticeship provider, in advance of a full inspection in the future. Ofsted inspected three key areas: management and leadership, quality of apprenticeship provision, and safeguarding. The programme achieved the top assessment of "significant progress" in the first two of these three areas, and reasonable progress in the third.

Professor Sean Tyrrel, Pro-Vice-Chancellor – Education at Cranfield University said: "We're delighted with our initial Ofsted report for Cranfield's apprenticeship provision. Working with individuals, small businesses and right up to multinational firms, Cranfield's apprenticeship courses focus on building the skills and knowledge that industry needs. Seeing the progress of our apprentices as they develop is fantastic, and something I am glad that Ofsted has highlighted."

Expertly designed curriculum delivers high-quality provision

The report noted that "senior leaders have successfully realised their vision to provide high-quality apprenticeships as part of the university's curriculum...apprentices make significant progress against their starting points and most successfully complete their apprenticeships with high grades."

The inspectors also mentioned Cranfield's support for disabilities, health conditions and learning differences, with additional specialist support provided.

Building skills and confidence

The report noted that "apprentices receive well-planned and high-quality off-the-job training" at Cranfield with the carefully planned programmes helping them develop new skills, knowledge and behaviours.

It goes on to say "apprentices are well prepared for their end-point assessments and career progression. Apprentices studying senior leader level 7 learn how to manage their staff and other colleagues within their businesses." Ofsted also recognised that apprentices gained promotions within their organisations "Their success in using these techniques gives them the confidence to apply for new jobs with additional responsibilities. As a result, apprentices promptly gain promotion."

Read the Ofsted report in full on the [Ofsted website](#).



EQUIS (EFMD Quality Improvement System)

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tional

Media Name: Cranfield
University Website

Media Type: Press
Release

Duration: 1

School of Management retains prestigious triple accreditation

Published 09 Apr 2020

Press release number PR-CORP-20-052

The European Quality Improvement System (EQUIS) Accreditation Board has voted to confer the EQUIS Accreditation label upon Cranfield School of Management for a further period of five years.

The decision means that Cranfield continues to be one of an elite group of schools worldwide to hold the triple accreditation of AACSB International (the Association to Advance Collegiate Schools of Business), AMBA (the Association of MBAs) and EQUIS.

Professor David Oglethorpe, Pro-Vice-Chancellor and Dean of Cranfield School of Management, said: "We are honoured to retain our EQUIS Accreditation – this is a testament to the hard work and efforts of our staff who should be congratulated on the result. Along with our other accreditations, this endorsement continues the global recognition for our excellence in leadership development, powerful industry links and real-world focus."

The Accreditation Board was impressed with the significant progress made since the School was last accredited in 2015 and took particular note of the quality of Executive Education and close connections to the corporate world. The united faculty community at Cranfield was also highlighted.

EQUIS accreditation is the most comprehensive institutional accreditation system for business and management schools. It is acknowledged worldwide by potential students, faculty, employers, corporate clients and the media, often being a pre-requisite for entry to rankings.

School of Management retains EQUIS accreditation

Impact Purpose

To reinforce Cranfield School of Management's elite global status through the continued achievement of EQUIS accreditation and commitment to excellence in leadership, industry engagement, and real-world application.

Impact Statement

Cranfield's renewed EQUIS accreditation underscores its place among top-tier global business schools, recognising its leadership in executive education, robust industry partnerships, and dedicated faculty.

School of Management retains prestigious triple accreditation

The European Quality Improvement System (EQUIS) Accreditation Board has voted to confer the EQUIS Accreditation label upon Cranfield School of Management for a further period of five years. The decision means that Cranfield continues to be one of an elite group of schools worldwide to hold the triple accreditation of AACSB International (the Association to Advance Collegiate Schools of Business), AMBA (the Association of MBAs) and EQUIS. Professor David Oglethorpe, Pro-Vice-Chancellor and Dean of Cranfield School of Management, said: "We are honoured to retain our EQUIS Accreditation – this is a testament to the hard work and efforts of our staff who should be congratulated on the result. Along with our other accreditations, this endorsement continues the global recognition for our excellence in leadership development, powerful industry links and realworld focus." The Accreditation Board was impressed with the significant progress made since the School was last accredited in 2015 and took particular note of the quality of Executive Education and close connections to the corporate world. The united faculty community at Cranfield was also highlighted. EQUIS accreditation is the most comprehensive institutional accreditation system for business and management schools. It is acknowledged worldwide by potential students, faculty, employers, corporate clients and the media, often being a pre-requisite for entry to rankings.

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Management
Education

1. Has the PRME Signatory Member or its governing parent institution adopted policies that are intended to influence how faculty, staff and students the school's support its commitment to RME? If so, share the adopted policies.

☒

 Travel

Policy

Title: Sustainable Travel Policy

Description: This policy statement indicates our intent to introduce a culture of sustainable travel to help us achieve our net zero goal. It includes business travel, commuting, and international student travel.

Date: 17/10/2024

Language: British English

Sharing Rights: Public

Scope: Business travel, commuting, and international student travel.

Enforcement Date: 01/07/2024

Revision Date: 01/07/2025

Number Of Pages: 2

Publisher: Cranfield University Energy and Environment Team

Media: Document



Sustainable Travel Policy

Policy Statement

The University is committed to taking action to achieve net zero by 2030 whilst undertaking research to reduce emissions across all its Themes. Our research and teaching on transport including aviation requires us to engage and support these sectors in achieving net zero.

This policy statement indicates our intent to introduce a culture of sustainable travel to help us achieve our net zero goal. It includes business travel, commuting, and international student travel.

Travel is a difficult area to address as a global university that engages with organisations worldwide through research, field trips, conferences and collaborations and that has its own global research airport. In this context we recognise that some travel is necessary to carry out research and our wider institutional work.

In line with our vision to become a globally valued university for sustainability, our Ambition 2027 goals, and our environmental strategy, we want people to look for every opportunity to do things differently, so that travel only happens when it is essential, and it has the lowest possible carbon impact. We also recognise that our research is aimed at finding sustainable solutions to achieve net zero.

Context

In 2022, Cranfield signed the Sustainable Development Goals Accord, which committed us to combating poverty, inequality, climate change, environmental degradation, and promoting peace and justice. We also created a new Vision statement, to become a globally valued university for sustainability through our education, research and operations; and launched a new Corporate Plan, Vision 2027, creating impact together [Introducing Ambition 2027 - Ambition 2027 - Cranfield University's Corporate Plan \(foleon.com\)](#) with sustainability at its heart. Reducing scope 1, 2 & 3 emissions is therefore a priority for Cranfield as well as for key industries we partner with and applies to all our Themes.

This Sustainable Travel Policy statement will apply to all travel on University business, commuting and international student travel from 15 July 2024 and should be read in conjunction with:

- Business Travel guidance on booking travel - [Business travel \(cranfield.ac.uk\)](#);
- Overseas Travel procedure

Approach

The University is committed to providing adequate resources to meet the objectives set out in Cranfield's Sustainable Business Travel Plan and our Campus Travel Plan addressing commuting - [Sustainable travel and transport \(cranfield.ac.uk\)](#).

To be successful the University needs everyone who works, studies or lives on campus to help achieve this policy, in particular by:

- considering whether they need to travel or whether virtual alternatives could be used;
- choosing the most sustainable travel option;
- considering the carbon footprint of their travel; and
- sharing suggestions for reducing the carbon impact of travelling

The Energy and Environment Committee (EEC) oversees the University's Travel Plans and holds regular reviews to ensure that adequate progress is being made against these main targets, taking remedial action if not.

The Energy & Environment Team in Facilities coordinates and delivers travel reduction management (including carbon offsetting measures), with support from relevant working groups, reporting progress to EEC.

This policy is communicated within the University and available to the general public, students and all persons working for, in or on behalf of the University.

Where to go for help

If you require any help or advice on any aspect of this policy, please contact the Energy and Environment team green@cranfield.ac.uk. Information can be requested in an alternative format using this e-mail address if required.

Approved:


Date:

9 July 2024



Professor Karen Holford
Chief Executive and Vice-Chancellor

Document control

Document title	Travel Policy CU-ENV-POL-05
Originator name/document owner	Gareth Ellis
Professional Service Unit/Department	Facilities Energy and Environment Team
Implementation/effective date	9 July 2024
Approval by and date	University Executive, 18 June 2024
Date of last review and version number	New policy
Date of next review	01 July 2025
Signature	
Name	Karen Holford
Title	Chief Executive and Vice-Chancellor
Information categorisation	Open
Where is this policy/procedure published?	Externally (on the University website)

Policy

Title: Sustainable Travel and Transport Webpage

Description: Sustainable Travel and Transport Webpage

Date: 17/10/2024

Language: British English

Sharing Rights: Public

Scope: All travel by staff and students

Number Of Pages: 1

Publisher: Cranfield University Energy and Environment Team

Enforcement Date: 31/12/2023

Revision Date: 31/12/2024

Media: Webpage

URL:

• <https://www.cranfield.ac.uk/our-sustainable-university/sustainable-travel-and-transport>



Student equity, diversity, inclusion

Policy

Title: Dignity at Cranfield Policy

Description:

This policy therefore aims to: • maintain the dignity of all members of the Cranfield Community • ensure that differences are respected and valued • demonstrate our commitment to diversity and inclusion

Date: 17/10/2024

Language: British English

Sharing Rights: Public

Scope: Dignity for both Staff and Students

Enforcement Date: 01/04/2017

Revision Date: 01/09/2022

Number Of Pages: 16

Publisher: Cranfield University Human Resources and Development

Media: Document

Policy

Title: Supporting LGBTQ+ Staff and Students Policy

Description:

This guidance is intended to equip members of staff/managers with the understanding and expertise they need to support LGBTQ+ members of staff/students and create an inclusive, high-performing team.

Date: 17/10/2024

Language: British English

Sharing Rights: Public

Scope: To provide staff/managers with the understanding and expertise they need to support LGBTQ+ members of staff/students and create an inclusive, high-performing team.

Enforcement Date: 25/05/2021

Revision Date: 11/02/2022

Number Of Pages: 7

Publisher: Cranfield University Human Resources and Development

Media: Document



Dignity at Work & Study Policy

We are committed to providing and promoting an inclusive working and learning environment where all our staff and students are treated fairly and with dignity and respect, in line with our University [Values](#) and as set out in our Charter:

“The University will provide a collaborative and supportive working and learning environment which embeds equality of opportunity and the rights of individuals in all its operations and treats everyone with dignity and respect”.

The University will not tolerate any form of discrimination, harassment, sexual misconduct, bullying or victimisation (unacceptable behaviour) by or against any member of our Cranfield community or a third party such as a supplier or visitor to the University.

About this policy

We are committed to providing all staff, students and wider members of our Cranfield community with a range of mechanisms for them to raise concerns, seek support and be listened to if they believe they are being or have been subjected to unacceptable behaviour while working, studying or participating in a Cranfield activity.

This policy therefore aims to:

- maintain the dignity of all members of the Cranfield Community
- ensure that differences are respected and valued
- demonstrate our commitment to diversity and inclusion
- embed our University [Values](#)
- set out the responsibilities of individual members of the University community in recognising and preventing harassment or bullying in (or associated with) the workplace
- outline and promote the support available and procedures to be followed if harassment or bullying occurs.

This policy has been developed in line with ACAS guidelines and covers work/study-related events (including social events) whether they are on or off our sites (including overseas), as well as the normal working/learning environment and electronic communications (including social media platforms).

This policy covers cases of harassment, bullying, discrimination, sexual misconduct, or victimisation of:

- staff by other members of the University (staff/students/third parties)
- students by other members of the University (staff/students/third parties)

Definitions

Bullying

Bullying is defined as: “Intimidating, malicious or insulting behaviour and/or an abuse or misuse of power that undermines, humiliates or denigrates the person at the receiving end”.

It can take the form of physical, verbal and non-verbal conduct. Non-verbal conduct includes postings on social media platforms.

Bullying may include, but is not limited to:

- a) setting up someone to fail by giving them unachievable tasks, an unmanageable workload impossible deadline, or making unreasonable demands
- b) inappropriate monitoring of work or overbearing supervision
- c) giving someone too little work or work that is below their competence
- d) Instantaneous rages, over trivial matters, personal insults and name-calling, or public humiliation, put-downs or ridiculing
- e) removing or reassigning a person's responsibilities without justification
- f) deliberately withholding training, information, or resources from someone that are necessary for them to perform the role or course, or opportunities for advancement
- g) constant unfounded criticism of performance or study tasks
- h) withdrawing or refusing reasonable support

Cyber bullying and the use of social networking sites

Cyber bullying is a term used to refer to bullying through electronic media, usually via social networking sites, personal web pages, emails, text messages and internet presence including blogs such as Facebook, and all other social media, whether private, personal or public. In using all social media or posting online, all staff and students should consider the content, language and appropriateness of such communications.

The following guidance is relevant for both students and staff in relation to online behaviour:

- avoid using language which could be deemed to be offensive, threatening or humiliating to others in a face-to-face setting as the impact may be much the same or worse, as it may not be possible to delete the online information
- avoid forming or joining an online group that isolates or victimises fellow students or colleagues
- ensure that social networking sites are not used to access or share illegal content
- avoid defamatory comments in relation to staff, students, customers or suppliers of the University
- do not share confidential information regarding a University employee, student, customer or supplier.

Staff and students are encouraged to report incidences of inappropriate online behaviour. If alleged cyber bullying or harassment is reported, it will be dealt with in accordance with this policy and may lead to disciplinary action in the same way as incidents that take place in a face-to-face setting.

The University's Social Media policy can be found here: [Social media \(cranfield.ac.uk\)](https://www.cranfield.ac.uk/social-media)

Harassment

The Equality Act 2010 defines harassment as: “Unwanted conduct related to a protected characteristic, which has the purpose or effect of violating a person’s dignity or creating an intimidating, hostile, degrading, humiliating or offensive environment for that individual”.

Harassment will amount to unlawful discrimination if it relates to any of the protected characteristics.

Harassment may involve conduct of a sexual nature (sexual harassment/sexual misconduct), or it may be related to a protected characteristic such as age, disability, gender reassignment, gender expression or identity, pregnancy or maternity (including breastfeeding), race, colour, nationality, ethnic or national origin, religion or belief, sex or sexual orientation.

Harassment/sexual misconduct may include, but is not limited to:

- a) unwanted physical conduct or ‘horseplay’, including touching, pinching, pushing, grabbing, brushing past someone, invading their personal space and more serious forms of physical or sexual assault
- b) unwelcome sexual advances or suggestive behaviour (which the harasser may perceive as harmless), and suggestions that sexual favours may further a career or that a refusal may hinder it
- c) continued suggestions for social activity after it has been made clear that such suggestions are unwelcome
- d) sending or displaying material that is pornographic or that some people may find offensive (including e-mails, text messages, video clips and images sent by mobile phone or posted on the internet)
- e) offensive or intimidating comments or gestures, or insensitive jokes or pranks
- f) mocking, mimicking or belittling a person’s disability
- g) ignoring or shunning someone, for example, by deliberately excluding them from a conversation or a workplace social activity
- h) intrusion by pestering, spying or stalking.

A person may be harassed even if they were not the intended "target". For example, a person may be harassed by racist jokes about a different ethnic group if it creates an offensive environment.

Harassment or bullying may consist of sporadic or persistent behaviour, although one single act may be considered sufficiently serious to warrant disciplinary action.

Specific examples of the harassment related to specific protected characteristics can be found in **Appendix A**.

Discrimination and hate crime

Unlawful discrimination takes place when an individual or a group of people are treated less favourably than others based on a protected characteristic such as age, disability, gender reassignment, pregnancy and maternity (including treating a woman less favourably because they are breastfeeding), race, colour, nationality, ethnic or national origin, religion or belief, sex or sexual orientation and in relation to direct discrimination only, marriage and civil partnership.

Direct discrimination occurs where someone is treated less favourably because of one of the protected characteristics set out above; this can include association with or a perception of a particular characteristic.

Indirect discrimination occurs where someone is disadvantaged by an unjustified provision, criteria or practice that puts people with a particular protected characteristic at a disadvantage compared with others who do not share that characteristic.

Crimes committed against someone because of their disability, transgender-identity, race, religion or belief, or sexual orientation are classed as hate crimes and victims are encouraged to report these to the police (in addition to seeking support internally from the University).

Hate crimes can include:

- threatening behaviour
- assault
- robbery
- damage to property
- inciting others to commit hate crimes
- harassment
- online abuse.

Victimisation

Victimisation broadly refers to poor treatment directed towards someone who has made or is believed to have made or supported a complaint under the Equality Act. It is subjecting a person to a detriment because they have, in good faith, complained (whether formally or otherwise) that someone has been bullying or harassing them or someone else, or supported someone to make a complaint or given evidence in relation to a complaint. This would include isolating someone because they have made a complaint or giving them a heavier or more difficult workload.

Provided that person has acted in good faith and genuinely believes that what they are saying is true, they have a right not to be victimised for making a complaint or doing anything in relation to a complaint of bullying or harassment and the University will take appropriate action to deal with any alleged victimisation, which may include disciplinary action against anyone found to have victimised another member of staff.

Making a complaint that you know to be untrue, or giving evidence that you know to be untrue, may lead to disciplinary action being taken against you.

Roles and responsibilities

Students – Dignity at study

All students:

- have the right to study and live in an environment which is free from any form of harassment or bullying.
- have the right to complain if they believe they are being treated inappropriately and be assured that all complaints will be dealt with seriously, promptly and confidentially. At all times, they have the right to choose how what action should be taken.
- have the right not to be victimised if they make a complaint or give evidence in connection with a complaint. Any complaint of harassment and/or victimisation will be dealt with thoroughly, promptly, fairly and confidentially. Victimisation (if proven) will result in disciplinary action and may warrant dismissal/termination of studies.
- have the right to take action outside of the University, including if they feel it appropriate to involve the police. If such an offence occurs the attack/assault should be reported to the police: the University will support them fully in doing this but cannot do it on their behalf. The existence of this

policy does not replace or detract from an individual's rights to pursue a complaint under the relevant discrimination legislation.

- have a responsibility to help ensure a learning and teaching environment in which the dignity of everybody is respected. Everyone must comply with this policy and students should ensure that their behaviour does not cause offence and could not in any way be considered to be harassment.
- should discourage harassment by making it clear that they find such behaviour unacceptable and by supporting students who suffer such treatment and are considering making a complaint. They should alert appropriate staff of any incident of harassment to enable Cranfield University to deal with this matter.

Staff - Dignity at work

All staff:

- have the right to work in an environment which is free from any form of harassment or bullying
- treat colleagues and other members of the University community with dignity and respect and adhere to this policy, in line with our University [Values](#)
- value differences in others and the contribution they make
- report any suspected incidents of bullying, harassment, sexual misconduct or victimisation immediately to their line manager, their local HR team or a Dignity at Work Advisor (highlighted below)
- discourage inappropriate behaviour by making it clear that they find it inappropriate and by supporting colleagues who experience such behaviour and reporting incidents to enable the University to deal with it
- ensure that visitors/contractors they engage with do not encounter any inappropriate behaviour and that they comply with this policy themselves. Complaints of bullying or harassment by a contractor will be investigated and action taken may include severing links with them where the complaint is upheld
- have a right to complain if they believe they are being treated inappropriately, and to be assured complaints will be dealt with seriously, promptly and confidentially. The procedures under [Ordinance 29 'Resolution of Grievances'](#) should be referred to for 'Dignity at Work' complaints.

Line managers/Supervisors

Line managers and supervisors have a duty to implement this policy and to make every effort to ensure that bullying and harassment does not occur, particularly in the area they are responsible for. They should create a culture of respect, dignity and trust, and deal with any incidents in line with this policy.

Line managers/Supervisors:

- have a right to be treated with respect and dignity from the people they manage/supervise
- have a right to manage and monitor staff/student performance without fear of unfounded accusations of bullying or harassment
- should be responsive and supportive to any member of staff or student who makes an allegation of bullying or harassment, provide clear advice on the procedure to be adopted, maintain confidentiality and seek to ensure that there is no further problem of bullying, harassment or victimisation after a complaint has been resolved
- should lead by example by treating all staff and students with dignity and respect, listening, and responding to their views and being realistic about objectives and work programmes
- should be alert to unacceptable behaviour and take appropriate action

Staff and students may be suffering the effects of unacceptable behaviour without revealing it and feeling stressed, so it is important that managers/supervisors/tutors are aware of some typical signs, notably:

- absenteeism, regular or prolonged sick leave
- reduced performance, a decline in productivity or quality of work output
- lack of respect for others, low morale or a change of atmosphere at work/study.

Staff and students should not interpret firm and fair management or supervision as bullying or harassment. Harassment or bullying is always unfair and may undermine someone's efforts to perform well, whereas assertive/legitimate management actions could include:

- setting fair but achievable objectives and performance measures
- monitoring performance levels against objectives
- providing constructive feedback when staff/students are not performing at satisfactory levels or behaving inappropriately
- taking action where unsatisfactory work or levels of absence have been identified.

The University

The University regards all forms of bullying, harassment, sexual misconduct, discrimination and victimisation as unacceptable and will not be tolerated. Conduct may be deemed to be unacceptable whether or not the person behaving in that way intends to cause offence. This applies to people who are not the subject of the harassment or bullying, but who may witness it and be offended by it.

The University:

- will ensure that adequate resources are made available to promote dignity at work and study and to deal effectively with complaints of inappropriate behaviour. This includes ensuring that this policy is readily accessible to all members of staff and students and training is available for staff to understand their responsibilities under the Equality Act 2010.
- will support staff to offer confidential first line information and support on all Dignity at Work and Study matters.
- has a duty to take appropriate action where a criminal offence has taken place, or if there is an incident which represents a serious risk to the health and/or safety of staff or students. If a student wishes to report a criminal offence, the University will support them in that action. (Examples of serious criminal offences include physical assault, indecent exposure or sexual assault including "date rape".) The University may take separate and additional disciplinary action against a member of staff or student who has been convicted of a criminal offence. In exceptional circumstances, the University may suspend the person concerned pending the outcome of an investigation.
- may also take action against members of the University making false or malicious allegations under the appropriate disciplinary procedure.
- will monitor all incidents of harassment and will review the effectiveness of this policy and procedures annually.

Raising a concern/Informal resolution

Most incidents involving harassment or bullying can be resolved quickly and informally: often they can result from misunderstandings or cultural differences, or that feelings have not been recognised or understood. This is particularly true in isolated incidents or with people who you do not know well.

Where possible, every effort should be made to resolve a complaint or issue informally. Often a person will not realise their behaviour is unwelcome or offensive, so an informal conversation may help them to understand the effect of their behaviour and prevent it reoccurring.

Staff

If staff find it difficult to approach the other person directly (or raising it with their line manager), they can contact one of the following for confidential support, advice or assistance in the first instance:

- [Dignity at Work Advisors](#)
- [Trade Union representatives \(if a member\)](#)
- Equality, Diversity and Inclusion team
- [Local HR Teams](#)
- [Employee Assistance Programme](#)

Dignity at Work Advisors are volunteers who have been trained to provide staff with advice and guidance. An advisor can be contacted on a confidential basis at the informal stage.

A list of advisors, their departments and contact details are available on the [intranet](#). There may be occasions where the Dignity at Work Advisor selected is unable to offer support. If this is the case, they will refer the member of staff to another Dignity at Work Advisor who will be able to assist.

It should be noted that the Dignity at Work Advisors do not normally conduct formal investigations.

Students

Students may seek a confidential discussion with any of the staff listed below that they feel able to approach and have the right to be accompanied at such a discussion by a friend or representative of the Cranfield Students' Association. The purpose of the discussion will be to discuss the nature of the problem and how to arrive at an acceptable solution through informal channels.

The following members of staff can be approached for support, advice or assistance:

- Staff in the [Student Wellbeing and Disability Support Team](#) (including the Head of Student Support and Wellbeing)
- Tutors/Supervisors, Course Directors, or other staff closely linked with the management of your studies
- Directors of Education and Directors of Research
- Staff in Education Services (including the Academic Registrar and the Assistant Registrars)
- Staff in the Cranfield Students' Association
- Heads of Academic and Administrative Departments

Support may include:

- providing information on options available to the person seeking help
- advice on how to collate evidence to establish a complaint
-

When you seek advice from any of the above, you will be advised that:

- a formal investigation and possible disciplinary action can only take place if the complaint is investigated under one of the University's formal disciplinary procedures;

- a written record of the action taken will be made to assist with any formal proceedings which may arise if the behaviour does not stop;
- there may be circumstances where the conversation cannot remain confidential, particularly if the person you talk to believes that the circumstances represent a health or safety risk to any member of the University.

Staff in the Student Wellbeing and Disability Support Team can support you with attempts to resolve matters informally, with you:

- approaching the alleged harasser directly, making it clear to the person(s) harassing you that the behaviour in question is offensive, is not welcome and should be stopped;
- approaching the alleged harasser with the support of a friend, staff in the Student Advice Centre, your personal tutor or a representative of the Students' Association;
- writing the alleged harasser a letter, with the help of a friend or staff in the Student Advice Centre;

If you feel unable to tackle the person(s) concerned, this will not constitute consent to harassment nor will it prejudice any formal complaint that you may make. It is important that at all stages, you keep notes of any relevant incidents which distress you, including a record of the ways in which the incidents have caused you to change the pattern of your studies or social life. These may be helpful if the informal resolution does not resolve the matter.

However, if you feel you are being subjected to harassment or bullying in any form, you should not feel that it is your fault or that you have to tolerate it.

Formal Complaints

If you feel that either you are unable to attempt to resolve the matter informally, or that any attempts to resolve a complaint formally have not been successful you may make a formal complaint to the University.

Staff – see Appendix B

Submit a complaint in writing to your HR Team, ideally within 20 days from the incident that led to the complaint.

Students - see Appendix C

Any formal complaint will be considered using the University's student complaints procedures, as set out in the [Senate Handbook: Student Complaints](#). The outcome of this process may in turn lead to action being taken against any perpetrator under the University's student disciplinary procedures, as set out in the [Senate Handbook: Student Disciplinary Procedures](#).

Monitoring

While individuals will remain anonymous, we will monitor all reported incidents of bullying and harassment annually and will regularly review the effectiveness of this policy.

Further reference documents

- [University Diversity Strategy](#)
- [Student welfare handbook](#)

- [Mental Health & Wellbeing Strategy](#)

Confidentiality

Evidence provided under this policy will be treated in a sensitive and confidential manner and information will be shared on a need-to-know basis, including as appropriate with the reported staff member.

Unnecessary disclosure of such allegations may result in disciplinary action.

As part of the investigatory process the identity of the individual(s) providing the evidence may have to be revealed and, as appropriate, they may be requested to make a statement and/or attend an investigatory interview.

All information received in relation to this policy will be stored and processed in line with applicable data protection legislation. To learn more about how we handle your data, please review our [Privacy Notice](#).

Appendix A: Examples of harassment

Harassment can take place face-to-face, or in written form (e.g. by emails, or comments on social media sites). They may be heard or received directly by the intended person, or by others. Both such 'direct' and 'indirect' harassment are considered unacceptable behaviour.

Outlined below are some examples of harassment. Some, if occurring only once, may cause mild irritation but if repeated becomes harassing. Some on the other hand are clearly harassment even if they occur once. Nevertheless, all the forms of harassment are inappropriate for the University to maintain a culture of respect and dignity.

A.1 Sexual harassment/sexual misconduct

Sexual harassment/sexual misconduct is unwanted behaviour of a sexual nature. It can happen to men, women and people of any gender or sexual orientation. It can be carried out by anyone of the same sex, opposite sex or anyone of any gender identity. It can be physical, verbal or non-verbal in nature and can occur between members of the same or opposite sex. It is for individuals to determine what behaviour is acceptable to them and what they regard as offensive. However, any behaviour that could make the recipient feel that they are viewed as a sexual object may cause offence even if offence was not intended.

Examples of sexual harassment/sexual misconduct include:

- unwelcome advances, attention, invitations, or propositions
- offensive or unwelcome sexist comments or behaviour
- unwanted or derogatory comments about dress or appearance
- making unwelcome comments, jokes or gestures emphasising the gender of an individual or a group that are of a sexual nature
- threats of academic failure or promises of promotion or training in exchange for sexual favours
- serious criminal behaviour such as indecent exposure, indecent or sexual assault or rape are extreme examples of sexual harassment/sexual misconduct
- emailing, texting or messaging sexual content
- displaying pornographic or sexual images on posters, calendars and cards
- having pornographic or sexual images on computers and phones
- unnecessary and unwanted physical contact.

What some people might consider as joking, 'banter' or part of their workplace culture can still be

sexual misconduct if the behaviour is of a sexual nature and it's unwanted.

A.2 Racial harassment

Racial harassment is an incident, or a series of incidents intended or likely to intimidate, offend or harm an individual or group because of their ethnic origin, colour, race, religion or nationality or cultural difference. A racist incident is any incident that is perceived to be racist by the victim or any other person

Examples of racial harassment include:

- derogatory name-calling, insults, banter, taunts and racist jokes
- verbal abuse or threats
- the display of racist graffiti or images
- the transmission of racially offensive materials or statements via electronic or other means
- physical attack or threat of attack
- ridicule of an individual for cultural differences
- unnecessary comments or intrusive questioning about racial issues or racial origin

- open hostility, avoiding or refusing to work with an individual from a different racial group.

A.3 Disability harassment

Disability harassment is behaviour that makes direct or indirect insulting and offensive references to a person's disability.

Examples of disability harassment include:

- mockery, taunts or jokes regarding personal attributes or mental health
- offensive language or derogatory name-calling
- avoidance or refusal to work alongside a disabled person
- speaking to others rather than to the disabled person directly
- unwelcome discussion of the effects of disability on the individual's personal life
- excluding the disabled person from social events or meetings
- physical abuse or intimidation
- interfering with personal aids or equipment
- making assumptions about a person's ability to carry out certain types of work, based on their disability.

A.4 Harassment relating to sexual orientation

Harassment on the grounds of sexual orientation can be hostile or offensive acts or expressions by a person or group against another person or group because of their sexuality. Homophobia is a term used to describe hatred and rejection of gay, lesbian and homosexual people. It may be directed against individuals or groups of people who are, or are thought to be lesbian, gay, bisexual or transgendered.

Examples of harassment relating to sexual orientation include:

- unnecessary and degrading references to someone's sexual orientation, gender identity or their perceived sexual orientation or gender identity
- spreading rumours or gossip including speculating about someone's sexual orientation or gender identity, or outing them
- asking intrusive questions
- homophobic remarks, jokes, innuendo or gossip
- threats of disclosing sexuality of the individual
- expressing or acting on stereotypical assumptions
- display or transmission (including by electronic means) of offensive materials
- excluding people because they are bisexual, lesbian or gay
- offensive actions and physical attack
- using religious belief to justify anti-gay bullying and harassment.

A.5 Harassment relating to religion, belief or non-belief

Cranfield will not tolerate any form of religious harassment or discrimination against any faith group. Harassment may be defined as any hostile or offensive act or expression by a person or group against another person or group, based on their religion, belief (including a philosophical belief) or non-belief. It is imperative that behaviour towards others is at all times respectful and courteous, regardless of a person's religion, belief or non-belief and that the University's performance standards are adhered to.

Examples of harassment relating to religion, belief or non-belief may include the following:

- ridicule and offensive humour or jokes about a belief or non-belief
- abusive language, including racist or religious jokes and can include "banter"
- derogatory remarks or name calling

- exclusion from social activities or work-related events without justification
- display of or transmission (including by electronic means) of offensive materials
- (malicious) scorning of beliefs or non-belief
- proselytising
- physical attack or threats of attack
- the display of racially offensive written material.

On harassment relating to a specific religion, belief or non-belief, external guidance may be available e.g. the [IHRA definition of antisemitism](#) will be taken into account in any disciplinary case following a complaint or allegation of antisemitism.

A.6 Age harassment

Harassment on the grounds of age consists of hostile or offensive acts by a person or group against another person or group in relation to their age. It is recognised that younger or older workers may be harassed or bullied on account of their age.

Examples of age harassment include the following:

- ageist remarks, jokes
- negative or derogatory comments generalising about the age-group of the individual
- physical attack or threats of attack
- exclusion on the basis of age e.g. being too young or too old to participate in work-related events.

A.7 Harassment relating to gender reassignment

Transgender harassment is harassment on grounds that a person proposes to undergo, are undergoing or have undergone gender reassignment. Gender reassignment is the medical and social process whereby a person changes their birth sex to match their chosen gender identity.

A person harasses another if they engage in unwanted conduct related to gender reassignment, which has the purpose or effect of violating the other person's dignity or of creating an intimidating, hostile, degrading, humiliating or offensive environment.

Examples of harassment relating to gender reassignment include the following:

- derogatory name-calling derogatory remarks, jokes, innuendo or gossip
- offensive transphobic comments or jokes
- asking intrusive questions
- threats of disclosing the gender identity of the individual
- deliberately using the incorrect pronoun to address the member of staff when you have been informed of the correct one.
- expressing or acting on stereotypical assumptions
- exclusion of trans staff from facilities
- display of or electronic transmission of offensive materials.

A.8 Other forms of harassment

There are other forms of harassment that do not constitute harassment on the grounds of the above but nevertheless can seriously affect the well-being of colleagues if they occur.

Examples of such behaviour include:

- intrusion into the individual's personal life by pestering, spying or stalking
- persistent pressures to become involved in anti-social or criminal behaviour
- persistent intimidating behaviour based on the individual's membership or non-membership of a trade union.

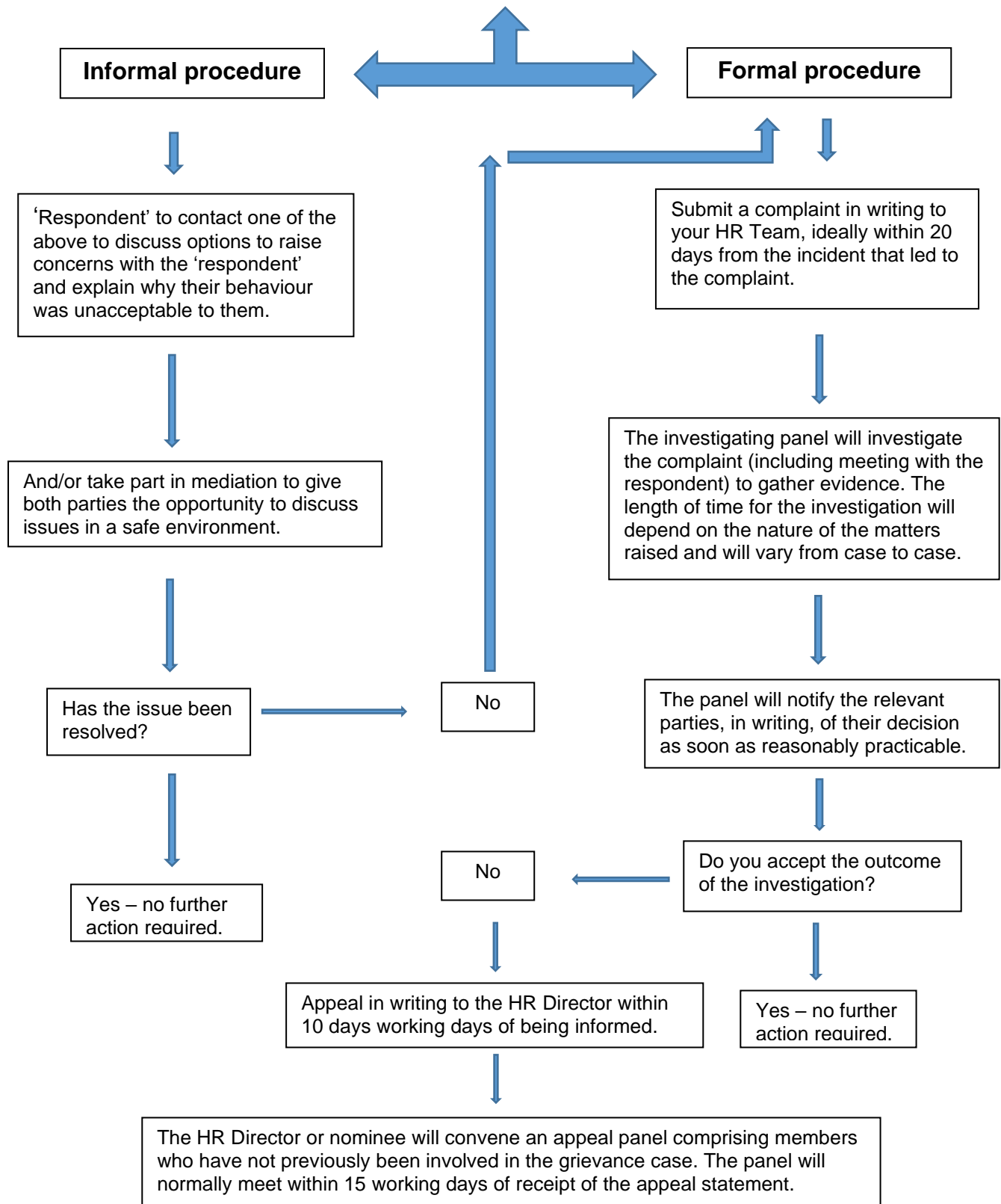
Any difficulty in defining what constitutes harassment should not deter staff from complaining of behaviour that causes them distress. Nor should anyone be deterred from making a complaint because of embarrassment or fear of intimidation or publicity.

Appendix B: Dignity at Work process

To be read in conjunction with Ordinance 29 – the resolution of grievances

If you feel that you have experienced a Dignity at Work issue you can discuss your concerns and seek advice from:

- Your Local HR Team
- Dignity at Work Advisor
- Equality, Diversity & Inclusion Team
- Local Trade Union representative

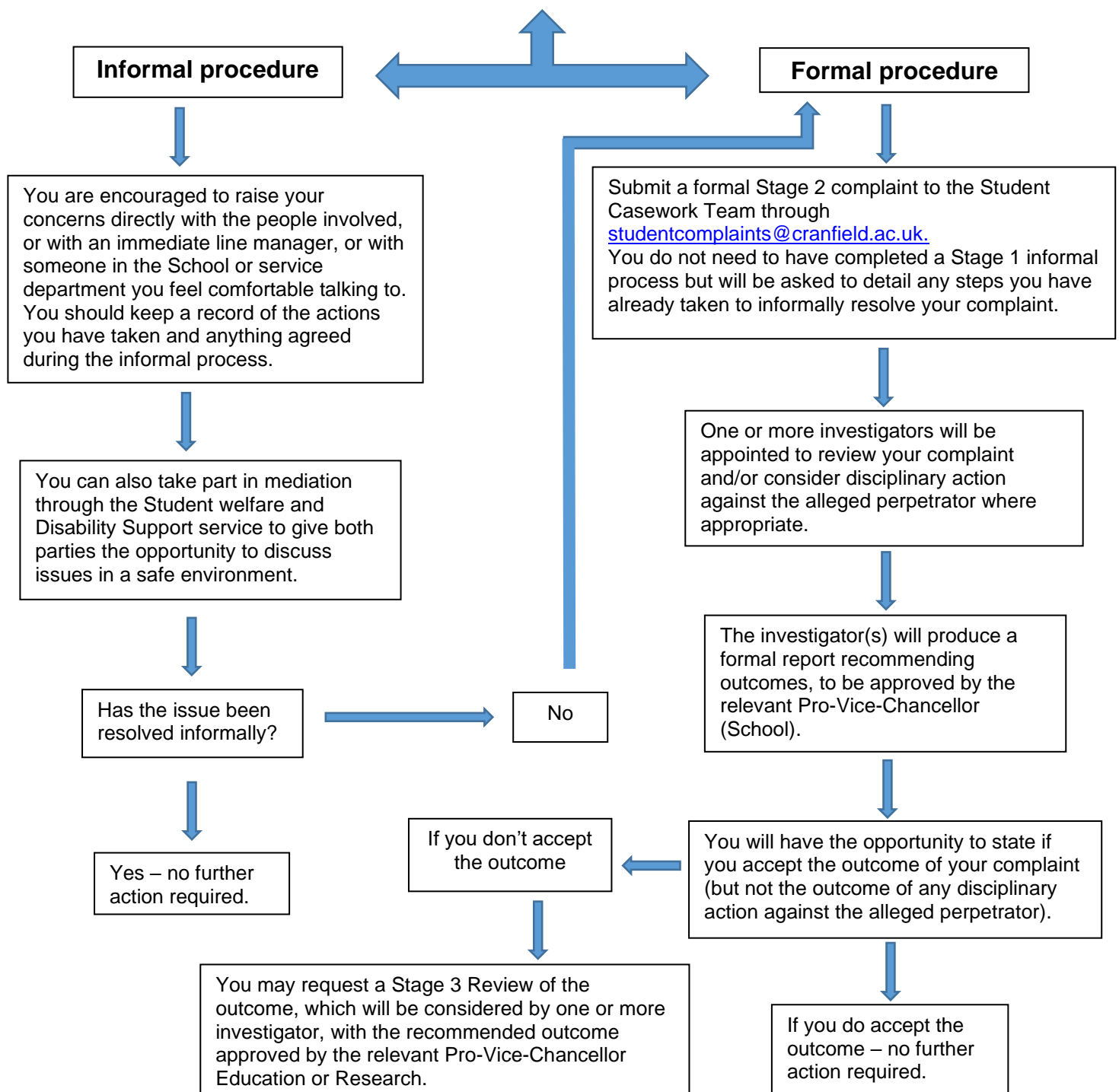


Appendix C: Dignity at Study process

To be read in conjunction with the Senate Handbook on Student Complaints

If you feel that you have experienced a Dignity at Study issue you can discuss your concerns and seek advice from:

- Staff in the Student Wellbeing and Disability Support Team (including the Head of Student Support and Wellbeing)
- Tutors/Supervisors, Course Directors, or other staff closely linked with the management of your studies
- Directors of Education and Directors of Research
- Staff in Education Services (including the Academic Registrar and the Assistant Registrars)
- Staff in the Cranfield Students' Association
- Heads of Academic and Administrative Departments



Document control

Document title	Dignity at Work Policy
Originator name/document owner	Head of Equality, Diversity & Inclusion
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Version	Amendment	By	Date
V1	Policy updated	Equality, Diversity & Inclusion Business Partner	April 2017
V2	Amendment to Appendix A (A.5) to include reference to IHRA definition of antisemitism	Head of Equality Diversity & Inclusion	December 2020
V3	Policy reviewed	Head of Equality, Diversity & Inclusion	February 2021
V4	Policy reviewed to include sexual misconduct	Head of Equality, Diversity & Inclusion	April 2022
V5	Policy reviewed to combine Dignity at Work and Dignity at Study policies	Head of Equality, Diversity & Inclusion	September 2022



Supporting Lesbian, Gay, Bi Trans, Queer, Questioning (LGBTQ+) staff and students

We aim to maintain and promote an environment where members of the Cranfield community whatever their sexuality, gender identity or expression, feel equally welcome and valued, in line with our [University Values](#).

Introduction

LGBTQ+ identities can seem like a complex area especially for members of staff/managers who are not LGBTQ+ themselves, do not know any LGBTQ+ people or who have little experience of managing diverse teams. This guidance is intended to equip members of staff/managers with the understanding and expertise they need to support LGBTQ+ members of staff/students and create an inclusive, high-performing team.

According to Stonewall, it is estimated that that 5-7% of the population in the UK define themselves as LGBTQ+.

What is the definition of lesbian, gay, bi,trans, queer and questioning (LGBTQ+)?

Sexual orientation is an enduring sexual, emotional and/or romantic attraction towards others. Heterosexuals are attracted to members of the opposite gender while homosexuals are attracted to members of their own gender.

- **Lesbian** - refers to a woman who has an emotional, romantic and/or sexual orientation towards women.
- **Gay** - refers to a man who has an emotional, romantic and/or sexual orientation towards men. It is also a generic term for lesbian and gay sexuality - some women or non-binary people define themselves as gay rather than lesbian.
- **Bi** - Refers to a person who has an emotional and/or sexual orientation towards more than one gender.
- **Trans** – an umbrella term to describe people whose gender is not the same as, or does not sit comfortably with, the sex they were assigned at birth. Trans people may describe themselves using one or more of a wide variety of terms, including (but not limited to) transgender, cross dresser, non-binary, genderqueer (GQ).

- Queer – is a term used by those wanting to reject specific labels of romantic orientation, sexual orientation and/or gender identity.
- Questioning – is the process of exploring your own sexual orientation and/or gender identity.

Further definitions can be found here on the Universities [LGBTQ+ Glossary of Terms](#).

For the purpose of this guidance:

- the term 'identity' will cover (but is not limited to) sexual orientation, gender identity and gender expression.
- 'harassment and bullying' will cover (but are not limited to) homophobic, biphobia and transphobic behaviour.

Being 'out' at work/at University

Some members of staff/students may regard others or their own 'identity' as a private matter. However, whether a staff member/student feels comfortable to be 'out' at work or University (open about their identity) or not can impact on their performance and wellbeing. Research by Stonewall has demonstrated that staff who are out at work are overwhelmingly more content at work and consider that their performance improves too.

LGBTQ+ people who are not 'out' are unlikely to complain about harassment or bullying for fear that if they do, their identity will become widely known. Those who are not out at work/University may feel they need to adopt different identities between home and work/University, and act in a way that is inconsistent with their own identity. They may therefore experience isolation and invisibility because their true self is not known to others.

LGBTQ+ people are often vulnerable to being 'outed' against their will (perhaps inadvertently by colleagues or fellow students). This may have consequences where some members of staff or students have strongly opposing beliefs, as it may cause concerns about the possibility of homophobic, biphobia or transphobic bullying or harassment.

LGBTQ+ members of staff and students should be in control about who they are out to and when. Some LGBTQ+ people may be comfortable for some colleagues/students to know and not others – partially out - so it is not appropriate to assume that others know about a colleague or fellow student's identity. Deliberately outing a colleague or student can be very harmful and considered harassment under the University's [Dignity at Work](#) and/or [Dignity at Study policy](#).

The experience of LGBTQ+ people

LGBTQ+ people can face particular issues in wider society. For example:

- They may experience pressure to conform to 'cultural norms' and have to acquire coping strategies to confront bias and hostility. Knowing that being out can make them more vulnerable to prejudice, and deciding who to trust can be stressful;
- Where an LGBTQ+ person is not out, they may be concerned about work events and social gatherings where there is an expectation of being accompanied by a partner;
- According to research by Stonewall, some lesbians and bi women consider that being a woman is a bigger barrier at work than being gay, and so will be wary about being out at work to avoid double discrimination;
- There is a conflict for some people between their faith and sexual orientation. Some people of faith can be hostile to LGBTQ+ people, which can alienate LGBTQ+ people of faith. Similarly, some LGBTQ+ people of faith face discrimination from people who believe people cannot be LGBTQ+ and a person of faith.
- LGBTQ+ staff may be seen by colleagues as role models for LGBTQ+ students and thus it may be assumed that they will undertake all the pastoral care of LGBTQ+ students, which may be burdensome. There may also be assumptions that an out LGBTQ+ staff member will take responsibility for LGBTQ+ issues in the workplace;
- Bi people may face a struggle for acceptance with either lesbian or gay people as well as with heterosexual colleagues;
- Black and minority ethnic LGBTQ+ people sometimes feel they have to choose whether to identify with their ethnicity or sexual orientation, rather than both. They may face racism from other LGBTQ+ people or homophobia from people from the same cultural or ethnic background.

It is important not to make assumptions about someone's identity, for example, try use 'partner' rather than 'girlfriend' or 'husband' in conversation unless they state otherwise.

Harassment of LGBTQ+ people at work/at University

LGBTQ+ people, and those perceived to be LGBTQ+, sometimes experience homophobia, biphobia or transphobia, hostility, harassment or prejudice which can go unrecognised and unchallenged.

One of the most common manifestation of this is 'jokes' and banter in their place of work or study, which members of staff/managers need to 'nip in the bud' where it promotes negative stereotypes of LGBTQ+ people or uses offensive language e.g. the word 'gay' in a pejorative sense.

When used appropriately, banter can be fun, team-building, reduce stress and raise morale. However, it can also contribute towards a hostile environment, even when it

is not directed towards a singular individual banter may cause an LGBTQ+ person who is not open about their sexuality to feel unsafe. Managers or members of staff should intervene if they think someone is feeling uncomfortable and stop any offensive comments. If in doubt seek advice from the Equality, Diversity and Inclusion Team.

Managers or members of staff who do not take firm action to curtail inappropriate banter and jokes could be viewed as complicit in the harassment and risk low team morale, reduced productivity, and complaints from staff.

Trans staff/students

Trans issues are distinct from sexual orientation issues, although they are sometimes conflated. Someone who identifies as Trans is someone whose gender identity and/or gender expression differs to the gender they were assigned at birth. They might have identified with the opposite gender from an early age.

Some trans people may choose to affirm their gender through medical treatment instead of using gender reassignment. Gender reassignment is an outdated and contested term, and largely focused on binary and medical notions of transitioning.

Transition at work is a crucial part of the process, 40% of Trans people are not living permanently in their affirmed gender because of fear of discrimination in the workplace.

Examples of transphobia may include:

- Deliberately ignoring someone's preferred gender pronouns or using their former name
- Disclosing someone's trans history without consent
- Gossiping or speculating about someone's gender
- Questioning someone's ability to 'pass' as their affirmed gender

It is best not to assume how someone identifies but to ask which terms they use and the gender pronouns they would prefer you to use.

Reclaiming 'queer'

The word queer has a complex history and has been used pejoratively against members of the LGBTQ+ community. However, the word is being reclaimed by LGBTQ+ people with some seeing it as an inclusive term that encompasses different sexual orientations, gender expressions and gender identities.

Not all members of the LGBTQ+ community are comfortable with this word because of the way it has been used in the past, but some people choose to identify themselves as queer. It is not appropriate to refer to a person as queer unless they have explicitly stated that they identify as such.

Being an LGBTQ+ Ally

Listen, learn: With an open mind speak with your LGBTQ+ colleagues/students, but be respectful if people don't want to talk about their personal experiences.

Challenge assumptions: Don't assume you know your colleagues' or students' gender and/or sexual orientation. Remember, even if someone has a same-gender partner they may not identify as gay or lesbian, they might be bi or queer or rather not label themselves at all.

Speak up: Banter or jokes about someone's sexual orientation and/or gender identity /expression can be harmful. As an ally it is important not to let others do this and to call it out. Gently but firmly let them know that it's not ok. Sometimes LGBTQ+ people don't want to be the only ones calling people out, and your voice can make a powerful difference to someone else's life. However, please do consider when it might be more appropriate to give the floor to an LGBTQ+ person to allow them to speak for themselves (but if the situation becomes more contentious, they should contact their local HR team for support).

Information and support for LGBTQ+ students

The University understands that LGBTQ+ students may face different challenges during their time at the University, therefore the following information has been provided regarding welfare support and information.

Support

The University has a confidential counselling service that is available to all students free of charge. When required, personal counsellors seek to help students to focus clearly on their problems and to work towards an outcome which the individual student feels to be appropriate. Further details can be found [here](#).

Dignity at Study

Underpinning the University's [Dignity at Study Policy](#) is the belief that staff and students should be free from intimidation or discrimination, harassment and bullying. Harassment in any form is unacceptable behaviour and will not be permitted or condoned by the University.

You may seek a confidential discussion with any of the staff listed below that you feel able to approach. You have the right to be accompanied at such a discussion by a friend or representative of the Cranfield Students' Association. The purpose of the discussion will be to discuss the nature of the problem and how to arrive at an acceptable solution through informal channels.

The following members of staff can be approached for support, advice or assistance:

- Staff in the Student Advice Centre (including the Head of Student Support and Wellbeing)

- Tutors/Supervisors, Course Directors, or other staff closely linked with the management of your studies
- Directors of Education and Directors of Research
- Staff in Education Services (including the Academic Registrar and the Assistant Registrars)
- Staff in the Cranfield Students' Association
- Heads of Academic and Administrative Departments

Other useful internal resources

[General Student Handbook](#)

[Student Handbook \(Student Welfare\)](#)

[Student Advice Centre](#)

Further Resources (Staff and Students):

Internal support

- Equality, Diversity and Inclusion Team diversity@cranfield.ac.uk
- [Glossary of Terms](#)
- [Dignity at Work Policy](#)
- [Diversity & Inclusion Strategy](#)
- [PAM Assist](#)

External support

- [stonewall.org.uk/](https://www.stonewall.org.uk/) UK's leading LGBTQ+ advocacy organisation
- [LGBT+ switchboard](#) provide an information, support and referral service considering issues around their sexuality and/or gender identity.
- [Helpline – Galop](#) support all LGBT+ people who've experienced hate crime, domestic abuse or sexual violence
- [QTIPOC organisations](#) - This is a list curated by the Black, Asian, Minority Ethnic/People of Colour Staff Network of the organisations, community groups and social spaces that are creating incredible work and support for QTIPOC (queer, trans and intersex) people in the UK.
- [Opening Doors London](#) is the largest UK charity providing activities, events, information and support services specifically (LGBTQ+) people over 50.
- [Mermaids](#) supports transgender, nonbinary and gender-diverse children and young people until their 20th birthday, as well as their families and professionals involved in their care.
- [Biscuit](#) is a mixed purpose organisation catering to modern bi women, femmes and those assigned female at birth. Biscuit also has a [list of Bi organisations around the UK](#)

For other groups in the UK, consult [What's in my area](#)

Document control

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V1	Guidance launched	Head of Equality, Diversity & Inclusion	25 May 2021
V2	Updated language	Head of Equality, Diversity & Inclusion	11 Feb 2022

Policy

Title: EDI Annual Report

Description: This Equity, Diversity and Inclusion (EDI) report provides an account of our staff data and actions for the period August 2022 - July 2023

Date: 17/10/2024

Language: British English

Sharing Rights: Public

Scope: This Equity, Diversity and Inclusion (EDI) report provides an account of our staff data and actions for the period August 2022 - July 2023.

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• <https://www.cranfield.ac.uk/som/press/women-in-leadership-achieving-your-next-steps-top-business-schools-join-forces>

Policy

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Equity, Diversity and Inclusion Annual Report

August 2022 – July 2023

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Introduction

This Equity, Diversity and Inclusion (EDI) report provides an account of our staff data and actions for the period August 2022 - July 2023. It has been written in line with our statutory reporting to the Higher Education Statistics Agency (HESA) and to demonstrate compliance with the Public Sector Equality Duty and Equality Act (2010). This report also offers the opportunity to highlight Cranfield's ongoing progress and successes in EDI while acknowledging the challenges we continue to face.

This report covers the period 2022-2023. During this time, we [published our new EDI strategy - Making Change Happen, together with a video bringing it to life](#). As well as summarising our progress against our previous EDI strategy, we set four new strategic ambitions. By 2027 our ambitions are to be:

1. A diverse organisation that is more representative of our local and global communities and partners than we were in 2022.
2. An inclusive organisation where all our staff and students have a voice and feel safe (physically and psychologically) and respected, and where everyone can fulfil their own potential.
3. An organisation where EDI is strongly integrated across all our activities and everyone feels confident when talking about EDI matters.
4. An organisation that continues to take decisions and actions which are informed by our data.

This report for the period 2022-2023 therefore spans across our previous and our current strategies.

Our commitment to equity, diversity and building an inclusive culture is interwoven throughout our corporate plan, [Ambition 2027](#). The corporate plan was also launched during the reporting period and is supported by a number of enabling strategies and areas of focus, including "Applied Research Powerhouse", "Distinctive Cranfield Learner" and "Employer of Choice". All these elements reflect our EDI aspirations.

Overview 2022-2023

We regularly analyse our EDI data, not only to meet our statutory obligations, but to assist us with understanding our staff demographics. By understanding our staff data, we can tailor actions that, in turn, support our goal of being an Employer of Choice, in line with Ambition 2027.

In summary, over the period we have made positive progress against our four new EDI strategic ambitions (outlined above). The data in this report are presented in line with statutory requirements, by individual protected characteristics. We do also acknowledge that there are complexities and barriers experienced by people with intersecting identities in our workplace which will require further analysis.

The charts and tables provide a detailed account of our data. Some of our positive actions and successes during this period are summarised now.

Highlights

Gender

- Introduced a sector-leading enhanced maternity leave policy offering 22 weeks of paid leave at full pay.
- For the second year running we were recognised in the Top 30 Employers in the UK by the charity Working Families, reflecting our innovative, flexible and family-friendly policies and practices that support parents and carers.
- Our gender pay gap continues to reduce. In the relevant period, our mean pay gap reduced from 22.2% to 21.0% and our median from 18.7% to 18.4%. While this progress is positive, we recognise the need for ongoing improvement. For details, please refer to the [published report on our website](#).

Ethnicity

- Reported our ethnicity pay gap for the first time. While this is not currently a statutory requirement, it signals our commitment and provides a benchmark for us to make continued improvements. For details, please refer to the [published report on our website](#).
- Celebrated Black History Month by inviting Nels Abbey, a writer, media executive and corporate leadership & diversity consultant to join us and run a workshop.
- In January 2023, Cranfield's executive leadership team signed individual pledges supporting race equality as part of [Race Equality Matter's Big Promise](#).

Disability

- Members of our community who chose to share a disability, condition or impairment increased during the reporting period. Sharing rates have improved and at 7% are in line with the sector benchmark.
- Organised a series of events, blogs and speakers for Neurodiversity Celebration week in March 2023, and established a Neurodiversity working group.
- Launched a Digital Accessibility YouTube playlist with video guides to help staff and students produce accessible documents and presentations.

Sexual orientation

- Developed a new Sexual Orientation report on our EDI data dashboard, which helped to achieve an increase in the percentage of people who chose to share their LGBTQ+ status from 2% to 3%.

- Celebrated LGBTQ+ History Month by sharing information about Cranfield's LGBTQ+ community and what we can all do to promote an inclusive culture.
- During Pride 2023, our community members shared how they would be celebrating throughout the month, and their experiences of inclusivity at Cranfield.

Intersectionality

To support our communities and EDI agenda more broadly, recognising the intersectional challenges we face, we have taken additional actions, some of which are highlighted below:

- established a new University Executive Forum with a broader, more diverse membership to support the Chief Executive and Vice Chancellor and the Executive Team in the operation of the University, in particular the delivery of the corporate plan. The first forum included a session on inclusive, candidate centric recruitment practices;
- established a men's mental health community and support network as a forum to provide a space for male colleagues to open up, share their experiences and show they're not alone;
- ran Inclusive Leadership Development and Conscious Decision-making workshops which were well attended and positively received; and
- launched a [new report + support tool](#) which makes it easier for staff and students to seek support and report behaviours such as bullying, harassment and discrimination which are not acceptable and have no place at Cranfield.

Recruitment

Attraction, recruitment and selection continued to be a focus, and many initiatives were implemented in the year to enhance the candidate experience, and improve our practices, including:

- collaborated with local recruitment providers and attended careers fairs in our region to help us attract and recruit more diverse talent from our local community;
- launched a new in-house workshop, "The Art of Successful Recruitment" which has been well attended and positively received; and
- enhanced the inclusivity of our recruitment practices which included:
 - reviewing the "essential" criteria for a role to ensure we are not causing people to self-select out of applying;
 - promoting job opportunities through video content shared on social media;
 - writing our adverts in an engaging, candidate focused way, in plain, gender-neutral language; and
 - using assessments to evaluate candidates, not just relying on a single interview.

Student engagement

Throughout this period, we have been working more closely with our student community. This includes delivering a variety of EDI workshops and sessions to students, collaborating with the [Student Wellbeing and Disability Support team](#) to support students with their needs, and engaging with the Cranfield Students Association and [Cranfield Careers and Employability Service](#).

New Senior Academic Promotions Process

In 2022, we launched a new Senior Academic Promotions Process, after a comprehensive review. This involved consultation with colleagues and trade unions, and significant research into sector best practice to inform our new process. One of the key principles guiding this review was to ensure an inclusive process, where decision makers are aware of, and mitigate bias, and outcomes are subject to independent review.

The positive impact of our new process is reflected in the demographics data and analysis section of this report, and we hope to see further improvements in our data in the next reporting period.

We conducted an equality impact assessment (EIA) on the promotion candidates and their success rates which is summarised in Table 1. Please note, the number of candidates who chose to share if they are disabled or their sexual orientation was too low to be able to conduct analysis. Contract hours were evaluated, distinguishing between full time and part time staff. The EIA revealed that a higher proportion of staff working full-time hours were considered for promotion compared to those working part-time. This insight will inform our approach to the 2023-2024 promotions round.

Characteristic	% of eligible candidates considered	% Successful
Female	21%	79%
Male	15%	72%
White	17%	77%
Minority ethnic	19%	68%
Full time	19%	75%
Part time	2%	0%

Table 1 EIA - Senior Academic Promotions

Research Acceleration Fellowship

We introduced a Research Acceleration Fellowship to provide funding for additional time in support of personal research and research career development from January 2023-July 2023. We actively encouraged applications from researchers belonging to minoritised or underrepresented groups. We conducted an EIA of the applications and awarded fellowships, the results of which were:

- 27% of applicants were female, and 40% of the fellowships were awarded to women;
- 6% of applicants shared they are disabled, and 10% of fellowships were awarded to people who shared they are disabled;
- 6% of applicants shared their sexual orientation as being LGBTQ+ and 7% of fellowships were awarded to LGBTQ+ applicants; and
- 62% of applicants were from Black, Asian or minoritised ethnic groups and 42% of fellowships were awarded to Black, Asian and minoritised ethnic people.

The relatively small applicant numbers did not allow more detailed analysis to be conducted into individual characteristics, or intersecting identities.

Positive pulse survey results

We regularly carry out pulse surveys to ask our staff how they feel about working at Cranfield. This includes questions about Cranfield's progress on EDI and how they perceive Cranfield as an "employer of choice".

The survey results from January 2023 showed:

- 84% of staff agree they are proud to work at Cranfield from a baseline of 82% in 2022;
- 77% of staff agree they feel part of a supportive community from a baseline of 71% in 2022; and
- 63% of staff agree we are making progress on our EDI agenda from a baseline of 55% in 2022.

Staff networks

Our staff networks continue to gain momentum and have created active calendars of meetings and events. We have established a new parent and carers staff network, and are members of [Employers for Carers UK](#). We established a forum specifically to bring together our network chairs and to provide support in their roles and encourage intersectional sharing of perspectives and ideas. Our networks are supporting cultural change at Cranfield through fostering a wider understanding of the EDI agenda.

Data Analysis

In this section we provide a snapshot of our staff demographic data in a series of tables and charts, with brief commentary to help interpret the data.

Staff gender profile

When looking at the gender balance across the University, this is stable compared with the previous years – women now make up 48% of all University staff, a small increase from 47% last year.

The proportion of female staff increased within all schools and professional services units (PSUs), with the exception of the School of Aerospace Transport and Manufacturing (SATM) which remained the same as shown in Figure 1 below. It should be noted that while the percentage of female staff within SATM remained static, the actual number of female staff has increased.

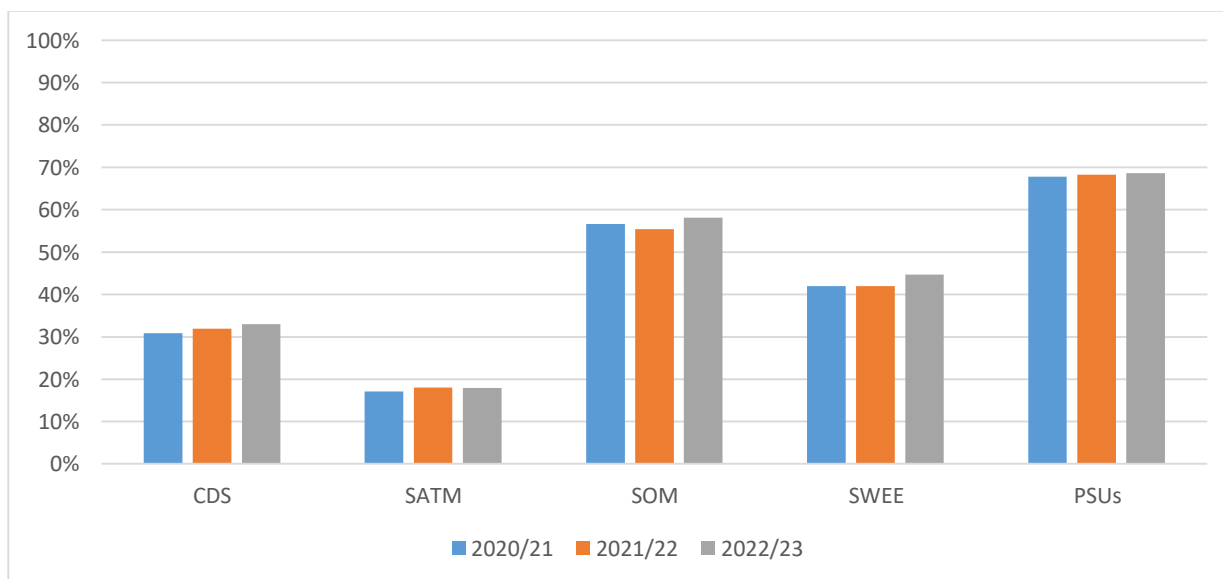


Figure 1 Female staff by School/Professional Support Units (PSUs)

As shown in Figure 2, when looking at gender representation by job family, it is pleasing to see the number of female academics has risen steadily over last three years, from 84 in 2021 to 103 in 2023. The number of female professors has also increased by three since last year.

We have seen a small rise in the number and percentage of female technicians compared to last year, another positive result.

Women continue to be the majority in business services roles. The apparent fall in the percentage of women within the operational job family this year is as a result of an increase in men in this job family, rather than a fall in the number of women employed in these roles.

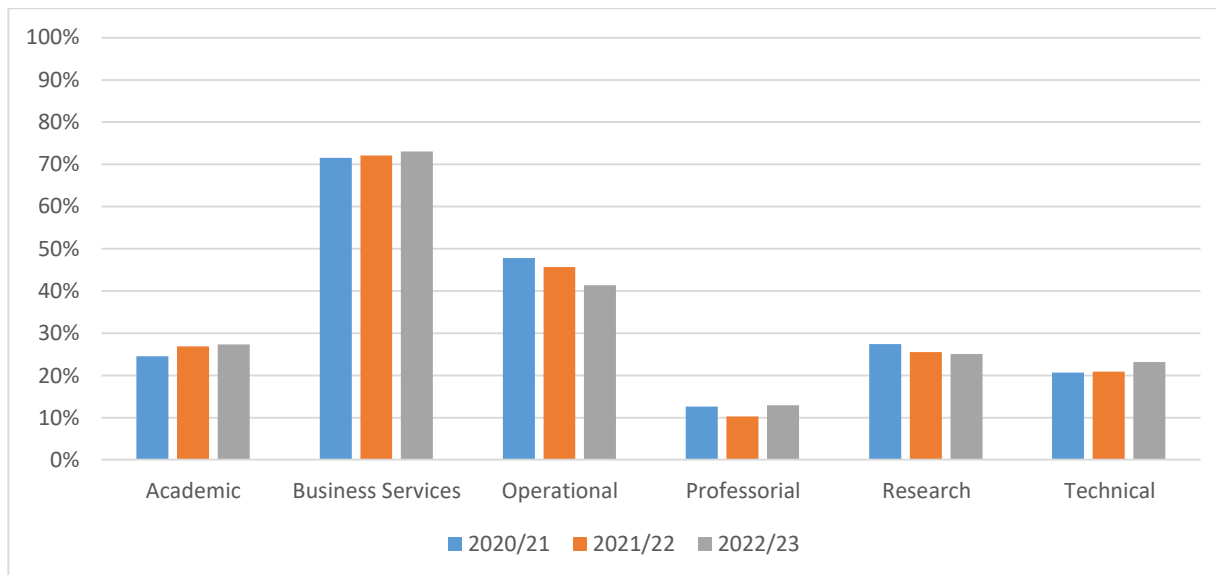


Figure 2 Female staff by job family

Gender representation on senior committees of the University

We improved representation on University senior committees in the reporting period, shown in Table 2. In 2023, the University established a new University Executive Forum with a broader, more diverse membership, replacing the previous Senior Management Team structure. Representation on Senate has also improved based on the previous reporting year, now with 20% female representation (Senate has authority delegated by Council to oversee the academic work of the University, assure academic quality and standards and regulate student affairs. Membership is predominantly made up of the Cranfield's professoriate).

Committee	2022 - 2023		2021- 2022	
	% Female	% Male	% Female	% Male
Council	53	47	50	50
University Executive	31	69	31	69
University Executive Forum*	43	57	28	72
Senate	20	80	13	87
* Created in 2023. Previous to this we had a Senior Management Team in place.				

Table 2 Gender representation on senior committees of the University

Staff ethnicity profile

Our staff nationality and ethnicity data for the period are shown in the tables and figures below. When looking at the ethnicity of our staff in Table 3, staff from a minority ethnic background represent 22% of all University staff, a rise of 3% from last year. This is explained by a

significant increase in the number of non-UK minority ethnic and an increase in UK minority ethnic staff. This increase in UK minority ethnic staff is very positive, as we continue to seek to become more representative of our local demographic*.

Frustratingly, we experienced a significant increase in the number of “undisclosed” ethnicity data amongst our staff. This is a direct result of changes to the ethnicity categories made by HESA which required staff to re-share their personal data with us. Significant efforts are being made to encourage re-sharing of this information.

*UK Census 2021 ethnic minority people: Milton Keynes – 28%, Bedford 24%, Shrivenham 9%, Swindon 18%.

	2020/21		2021/22		2022/23	
	Count	%	Count	%	Count	%
Non-UK Minority Ethnic	188	11%	197	12%	244	14%
Non-UK White	228	14%	231	14%	61	3%
UK - Minority Ethnic	118	7%	116	7%	136	8%
UK - White	1049	64%	1053	64%	434	25%
Undisclosed*	58	4%	56	3%	894	51%
University	1641	100%	1653	100%	1769	100%

Table 3 Staff nationality and ethnicity

There has been little change from last year in the specific ethnicities of UK minority ethnic staff. The changes to HESA categories for general ethnicity mean a direct comparison year on year is not made, but the current ethnicities are shown in Table 4.

Ethnicity	Count	%
Asian - Indian or Indian British	34	25%
Any other Asian background	16	12%
Asian - Chinese or Chinese British	15	11%
Asian - Pakistani or Pakistani British	13	10%
Any other ethnic background	12	9%
Black - African or African British	11	8%
Black - Caribbean or Caribbean British	9	7%
Mixed - White or White British and Asian or Asian British	7	5%
Any other Mixed or Multiple ethnic background	5	4%

Mixed - White or White British and Black Caribbean or Black Caribbean British	5	4%
Asian - Bangladeshi or Bangladeshi British	5	4%
Arab	3	2%
Mixed - White or White British and Black African or Black African British	1	1%

Table 4 UK ethnicity

Figures 3 and 4 show the ethnicity of our staff by school/PSU and by job family. These figures highlight the high percentage of 'Undisclosed' ethnicity that has resulted from recent changes to the ethnicity categories made by HESA which required us to seek the information anew from staff. Efforts are being made to encourage re-sharing of this information by all our staff.

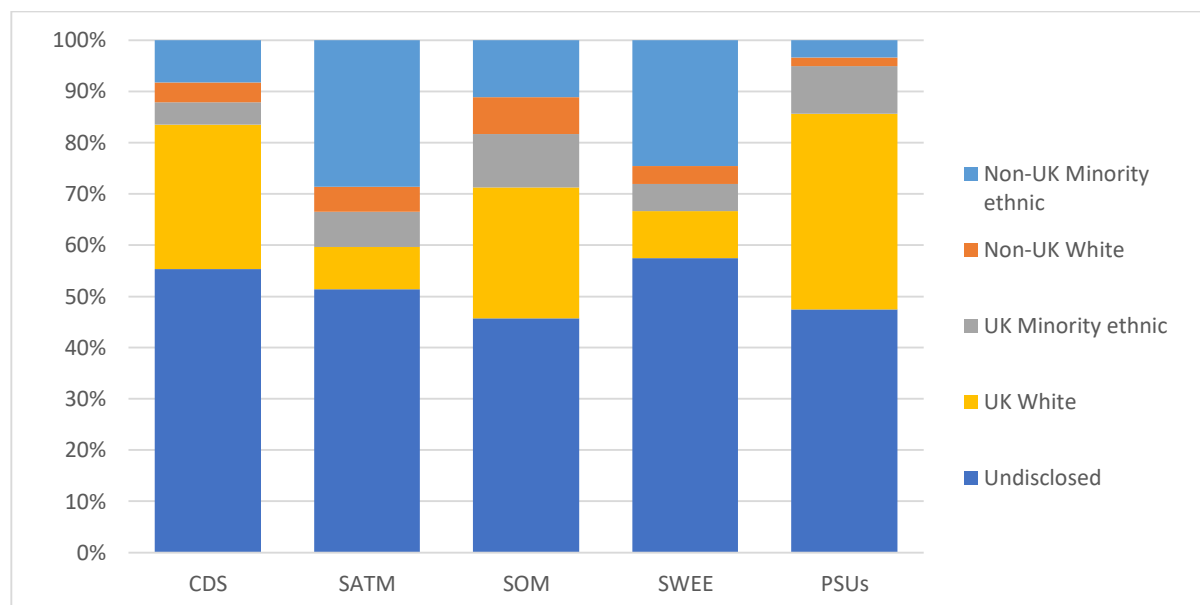


Figure 3 Ethnicity by School/PSUs

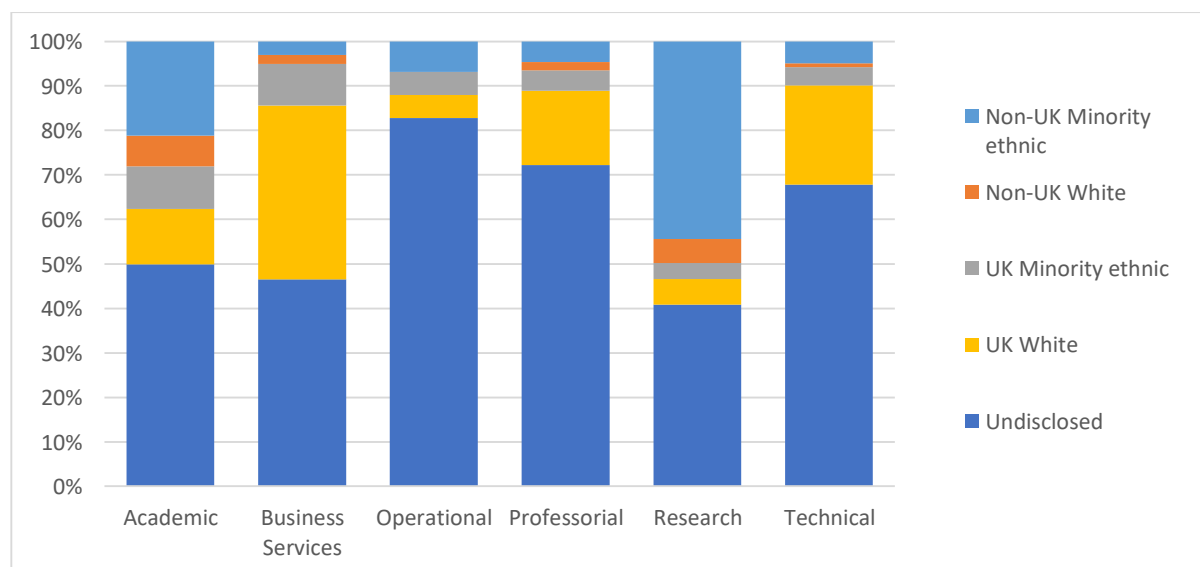


Figure 4 Ethnicity by job family

Staff disability profile

When analysing the staff disability data, we are very pleased that the percentage of staff sharing a disability, condition or impairment has increased from 5% to 7%, as shown in Table 5.

	2020/21		2021/22		2022/23	
	Count	%	Count	%	Count	%
No shared disability	1545	94%	1552	94%	1593	90%
Disability shared	71	4%	78	5%	126	7%
Undisclosed	25	2%	23	1%	50	3%

Table 5 Staff sharing a disability, condition or impairment

A further positive this year is a new option to share details of more than one disability, condition or impairment, making our data more inclusive and relevant. This is shown in Table 6.

The increase in sharing rates is particularly notable in the following areas:

- increase in long-term conditions, was 12 last year, now 30;
- increase in sharing of learning differences, was 14, now 25;
- increase in sharing mental health conditions, was 14, now 22; and
- increase in sharing hearing difficulties, was 4 now 12.

Disability, condition or impairment	Count	%
Long-term illness or health condition such as cancer, HIV, diabetes, chronic heart disease, or epilepsy	30	24%
Learning difference such as dyslexia, dyspraxia or AD(H)D	25	20%
Mental health condition, challenge or disorder, such as depression, schizophrenia or anxiety	22	17%
An impairment, health condition or learning difference not listed above	20	16%
D/deaf or have a hearing impairment	12	10%
Physical impairment (a condition that substantially limits one or more basic physical activities such as walking, climbing stairs, lifting or carrying)	11	9%
Two or more impairments and/or disabling medical conditions	3	2%

Social/communication conditions such as a speech and language impairment or an autistic spectrum condition	2	2%
Blind or have a visual impairment uncorrected by glasses	1	1%

Table 6 Disability, condition or impairment

Staff sexual orientation profile

The number of staff sharing their LGBTQ+ sexual orientation with us has increased, but remains relatively small as a percentage of our total staff. However, we are pleased to report a 36% increase in the number of people sharing they are LGBTQ+ during the six-month period after first publishing these numbers in a new data dashboard. This is a reflection of the work of our staff network, Q at Cranfield. This is shown Table 7.

	Count	%
Heterosexual	1331	75%
LGBTQ+	57	3%
Undisclosed	381	22%
University	1769	100%

Table 7 Sexual orientation

Staff age profile

There has been little change in the age profile of our staff compared with last year, as shown in Figure 5. We have seen a slight increase in the proportion of University staff under the age of 30. The percentage of staff over the age of 60 in our professorial and operational job families, shown in Table 8, is significant for our succession planning.

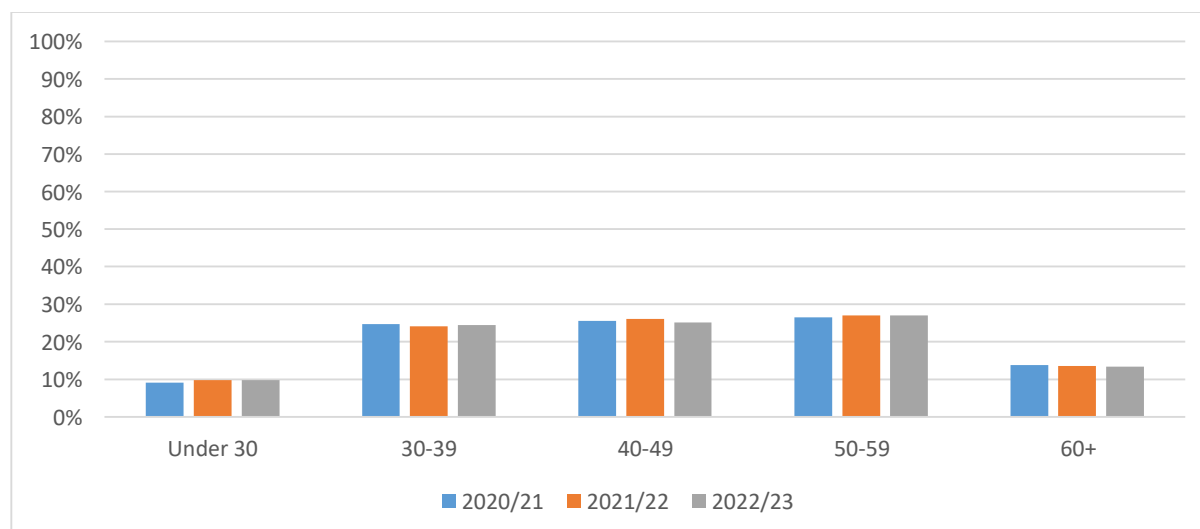


Figure 5 Age profile

	% age within job family						
	Academic	Business Services	Operational	Professorial	Research	Technical	University
< 30	1%	9%	10%	0%	23%	26%	10%
30-39	27%	21%	9%	1%	48%	16%	24%
40-49	35%	26%	22%	22%	17%	15%	25%
50-59	26%	33%	31%	38%	8%	24%	27%
60+	12%	12%	28%	39%	4%	19%	13%

Table 8 Staff age by job family

Staff recruitment data

The data presented in this section are summary results from analysing recruitment activity for the six-month period August 2022 to January 2023, covering the gender, ethnicity and disability of applicants. The data are presented to show our recruitment activity by job family.

Gender in recruitment data

Overall, women represented 41% of all applicants, and 58% of those hired, resulting in a higher overall success rate of 15% for female applicants compared to that of 7% for male applicants. This is an increase on the year 2021-2022, when overall 38% of all applicants were female.

These results were replicated across all job families except for technical and apprentice roles where the number of female applicants and those shortlisted was lower. Similar female success was seen in roles across the pay scales, including those at senior level.

As in previous years, male applicants continue to have a low success rate for business service roles, with men making up 37% of all applicants, but only 17% of those hired for these roles. The percentage of offers made to women remained stable compared to last year, at 53%. The data are provided in Table 9

Female					
Job Family	Applications	Shortlisted	Offered	Hired	Conversion Rate
Academic	31%	34%	37%	35%	6%
Professorial	40%	100%	100%	100%	50%
Research	19%	25%	29%	29%	14%
Business Services	63%	72%	83%	83%	16%
Operational	42%	55%	58%	58%	28%
Technical	23%	26%	14%	14%	10%
Apprentice	26%	10%	17%	17%	7%
All University	41%	53%	58%	58%	15%

Male					
Job Family	Applications	Shortlisted	Offered	Hired	Conversion Rate
Academic	69%	66%	63%	65%	5%
Professorial	60%	0%	0%	0%	0%
Research	81%	75%	71%	71%	8%
Business Services	37%	28%	17%	17%	6%
Operational	58%	45%	42%	42%	15%
Technical	77%	74%	86%	86%	18%
Apprentice	74%	90%	83%	83%	13%
All University	57%	46%	40%	40%	7%
Elected not to share	1%	1%	1%	2%	13%

Table 9 Recruitment activity by gender for August 2022 - January 2023

Ethnicity in recruitment data

Compared to the reporting period in 2021-2022, our recruitment data for ethnicity shows little change. UK white applicants continued to have the highest success rate across all roles with 21% of this group being successfully hired (compared to 19% last year), shown in Table 10. Non-UK ethnic minority applicants again had a low conversion rate of 4% (3% last year); non-UK white had a 11% conversion rate (9% last year), shown in Table 11.

Encouragingly, UK-ethnic applicants had a conversion rate of 11% this year which was up from 6% last year.

Overall, the conversion rates for minority ethnic staff have improved since the last reporting period, by 5% for UK ethnic applicants, and by 1% for non-UK ethnic applicants. This is evidenced in the overall increase in ethnic minority staff numbers this year.

As in previous years, ethnic minority applicants from outside the UK make up the largest proportion of all applicants at 47% in the reporting period. This is a slight decrease over previous years (around 50%) and may reflect changes in the immigration landscape in the UK in the previous period. Non-UK ethnic minority applicants had the lowest success rate in terms of being appointed across all job family roles. In particular, they had a low success rate for academic and research roles even though they comprised the majority of applicants for roles of this type. UK ethnic minority applicants were shown to have low success rates in academic, operational and apprentice roles.

Our focus for 2023 -2024 will continue to be on increasing candidate attraction and identifying and removing barriers in the recruitment process to improve hiring levels for minoritised ethnic candidates.

UK White					
Job Family	Applications	Shortlisted	Offered	Hired	Conversion Rate
Academic	10%	26%	37%	41%	22%
Professorial	60%	100%	100%	100%	33%
Research	5%	13%	19%	19%	35%
Business Services	50%	71%	77%	76%	19%
Operational	51%	80%	100%	100%	38%
Technical	32%	63%	67%	67%	33%
Apprentice	45%	76%	83%	83%	21%
All University	28%	52%	58%	58%	21%

Non-UK White					
Job Family	Applications	Shortlisted	Offered	Hired	Conversion Rate
Academic	17%	28%	42%	41%	13%
Professorial	20%	0%	0%	0%	0%
Research	12%	14%	21%	21%	16%
Business Services	8%	5%	3%	3%	5%
Operational	5%	3%	0%	0%	0%
Technical	16%	6%	0%	0%	0%
Apprentice	6%	5%	17%	17%	33%
All University	10%	9%	11%	11%	11%

Table 10 Recruitment activity by white or non white ethnicity for August 2022 - January 2023

UK Minority Ethnic					
Job Family	Applied	Shortlisted	Offered	Hired	Conversion Rate
Academic	9%	13%	5%	6%	4%
Professorial	0%	0%	0%	0%	
Research	3%	3%	4%	4%	15%
Business Services	15%	15%	14%	14%	12%
Operational	4%	3%	0%	0%	0%
Technical	5%	6%	17%	17%	50%
Apprentice	11%	14%	0%	0%	0%
All University	9%	11%	9%	9%	11%

	Non-UK Minority Ethnic				
Job Family	Applied	Shortlisted	Offered	Hired	Conversion Rate
Academic	64%	33%	16%	12%	1%
Professorial	20%	0%	0%	0%	0%
Research	80%	70%	55%	55%	6%
Business Services	27%	8%	7%	7%	3%
Operational	40%	13%	0%	0%	0%
Technical	46%	25%	17%	17%	6%
Apprentice	38%	5%	0%	0%	0%
All University	47%	24%	19%	19%	4%
Elected not to share	5%	4%	4%	4%	9%

Table 11 Recruitment activity by minoritised ethnicity for August 2022 - January 2023

Disability in recruitment data

The sharing rates among candidates who apply for posts at Cranfield remain relatively low as a percentage of candidates. We aim to improve our understanding of the candidate experience for disabled candidates, and therefore request people share their data with us, in line with our commitments as a Disability Confident Employer. Of those applicants who chose to share that they are disabled, 8% were successfully appointed, whereas 13% of applicants who did not share any disability-related information with us were appointed, as shown in Table 12. It is important to note that this lower success rate may be due to the fact that many applicants elect not to share their personal information until they have been offered a role. This analysis marks the first year we have published this form of analysis and serves as a benchmark for our ongoing progress. In addition, the changes to HESA codes in 2023, which have made the categories of data that we collect more inclusive, may further assist us with increasing sharing rates.

Shared Disability					
Job Family	Applications	Shortlisted	Offered	Hired	Conversion Rate
Academic	3%	7%	5%	6%	9%
Professorial	0%	0%	0%	0%	
Research	2%	4%	0%	0%	0%
Business Services	7%	9%	5%	5%	8%
Operational	7%	10%	0%	0%	0%
Technical	2%	5%	0%	0%	0%
Apprentice	6%	10%	17%	17%	33%
All University	5%	7%	3%	4%	8%

None Shared					
Job Family	Applied	Shortlisted	Offered	Hired	Conversion Rate
Academic	97%	93%	95%	94%	5%
Professorial	100%	100%	100%	100%	20%
Research	98%	96%	100%	100%	10%
Business Services	93%	91%	95%	95%	12%
Operational	93%	90%	100%	100%	22%
Technical	98%	95%	100%	100%	17%
Apprentice	94%	90%	83%	83%	10%
All University	94%	92%	95%	95%	11%
Elected not to share	1%	1%	1%	2%	13%

Table 12 Recruitment activity by disability for August 2022 - January 2023

Sexual orientation in recruitment data

Our data on sexual orientation of candidates during the recruitment process is currently too small to perform meaningful analysis. We maintain our commitment to encouraging applicants to share their sexual orientation with us during recruitment stages through our engagement with the LGBTQ+ community. We have demonstrated good progress with increasing sharing rates with our employees when they join us, and we will continue to promote this practice. In addition, the changes to HESA codes in 2023, which broaden the categories of data we collect for sexual orientation, may further aid us in this regard.

Staff voluntary turnover data

Voluntary turnover occurs when staff willingly leave an organisation, as opposed to leaving at the end of a fixed term contract or other reasons initiated by the employer.

At Cranfield, our voluntary turnover rate for the six-month period to January 2023 was 5% which when extrapolated to a full year, is in line with the previous EDI annual report when voluntary turnover was 11% for the full year. This slightly lower voluntary turnover rate could reflect a stabilising of the general recruitment climate in the UK following the peak during the 'Great Resignation' and 'Great Retirement' that affected the country as a whole in 2021-2022. This rate continues to be in line with the rest of the sector.

During the six-month period, women and men experienced similar turnover rates, with women having a voluntary turnover rate of 6% and men 5%. The primary reasons for leaving were similar for both men and women, with career prospects and retirement being the most common reasons provided, however some women also referred to 'work/life balance' as a contributing factor. This is an important trend that also reflects the broader UK trends and is being considered as part of our wellbeing initiatives.

Variations in turnover can be seen within different ethnic groups. UK ethnic minority staff had the highest voluntary turnover rate of all groups during the six-month period, at 7%. The ethnic groups of non-UK ethnic, UK white and non-UK white all had a voluntary turnover rate of 5%.

Sector Benchmarks

Referencing [HESA staff data](#) for the academic year 2021/22, and the latest [AdvanceHE staff statistical report](#) which looks at staff data for the academic year 2020/21, the tables below benchmark Cranfield's key staff demographic metrics against the wider HEI sector where comparisons are available. The HESA data is a year older than the Cranfield reported data, due to HESA reporting timelines.

The tables below also show our People strategy KPIs to benchmark our progress towards our goals for 2027.

Gender	Cranfield July 2023	Strategy KPI by 2027	HESA 2021/22	Advance HE 2020/21 (rounded)
Females as % of all staff	48%	-	55%	54%
Females as % of all academics	27%	35%	-	-
Females as % of all professors	13%	20%	30%	28%

Ethnicity	Cranfield July 2023	Strategy KPI by 2027	HESA 2021/22	Advance HE 2020/21 (rounded)
Ethnic staff as % of all staff	21%	-	16%	16%
UK Ethnic staff as a % of all staff	8%	12%	-	9%
Ethnic staff as % of all professors	9%	-	12%	11%
Black staff as a % of all professors	0%	-	1%	1%

Disability	Cranfield July 2023	Strategy KPI by 2027	HESA 2021/22	Advance HE 2020/21 (rounded)
Shared disability as % of all staff	7%	6%	7%	6%

Sexual Orientation	Cranfield July 2023	Strategy KPI by 2027	HESA 2021/22	Advance HE 2020/21 (rounded)
Staff sharing their LGBTQ+ status as a % of all staff	3%	-	-	4%

Making Change Happen 2023 – 2024

Cranfield has strong ambitions to continue our progress and make change happen as outlined in our new [EDI strategy](#). While this report demonstrates good progress in a number of key areas, we recognise there is still more we aim to achieve. We acknowledge the need to make firm commitments to take the necessary actions to enable us to achieve our aspirations. A summary of some of our operational actions for 2023-2024 is provided below.

Operational actions

We will continue our EDI work in recruitment, career development, wellbeing, pay and reward and retention. In addition, we have planned new operational actions for the period 2023-2024, including:

1. establishing an executive committee for EDI and Wellbeing to further strengthen leadership and governance;
2. commencing the pilot for small and specialist institutions for [AdvanceHE's Race Equality Charter](#) submission;
3. applying for recognition as a [Trailblazer by Race Equality Matters](#). The Trailblazer series spotlights forward-thinking organisations that are implementing impactful solutions to drive race equality;
4. re-establishing our [Athena Swan](#) self-assessment team for our Bronze level Charter re-submission;
5. expanding our outreach activities with local communities, including participation in job shows, and ongoing engagement with organisations such as Women Leaders UK.
6. implementing a working group to review our disability adjustments processes;
7. submitting evidence towards achieving [Disability Confident Leader](#) status under the Disability Confident Scheme, building on our current level 2 status, Disability Confident Employer;
8. developing an enhanced shared parental leave policy to remove a barrier that may disincentivise co-parents from returning to work;
9. reviewing our People KPIs for staff sharing rates which have made strong progress in the past 12 months and may be revised upwards if this trend continues; and
10. sustaining our momentum of engaging with students, by increased partnering with the Cranfield Students' Association, and collaboration with colleagues such as our [Student Wellbeing and Disability Support team](#) and [Careers and Employability Service](#).

Policy

Title: Equity, Diversity and Inclusion Webpage

Description: Equity, Diversity and Inclusion Webpage

Date: 17/10/2024

Language: British English

Sharing Rights: Public

Scope: Equity, Diversity and Inclusion Webpage

Enforcement Date: 31/12/2023

Revision Date: 31/12/2023

Number Of Pages: 1

Publisher: Cranfield University

Media: Webpage

URL:

• <https://www.cranfield.ac.uk/working-at-cranfield/diversity>

Policy

Title: Student Disability Policy

Description: Policy to promote an inclusive learning, teaching and working environment in which disabled students are not disadvantaged or treated unfavourably.

Date: 17/10/2024

Language: British English

Sharing Rights: Public

Scope: s to promote an inclusive learning, teaching and To ensure that disabled students are not disadvantaged or treated unfavourably

Enforcement Date: 01/09/2020

Revision Date: 01/09/2022

Number Of Pages: 6

Publisher: Cranfield University

Media: Document



Equity Diversity Inclusion

Strategic plan to 2027

Making change happen

Strategy overview



Ambitions

We are a diverse organisation that is more representative of our local and global communities and partners than we are in 2022.

We are an inclusive organisation where all our staff and students have a voice and feel safe (physically and psychologically) and respected, and where everyone can fulfil their own potential.

We are an organisation where EDI is strongly integrated across all our activities and everyone feels confident when talking about EDI matters.

We are an organisation that continues to take decisions and actions which are informed by our data.

Priority areas

Take down barriers to diversity and inclusion



We will:

- Adopt bolder, more inclusive, agile, and best practice recruitment initiatives that enable the attraction and selection of diverse, high-performing talent, including positive action.
- Retain people by helping everyone to realise their potential through effective and inclusive development and talent management.
- Offer targeted career development opportunities for women, and black, Asian and minority ethnic people, who our data tells us face organisational barriers to career progression and are underrepresented at senior levels at Cranfield.
- Undertake research to identify organisational barriers faced by underrepresented groups for whom we don't have the data, including people who are disabled, and members of the LGBTQ+ community. This will enable us to take a targeted approach to taking down organisational barriers.
- Develop and implement actions to achieve physical and digital accessibility for all.

Build an inclusive, values-based culture



We will:

- Provide a distinctive employee experience through regular engagement and two-way communication with our employees, recognised trade unions, our staff network groups and working groups.
- Provide a distinctive student experience through regular engagement and two-way communication with students, the Students' Association, loop groups and other forums, as noted in Cranfield's Student Voice framework.
- Actively support and further promote our staff networks, School and PSU EDI groups, cross-University Working Groups, and their action plans.
- Continue to promote agile, flexible and inclusive working practices that support the diverse needs of staff, students, partners and the wider Cranfield community.
- Continue to demonstrate Cranfield's reputation as a diverse and inclusive employer through awards/charter marks and memberships of external bodies.
- Develop and embed a culture where leadership drives positive change.

Weave EDI into all we do



We will:

- Further enhance our student experience through creating an environment of access and inclusion, by all our stakeholders working together, including our staff, wider community and external partners.
- Further enhance our research culture through promoting opportunities to collaborate and by extending opportunities for stakeholders to work together.
- Create opportunities to increase knowledge and awareness of EDI and practical actions that can be taken across our sites.
- Create opportunities for learning and micro opportunities so that everyone can increase their confidence and feel empowered when talking about diversity and inclusion, in particular with regards to race and ethnicity, disability, neurodiversity and LGBTQ+. This will help foster a culture of trust and allyship.

Ensure all EDI objectives and actions continue to be evidence-based



We will:

- Improve sharing rates for people with protected characteristics and ensure people understand how that data will be used by the University.
- Continue to leverage robust data and management information reporting capabilities to support the delivery of key strategic objectives and actions, and measure their success.
- Continue to carry out Equality Impact Assessments of pay awards, and analysis of gender and ethnicity pay gaps, and act upon the findings.

Introduction

“Being a modern, inclusive organisation is at the heart of our future success. It is absolutely crucial that we make more rapid progress so that Cranfield can be recognised and celebrated as a university with diverse, high-performing and world-class talent.”

Professor Karen Holford CBE FREng, Vice-Chancellor and Chief Executive



This is Cranfield's second, five-year EDI strategic plan, building on the 2017-2022 plan. The 2017 plan contained seven strategic aims (outlined in Appendix 1) and led to substantial progress against each. That progress provides the foundation upon which we can build more ambitious plans for 2023-2027.

Since the previous strategy document was published, we have defined a set of shared, common **values** and a number of internal strategies and commitments, not least our corporate plan, **Ambition 2027 – creating impact together**. Building a diverse and inclusive community where we can all thrive, and bring our diverse perspectives is central to achieving our vision and corporate aims.

Cranfield's commitments to the principles of equity, diversity and inclusion (EDI) are woven like golden threads throughout Ambition 2027 and its supporting strategies.

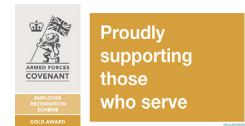
The purpose of this new EDI strategic plan is to articulate our ambition for EDI over the next five years and weave these golden threads into one clearly articulated set of objectives. This will enable us to set goals and monitor and track our progress against them.

The trajectory we have charted over the past five years can be further heightened, and there remains a great deal we can do to build on our culture of inclusion and improve our diversity. As well as it being the right thing to do, we know that by managing and embedding EDI successfully, we will enhance creativity and innovation.

Further improvement and 'Making change happen' will require bold, positive actions. Consistent with our values, we recognise that for Cranfield to be a diverse community where all our people, (staff, students and partners) feel included, we need to be more ambitious and take bolder steps to create bigger impact.

This report was written with significant contributions from our University Executive, chairs of our staff networks and School EDI groups, and colleagues from People and Culture, Student Experience and Communications and External Affairs. We thank everyone for sharing their insights.

Recognition: current charters, accreditations and memberships



In the past five years, Cranfield has been recognised as an inclusive, welcoming employer. We have gained external endorsement, notably through HREiR, TALENT, and Athena SWAN. We are a Disability Confident employer and we are proud to be recognised by Working Families in their Top 30 Employers 2022 rankings.

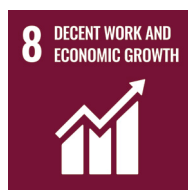
We have been granted a Gold Defence Employer Recognition award in acknowledgement of our support for the defence and armed forces community and alignment with the Armed Forces Covenant. In addition, we are sponsors of International Women in Engineering Day and signatories of the Women in Defence and Women in Aerospace and Aviation Charters.

We will look to maintain the recognition, charters, accreditations and status in the years to come.

Through regular surveys, our staff and students will let us know whether they agree if we are making progress in our EDI ambitions.

In 2022, signalling the University's ongoing commitment to sustainability and environmental responsibility, Professor Karen Holford, our Vice-Chancellor and Chief Executive, signed the Sustainable Development Goals Accord. The United Nations Sustainable Development Goals (SDGs) are a framework for action by all countries in a global partnership to achieve social, environmental and economic sustainability by 2030. The SDGs aim to tackle climate change, poverty and inequality, and to develop health, education and economic growth. Cranfield's research and teaching is directly contributing to each SDG.

We will work to help deliver the University's commitment to the SDG Accord beyond our research and teaching. In particular, SDG 5, Gender Equality; SDG 8, Decent Work and Economic Growth; and SDG 10, Reduced Inequalities are relevant to our ambitions for EDI.



"More than ever, our people are at the heart of our corporate plan. We want to establish and promote a fully inclusive culture where all our people feel part of a diverse, skilled, ambitious and motivated community. We want everyone to feel empowered and engaged through working in a collaborative, supportive and safe working environment."

Helen Perkins, Director of People and Culture

Our understanding of equity, diversity and inclusion at Cranfield

We are raising our ambition following the first five-year plan, strengthening our commitment from 'equality' to 'equity'. To express this commitment, the 'E' in EDI at Cranfield will now refer to equity.



There are many different ways that EDI can be defined, and each person will have their own understanding of what EDI means to them. You may also see some organisations using the 'E' in EDI to refer to equality. We have decided to move to using the term equity rather than equality so we thought it would be helpful to provide our understanding of the terms EDI at Cranfield.

Equity and equality are both terms that are linked to the idea of 'fairness' and can often be used interchangeably, but they do differ in their meaning.

Equality is based on the idea that everyone should be treated the same. It's about fair treatment and equal opportunity for all. However, the drawback of equality is that it does not consider individual differences or needs. At Cranfield, we will continue our work to achieve and maintain equality and uphold the Equality Act (2010).

Equity is understanding and giving individuals what they need to achieve their full potential. In line with our values of community and respect, at Cranfield we believe that equity means treating people as individuals and aims to give everyone what they individually need to be successful. We acknowledge structural barriers exist that put some people at a disadvantage and we therefore need to consider organisational practices, systems, and processes that put some people at a disadvantage, and seek to overcome them.

"Understanding these issues and balancing equity is a crucial step to achieving true equality in the workplace."

Jenny Garrett (Equality v Equity)

This definition aligns with Cranfield's ambition of embedding inclusive practices and operationalising our strategic aims across our organisation.

Diversity is about recognising difference. It's acknowledging the benefit of having a range of perspectives in decision-making and our workforce being representative of our organisation's customers and communities.

Inclusion is where people's differences and experiences are valued and used to enable everyone to thrive. We believe that an inclusive working environment is one in which everyone feels that they belong, can be their true selves, their contribution matters and they are able to perform to their full potential, no matter their background, identity or circumstances.

How equality and equity differ

Equality ▼	Equity ▼
Treat everyone the same	Consider systems that disadvantage and seek to overcome them
Collective approach	Individual approach
Needs management	Needs leadership
Hold power	Share power
Input driven	Outcomes driven

Table: copyright @Jennygarrett.global

Quote: Garrett, J. (2023) Equality vs Equity.
Bingley: Emerald Group Publishing Ltd.

"Equity, diversity and inclusion needs to run as a golden thread collectively through our education and student experience. This aligns with our University values and aspirations to nurture a fully-inclusive culture."

Professor Sean Tyrrel, Pro-Vice-Chancellor - Education

EDI Strategic Plan to 2027

Making change happen

By 2027 our ambition is that Cranfield is:

1

A diverse organisation that is more representative of our local and global communities and partners than we are in 2022.

2

An inclusive organisation where all our staff and students have a voice and feel safe (physically and psychologically) and respected, and where everyone can fulfil their own potential.

3

An organisation where EDI is strongly integrated across all our activities and everyone feels confident when talking about EDI matters.

4

An organisation that continues to take decisions and actions which are informed by our data.

These four ambitious EDI objectives have been identified to continue the momentum from the past five years, and directly support us to achieve Ambition 2027.

Progress against them will be evaluated, in part, through monitoring our progress towards the measures and key performance indicators (KPIs) agreed in our People strategy, which are provided in Appendix 2.

In addition to these KPIs, annual EDI operational action plans will enable us to set specific actions and goals each year.



1

OBJECTIVE ONE

Take down barriers to diversity and inclusion.

Our ambition: We are a diverse organisation that is more representative of our local and global communities and partners than we are in 2022.

We recognise that despite making incremental progress, women, and Asian and ethnic minority people remain underrepresented at Cranfield, especially at senior levels.

To achieve this objective we will: recruit, retain, and develop...

- 1.1. Adopt bolder, more inclusive, agile, and best practice recruitment initiatives that enable the attraction and selection of diverse, high-performing talent, including positive action.
- 1.2. Retain people by helping everyone to realise their potential through effective and inclusive development and talent management.
- 1.3. Offer targeted career development opportunities for women, and black, Asian and minority ethnic people, who our data tells us face organisational barriers to career progression and are underrepresented at senior levels at Cranfield.
- 1.4. Undertake research to identify organisational barriers faced by underrepresented groups for whom we don't have the data, including people who are disabled, and members of the LGBTQ+ community. This will enable us to take a targeted approach to taking down organisational barriers.
- 1.5. Develop and implement actions to achieve physical and digital accessibility for all.



2

OBJECTIVE TWO

Build an inclusive, values-based culture.

Our ambition: We are an inclusive organisation where all our staff and students have a voice and feel safe (physically and psychologically) and respected, and where everyone can fulfil their own potential.

We see from our pulse surveys that we have made good progress to support our people, however not all members of our community currently have an equal voice, and we recognise that lived experiences do differ.

To achieve this objective we will communicate, support, embed and demonstrate ...

- 2.1. Provide a distinctive employee experience through regular engagement and two-way communication with our employees, recognised trade unions, our staff network groups and working groups.
- 2.2. Provide a distinctive student experience through regular engagement and two-way communication with students, Student Association, loop groups and other forums, as noted in Cranfield's Student Voice Framework.
- 2.3. Actively support and further promote our staff networks, School and PSU EDI groups, cross-University working groups, and their action plans.
- 2.4. Continue to promote agile, flexible and inclusive working practices that support the diverse needs of staff, students, partners and the wider Cranfield community.
- 2.5. Continue to demonstrate Cranfield's reputation as a diverse and inclusive employer through awards/chapter marks and memberships of external bodies.
- 2.6. Develop and embed a culture where leadership drives positive change.

3

OBJECTIVE THREE

Weave EDI into all we do.

Our ambition: We are an organisation where EDI is strongly integrated across all our activities and everyone feels confident when talking about EDI matters.

We have made clear progress in unifying our vision for EDI through our values and Ambition 2027, and we can do more.

To achieve this objective we will enhance our student experience and research culture, and create opportunities ...

- 3.1. Further enhance our student experience through creating an environment of access and inclusion, by all our stakeholders working together, including our staff, wider community and external partners.
- 3.2. Further enhance our research culture through promoting opportunities to collaborate and by extending opportunities for stakeholders to work together.
- 3.3. Create opportunities to increase knowledge and awareness of EDI and practical actions that can be taken across our sites.
- 3.4. Create opportunities for learning and micro opportunities so that everyone can increase their confidence and feel empowered when talking about diversity and inclusion, in particular with regards to race, ethnicity, disability, neurodiversity and LGBTQ+. This will help foster a culture of trust and allyship.



“If we are to truly engage with our students, the principles of equity, diversity and inclusion must be the foundation, to enable everyone to feel part of the Cranfield community.”

Alison Whaley, Director of Student Experience

4

OBJECTIVE FOUR

Ensure all EDI objectives and actions continue to be evidence-based.

Our ambition: We are an organisation that continues to take decisions and actions which are informed by our people data.

We have built on our statutory obligations to provide a suite of data reporting which we can now leverage to develop the case for bolder action and make change happen. We recognise that building trust is critical so that people feel able to be honest in self-identifying and share this information. We also recognise that our data about some protected characteristics, such as disability and LGBTQ+, is limited. So, improving sharing rates will be a focus over the course of this strategic plan.

To achieve this objective we will share, report and evaluate...

- 4.1. Improve sharing rates for people with protected characteristics and ensure people understand how that data will be used by the University.
- 4.2. Continue to leverage robust data and management information reporting capabilities to support the delivery of key strategic objectives and actions, and measure their success.
- 4.3. Continue to carry out equality impact assessments of pay awards, and analysis of gender and ethnicity pay gaps, and act upon the findings.

Legal context, roles and responsibilities

The Equality Act 2010

Under the 'General Duty' of the Equality Act 2010, the University has due regard to the need to:

- Eliminate unlawful discrimination/harassment and victimisation.
- Promote equality of opportunity between people who share a protected characteristic and those who do not share it, namely age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, sex, sexual orientation and marriage and civil partnership.
- Foster good relations between people who share a protected characteristic and those who do not.

Roles and responsibilities

The University Council provides support and challenge to the University Executive in endorsing the EDI strategy and monitoring the University's delivery against its EDI objectives. Council is responsible for ensuring compliance with UK legislation, including the public sector equality duty, promoting an inclusive culture, and leading by example in its decision making and in considering its own membership.

The University Executive is responsible for championing EDI and driving the strategy to ensure it is implemented and maintained within their areas of responsibility. They undertake EDI related training as appropriate to enable them to feel confident and able to role model inclusive behaviour and embed processes to enable the University to create and maintain an inclusive, safe working and learning environment. An EDI and Wellbeing Committee will be established as a further channel for accountability in 2023.

The Equity, Diversity and Inclusion team is part of the People and Culture PSU and responsible for the management, development and implementation of the University's EDI strategy and action plans and supporting people to be informed about their responsibilities under the Equality Act 2010.

Senior managers are responsible for leading and role modelling inclusive behaviour and embedding processes to enable the University to create and maintain an inclusive, safe working and learning environment. Senior managers are also responsible for ensuring people are informed about their responsibilities under the Equality Act 2010 and for supporting the EDI strategy in their areas of work.

Line managers are responsible for supporting and enabling their teams to perform their roles effectively. This includes making

reasonable adjustments to support all people in our community. Line managers undertake EDI training as appropriate to help them to demonstrate appropriate behaviours and embed processes to enable the University to create and maintain an inclusive, safe working and learning environment. Managers are also responsible for ensuring people are informed about their responsibilities under the Equality Act 2010 and for supporting the EDI strategy in their areas of work.

Staff networks, School and PSU EDI groups, cross-University working groups and Trades Unions provide the 'employee' voice, helping to identify and support actions, and enable people to connect and share experiences across a range of protected characteristics.



All staff have a responsibility to ensure that their actions comply with the requirements of the Equality Act 2010, namely, to eliminate unlawful discrimination, promote equality of opportunity and promote good relations between people of different groups. They undertake EDI training as appropriate to enable them to demonstrate appropriate behaviours and enable the University to create and maintain an inclusive, safe working and learning environment.

All students actively embrace the Cranfield experience, respecting everybody in our diverse, international community.

Student Experience Committee has a responsibility to bring forward relevant matters and topics for discussion within the student community so can be shared and discussed, and progress made.

Cranfield Students' Association (CSA) Executive, and EDI representative work alongside the University to share insight and expertise. The CSA is an independent voice, representing student needs as part of a diverse student population.

"Our Research and Innovation strategy contains ambitious plans, and we know that the principles of equity, diversity and inclusion are fundamental to enabling us to solve the complex challenges of today."

Professor Leon Terry, Pro-Vice-Chancellor - Research

Appendix 1 – Diversity and Inclusion 2017-2022 final report

Cranfield's first, five-year EDI strategic plan ran from 2017 to 2022. The 2017 plan contained seven strategic aims.

	Strategic aims 2017-2022	Status
1	Ensure all objectives are evidence-based and impact can be measured and monitored	Achieved
2	Increase recruitment, selection and retention of diverse staff	Significant progress
3	Increase diversity present in senior management roles	Significant progress
4	Embed an inclusive and respectful culture, which enables staff to value the benefits of diversity.	Significant progress
5	Demonstrate Cranfield's reputation as a diverse and inclusive employer by achieving diversity awards, in particular Athena SWAN, Stonewall and HR Excellence in Research.	Significant progress
6	Champion a culture where disabled staff are able to fulfil their potential.	Under Way
7	Develop a consistent approach to work life balance and family friendly policies and procedures.	Achieved

The 2017-22 plan has achieved some substantial successes (see below) leading to Executive support for the development of a second five-year plan to cover the period 2023-27 and coinciding with the introduction of Ambition 2027.

Diversity and Inclusion outcomes 2017-2022

Strategic Aim 2017-2022	2017-2022 Actions	Progress
Strategic Aim 1 – Ensure all objectives are evidence based and impact can be measured and monitored	<p>1.1 Improve declaration rates for protected characteristics data.</p> <p>1.2 Implement a central monitoring process to capture and share data.</p> <p>1.3 Interpret and analyse the data to inform targeted action plans.</p>	<p>Achieved: Management information and reporting underpins all we do. The reports are available to all staff and the staff networks.</p> <p>We continue to focus on creating a culture where all staff feel safe to share information relating to individual, intersecting protected characteristics.</p>
Strategic Aim 2 – Increase recruitment, selection and retention of diverse staff	<p>2.1 Promote Cranfield as an inclusive employer.</p> <p>2.2 Provide support to line managers so that they are aware of the steps they can take to increase the diversity of their departments.</p> <p>2.3 review recruitment and selection processes, procedures and training to ensure they are fair, unbiased and inclusive.</p>	<p>Significant progress: including improving our campus based imagery, website; recruitment and selection training and development, and an Advance HE audit of our recruitment and promotion practices.</p> <p>This continues to be a focus as more progress needs to be made.</p>
Strategic Aim 3 – Increase diversity present in senior management roles	<p>3.1 Continue to develop and promote targeted career development activity for women and other groups of staff who are underrepresented at senior levels.</p> <p>3.2 Develop the Cranfield Step-Up women's network and support the launch of additional staff networks</p> <p>3.3 Develop and deliver career support workshops (particularly for academic roles).</p> <p>3.4 Develop mentoring/sponsorship schemes (particularly for female staff, black, Asian and minority ethnic staff, and disabled staff).</p>	<p>Significant progress: Staff networks have been established for specific communities: EmbRace; Disability; Q at Cranfield; and Step Up continues to flourish. The academic promotion process has been relaunched with significantly increased emphasis on inclusion. Staff career development has been a priority, e.g. technicians' career pathways created.</p> <p>Representation at senior levels still needs further improvement, as evidenced by our gender pay and ethnicity pay gap reports, and our staff demographic data.</p>
Strategic Aim 4: Embed an inclusive and respectful culture, which enables staff to value the benefits of diversity.	<p>4.1. Provide essential development so all staff are aware of their roles and responsibilities.</p> <p>under the legislation and help to eliminate bias and inappropriate behaviours.</p> <p>4.2. Support the University Senior Management Team to demonstrate their visible commitment to the diversity and inclusion strategy in their areas and lead by example.</p> <p>4.3. Develop a culture where it is 'safe to speak up' and challenge inappropriate behaviours without fear.</p> <p>4.4. Provide and encourage regular communications and staff engagement activities to help staff understand the benefits of diversity and feel valued.</p>	<p>Significant progress: our values of Community and Respect helping to support our culture and behaviours.</p> <p>Our staff pulse surveys show that people feel part of an inclusive community, but further progress can be made.</p>

Diversity and Inclusion outcomes 2017-2022

Strategic Aim 2017-2022	2017-2022 Actions	Progress
Strategic Aim 5: Demonstrate Cranfield's reputation as a diverse and inclusive employer by achieving diversity awards, in particular Athena SWAN, Stonewall and HR Excellence in Research.	<p>5.1. Build on the success of achieving the Athena SWAN Bronze award and develop plans to submit a Bronze renewal under the new criteria (which goes beyond STEM) in November 2019.</p> <p>5.2. Maintain our HR Excellence in Research award.</p> <p>5.3. Develop a co-ordinated outreach strategy across the University.</p> <p>5.4. Engage with local community groups to attract under-represented groups to the University.</p> <p>5.5 Align with our stakeholders and other HEIs and join Stonewall to assess our position on the LGBT agenda through their Global Workplace Index.</p>	<p>Significant progress: demonstrated through our Athena SWAN award, HREiR award, Stonewall membership and other accreditations.</p> <p>Our outreach activities into our local communities require further prioritisation as our staff data shows we are not representative of our local communities in terms of black, Asian and minority ethnic staff.</p>
Strategic Aim 6: Champion a culture where disabled staff are able to fulfil their potential.	<p>6.1. Engage with staff to identify and remove any institutional barriers that exist which may disadvantage disabled applicants and staff.</p> <p>6.2. Ensure our disability policies and procedures effectively support disabled staff and line managers. 6.3. Become a 'Disability Confident' employer, by joining the Government's Disability Confident scheme to demonstrate our commitment to supporting disabled staff.</p> <p>6.4. Increase staff declaration rates on disability.</p>	<p>Under way: Working with our disability staff network we have achieved Disability Confident Level 2 employer and will apply for level 3 in 2023.</p> <p>More needs to be done to ensure that we are continuing to dismantle ongoing barriers faced by disabled staff at Cranfield.</p>
Strategic Aim 7: Develop a consistent approach to work-life balance and family-friendly policies and procedures.	<p>7.1. Understand the perceptions and barriers of flexible working to inform a consistent University-wide approach.</p> <p>7.2. Review maternity provisions to enable staff to feel more supported during and after maternity leave.</p> <p>7.3. Provide more comprehensive support for staff with all types of caring responsibilities.</p> <p>7.4. Provide a consistent approach to keeping in touch with staff during periods of extended leave for family or caring responsibilities.</p>	<p>Achieved: A working group for flexible working was established and we had developed a fair and progressive flexible working policy prior to the pandemic.</p> <p>Post-pandemic we have embraced hybrid and flexible working, with staff working 40-60% of their time on site and remotely where their roles allow.</p> <p>We will need to continue to monitor the long-term impacts of the pandemic and hybrid working on underrepresented groups at Cranfield.</p>

Appendix 2. People KPIs – 2022-2027

EDI Objective	People Strategy KPI	Measures
1: We are a diverse organisation that is more representative of our local and global communities and partners than we are in 2022.	Talented people Increase in representation of our under- represented groups on current baseline figures.	<p>📈 Baseline – Disability (4%), UK Ethnic Minority (7%), female academics (24%), female professors (11%).</p> <p>🎯 Target – Disability (6%), UK Ethnic Minority (12%), female academics (35%), female professors (20%) by 2027.</p> <p>📊 Measure – measured through our various EDI action plans, such as Athena SWAN, continuous improvement in our pay gaps, together with recruitment and retention data.</p>
	Staff satisfaction Increase the percentage of staff agreeing they are ‘proud to work at Cranfield’.	<p>📈 Baseline – 82%.</p> <p>🎯 Target – 90% by 2027.</p> <p>📊 Measure – Monitored through pulse survey feedback, staff turnover and resignation reasons, VC live events (via the question-and-answer sessions) and exit interviews.</p>
2: We are an inclusive organisation where all our staff and students have a voice and feel safe (physically and psychologically) and respected, and where everyone can fulfil their own potential.	Distinctive working environment Percentage of staff agreeing that ‘Cranfield University cares about my wellbeing’.	<p>📈 Baseline – 61%</p> <p>🎯 Target – 75% of staff who agree that CU cares about their wellbeing by 2027.</p> <p>📊 Measure – Measured through our regular pulse surveys, sickness absence levels, take up of mental health and wellbeing initiatives.</p>
	Respectful culture Staff agree/strongly agree we are making progress with our ED&I agenda.	<p>📈 Baseline – 55%.</p> <p>🎯 Target – 70% by 2027.</p> <p>📊 Measure – Monitored through pulse survey feedback, through our various diversity action plans and our staff network groups – EmbRace, Disability Network, Step Up, Q at Cranfield.</p>
4: We are an organisation that continues to take decisions and actions which are informed by our data.	Engaged employee community Increase in staff participation rates for our pulse surveys.	<p>📈 Baseline – 57%.</p> <p>🎯 Target – 70% by 2027.</p> <p>📊 Measure – increasing participation rates for each survey undertaken.</p>
	Meaningful reward Maintain an inclusive pay and reward structure monitored through regular equal pay reviews.	<p>📈 Baseline – Equal Pay - 2019 +/-5% (excluding Level 8)/Gender Pay – 18.7%.</p> <p>🎯 Target – Equal Pay - improving University tolerance level +/-3% within each pay level by 2027/Gender Pay Gap – year on year improvement.</p> <p>📊 Measure – Equal Pay - regular equal pay reviews undertaken with improving University tolerance levels from +/- 5% to +/-3% /Gender Pay Gap – year on year improvement.</p>



Student Disability Policy

&

Policy for Supporting Dyslexic Students and those with Other Specific Learning Difficulties (SpLDs)

Student Disability Policy

1 Introduction

Cranfield University aims to promote an inclusive learning, teaching and working environment in which disabled students are not disadvantaged or treated unfavourably. Teaching, work environments and practices are reviewed on a regular basis to ensure that disabled students do not experience barriers to full participation in the life of the university and to ensure that the skills and potential of all students are developed fully.

2 Definition of Disability

The Equality Act 2010 prevents unlawful discrimination relating to disability. Under the Act, a person is considered to be disabled if they have or have had a physical and/or mental impairment which has 'a substantial and long-term adverse effect on their ability to carry out normal day-to-day activities'. If a student is unsure whether a particular difficulty would be considered a disability, he or she is welcome to discuss this in complete confidence with a Learning Support Officer.

Cranfield University recognises its responsibility to make anticipatory and reasonable adjustments to all policies, procedures and provision of services and actively seeks to widen the participation of disabled people in Postgraduate education.

The University has Learning Support Officers, based in the Student Advice Centre on each campus who act as the initial point of contact with the School to provide support for disabled students. The Learning Support Officers work closely with the Senior Diversity & Inclusion Business Partner and the Head of Student Support and Wellbeing, who formulate policy and procedures in all areas of diversity for staff and students. The University maintains close links with Disability networks in order to keep abreast of national legislation and local and regional policy.

3 Admissions and entry

The University welcomes enquiries and applications from everyone with an interest in the University's courses. All disabled students considering whether to apply to Cranfield University are encouraged to contact a Learning Support Officer based in the Student Advice Centre, to find out about the support available to them.

All applicants are considered entirely on their academic merits, in accordance with the University's diversity policies. Disability information on the application form is removed in advance of submission to admission staff. The criteria and procedures for selecting students are relevant only to the general academic requirements of the University's Regulations and the specific additional requirements of each course of study or programme of research. Guidance and training in diversity and disability awareness is available to all staff.

Once a formal offer is made to a student who has declared a disability, the student is invited to contact the relevant Learning Support Officer to discuss specific support needs and adjustments (if required).

For students who omit to declare a disability on their application form, become disabled, or are diagnosed with a Specific Learning Difficulty during the course of their studies, processes are in place to provide support and adjustments throughout the academic year through the Learning Support Officers.

4 Learning, Teaching and Assessment

University staff take into consideration students' specific needs when organising registration and induction procedures. Advice on financial support available (such as the Disabled Students Allowance) is available to students via the Intranet, student communications and induction presentations.

The University will make all reasonable efforts to ensure that disability does not constitute a barrier to learning and maximise the opportunities for disabled students to achieve the same learning outcomes as non-disabled students. To achieve this, reasonable steps will be taken to provide specialist equipment, facilities and other assistance required. The University considers each case on an individual basis, in the light of the specialised nature of the technical aspects of much of its work.

After registration, presentations by the Learning Support Officers, material in course handbooks and the [Student Advice Centre intranet pages](#) provide information on the sources of support and guidance available to disabled students at Cranfield University. The Learning Support Officers will also write to students with a declared disability to inform them of the support available within the School.

Most students are allocated to a personal tutor or supervisor whose interest in them is pastoral as well as academic. Each campus has access to student counsellors and the Students' Association. The delivery of courses will be as inclusive as reasonably possible with judicious use of handouts, appropriate specialist computer software and varying modes of delivery. Every care will be taken when placing students in appropriate work placements and field trips. It is the responsibility of the individual School or Department to ensure that work/project placement providers receive copies of the relevant University disability policy and that they provide adjustments for the student if appropriate (with the student's consent).

The only basic requirement for the award of a degree or other academic distinction of the university is that students must satisfy the examiners that they have achieved the intended learning outcomes for the degree or distinction concerned. The University has the provision to grant reasonable adjustments to assessments and examination arrangements for students who have a disability when medical evidence/diagnostic assessment reports have been presented.

5 Disclosure and Confidentiality

Cranfield University encourages applicants and students to inform the University at the earliest opportunity of any disabilities or support needs they may have and at any time during the course of their studies. Students are reminded that whilst the University aims to accommodate the needs of disabled students, it may not be able to do so if it has not been informed of access requirements in

advance. Students who commence study without notifying the University do so at the risk that adjustments subsequently requested might not be able to be provided.

With the express consent of the student, the University will inform those who need to know that a student has a disability, in order to ensure that the needs of the student can be accommodated. Wherever possible, only the adjustments required and not the disability will be communicated to others. If no adjustment is required, students are not required to tell us about their disability. If a disability is disclosed but no adjustment is required, this information will not be shared.

The University recognises that there may be cases where students do not wish to declare their disability. However, we can only provide reasonable adjustments if we know they are required. In particular, students who disclose a disability after an assessment will not normally be able to obtain adjustments retrospectively. The Learning Support Officers will be able to provide advice and expertise and will not disclose information to anyone with regards to students who have requested confidentiality without express consent.

6 Access and Environment

The University has undertaken an access and facilities audit of its premises using an access specialist to ensure that disability issues were included in on-going plans for upgrading and refurbishment. While every reasonable attempt will be made by the University to address the particular requirements of disabled students, the university buildings are of varying age. Newer buildings have been designed and built to meet the latest standards of provision, but some older buildings are not at present suitable for use by some disabled students.

The University will, however, attempt to address on an individual basis any specific problems as they arise and access issues will be incorporated into new projects (whether new build or refurbishments).

7 Policy review and monitoring

The University has a Student Experience Committee comprising representatives from across the University. This Committee meets 4 times a year to review and monitor progress against the University's diversity objectives and to approve diversity related procedures and policy.

Students are invited to comment formally on the University's disability policies and processes – through a range of feedback opportunities, including questionnaires and the Learning Support Officers. The Learning Support Officers regularly meet and review student cases with the Head of Student Support and Wellbeing to ensure the appropriate support is in place.

Policy for Supporting Dyslexic Students and those with Other Specific Learning Difficulties (SpLDs)

1 Introduction

This Policy is supported by the University's overall Disability Policy (section 13.1). Dyslexia and other specific learning difficulties (such as dyspraxia) are covered by the Equality Act 2010 as they are ongoing conditions. Dyslexia is a combination of abilities and difficulties that affect the learning process in one or more of reading, spelling and writing. Accompanying weaknesses may be identified in areas of: speed of processing, short term memory, organisation, sequencing, spoken language and motor skills.

2 Assessment of needs

Students who have already been assessed as having dyslexia or other specific learning difficulties should bring a copy of their latest assessment with them to the university at Registration.

At student induction information will be provided on the sources of support and guidance available to SpLD students at Cranfield University. This information (which includes a link to the QuickScan screening tool on the intranet) will prompt students to consider whether or not they have difficulty in studying, taking notes, writing essays, spelling correctly, organising their work and remembering what they have learnt. Details will be given on whom to contact if students suspect they are dyslexic. The initial contact will be the Learning Support Officer based in the Student Advice Centre studentadvice@cranfield.ac.uk. Information will also be available via the Intranet and the Cranfield website.

A diagnostic assessment will be organised by the Learning Support Officer – wherever possible within the first term of the academic session. As it is important that no disabled student should be further disadvantaged on grounds of inability to pay for effective support, the University will fund the cost of the assessment in most cases.

The diagnostic assessment report will belong to the student who will then discuss its recommendations with the appropriate Learning Support Officer who will agree how to proceed and what additional assistance is required. The Learning Support Officer will draft a Learning Support Agreement based on the recommendations from the diagnostic assessment report. Confidentiality will be maintained as far as is reasonable and consistent with ensuring the appropriate provision of effective support.

Advice will be offered to those wishing to apply for a Disabled Students Allowance or DoE Masterships Learning Support funds to resource this support.

3 University assessments and progression

The Learning Support Officer will advise the appropriate members of staff (Course Director, Student Academic Support Lead, Examinations Office etc.) via the Learning Support Agreement of any practical measures required, in the light of recommendations in the diagnostic assessment report.

These might include:

- additional time for formal examinations (25% extra time)
- use of specialist software throughout the year
- use of coloured paper (for those with scotopic sensitivity syndrome)
- oral examinations to supplement written examinations and to enable the student to clarify written work
- a reader during an exam who will read aloud the examination paper and questions
- a scribe to write down what the student dictates in examination scripts (in exceptional circumstances)

Academic approval for concessions such as use of extra time or oral examination to supplement written examination shall be sought by the Learning Support Officer acting on recommendations from the student's diagnostic assessment report. Details will be notified to the examination invigilators at the time of the examinations.

4 Use of computers in examinations

Cranfield University will allow the use of computers in examinations when this is specifically recommended in a student's diagnostic assessment report. Where the use of a computer is permitted in a formal examination, the University will usually provide a laptop without internet access, which has had its hard drive cleared. In exceptional cases where a student is permitted to

use his or her own laptop, Education Services staff will liaise with IT to ensure that the hard disk has been cleared before the candidate sits the examination.

5 Additional Time for examinations and assessments

Where additional time is required for examinations (following the recommendations made in the diagnostic assessment report), the Learning Support Officer will note this in the Learning Support Agreement and ensure that the appropriate staff e.g. the Examinations Office are aware of the specific support requirements.

Deadlines for the submission of assignments should be adhered to since part of the learning process is to meet deadlines. If there is a change in your condition that impacts your ability to meet the assessment deadline, then you should request an extension through the 'Exceptional circumstances' process.

Should a Course Director refuse a request for additional time, the student has the right of appeal (see grounds for appeal in Student Handbook on Assessment Rules), to Education Committee. The student should contact the Learning Support Officer in the first instance to discuss the particular circumstances of the appeal.

While a student may be given additional time in examinations or additional time in which to submit a project or other coursework assignments, no additional concession will be given in the marking.

6 Specialist equipment and funding

The University cannot always provide specialist equipment but will make every effort through the Student Advice Centre to assist students in making an appropriate application for support from the Disabled Students Allowance (DSA), DoE Masterships Learning Support funds or sponsor. The Learning Support Officer is the initial point of contact for students applying for a DSA.

The Learning Support Officers will maintain a register of the specialist equipment purchased by the university for individual students together with listings of equipment and support services available externally.

7 Training and advice to academic staff

Academic staff should ensure that they have a general understanding of the learning implications for students with Specific Learning Difficulties. As part of their induction, academic and support staff will undertake development on disability and equality issues and the range and types of support available to students with Specific Learning Difficulties both within the university and externally. More specific advice can be sought from the Head of Student Support and Wellbeing.

Teaching and learning strategies should make the delivery of the course as inclusive as reasonably possible (e.g. videos, visual displays, lecture notes in advance etc).

8 Policy review and monitoring

The University will monitor the effectiveness of this policy through the Head of Student Support and Wellbeing and the Student Experience Committee comprising representatives from across the University.

Feedback is captured through a number of routes including student surveys and focus groups and will be reviewed by the Student Experience Committee. The results will be collated and analysed by the Head of Student Support and Wellbeing to help inform policies and action plans.

9 Publications

The University will publish details of its Disability Statement (Student Disability Policy) in positive terms in pre-registration material and online information. The emphasis will be solution-focused and will stress the aim of maximising potential rather than of addressing inherent disability. The policy will advise that, although the university has a formal policy, each student with a registered learning difficulty will be considered on an individual basis within those guidelines. All advice and appropriate follow-up action will be discussed confidentially as far as is possible. Responsibility will lie with the student to decide whether or not he or she wishes to take advantage of the services available once these have been made known.

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Department	Education Services
Implementation date	September 2020
Approval by and date	Academic Registrar, September 2020
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Policy

Title: Energy Code of Practice

Description: Energy Code of Practice

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gasses and energy

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1. Purpose

Since August 2018 the University's Energy Management System has been certified to the internationally recognised ISO 50001:2018 standard. By July 2021 the University reduced its Scope 1 and Scope 2 carbon emissions by 42% compared to a 2005 baseline. It now aims to be net zero by 2030. This Code of Practice outlines recommendations relating to good housekeeping measures intended to reduce energy use on campus.

1.1. Covid Secure Sites and Ventilation

For the avoidance of any doubt, where the requirements below are in conflict with measures put in place by the University to provide Covid secure sites, the Covid measures ALWAYS take priority. AHU Control Dampers are to be set a proportion of recirculation where appropriate and the impact on CO₂ levels is to be monitored to gauge whether sufficient fresh is being made available in the spaces concerned.

To ensure good ventilation it may be necessary to keep some windows open and some fire doors may also be wedged or propped open. Computers may also be left running 24/7 where there is a business need when working from home to use a Remote Desktop Gateway to access functionality only possible on a University LAN connected machine.

2. Temperatures

2.1. Space Temperatures

Heating or cooling more than necessary is very wasteful of energy. A one degree Celsius increase in temperature can use 10% more energy.

Temperatures in the indoor workplace are covered by the Workplace (Health, Safety and Welfare) Regulations 1992, which place a legal obligation on employers to provide a 'reasonable' temperature in the workplace. The associated Approved Code of Practice suggests the minimum workplace temperature should normally be at least 16°C. If the work involves rigorous physical effort, the temperature should be at least 13°C. There is no such suggestion for a maximum working temperature.

Facilities will endeavour to maintain comfortable working conditions in buildings whilst minimising energy use. Comfortable temperature levels for offices, residences, meeting rooms and lecture rooms will depend on air movement, humidity, radiant heat and other factors. It is very important for people to wear appropriate clothing for the prevailing weather conditions.

2.2. Heating

If a room is being heated, ensure the windows and doors are closed and set thermostats to the lowest comfortable temperature setting. Please remember that a thermostat simply sets the temperature required – turning it up higher does **NOT** make the temperature rise any quicker. It is important to ensure there is no cooling and heating operating simultaneously. If the heating is not working, please report it.

Do NOT use electric heaters without written permission – see Section 4.

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As part of the Energy Campaign, work is being undertaken across the main Cranfield campus to improve the efficiency of heating infrastructure (replacement of radiators, installation of thermostatic radiator valves, lagging of pipework, and improvements in building insulation). Building opening times have also been restricted and Building Management System controls have been modified to reflect these so that buildings are not heated unnecessarily.

2.3. Cooling

Air conditioning will be avoided where possible. Where it is used it shall be set at an appropriate level and doors and windows shall be kept closed.

2.4. Hot Water Temperatures

Hot water temperatures will be set to ensure energy is saved whilst not compromising safety measures to guard against Legionella and scalding.

2.5. Reporting Issues

Any problems with the above should be reported as soon as possible. See section 10 for contact details.

3. Sensible Management of Conditioned Space

There are a number of measures, which will help to reduce energy use in a room:

- windows and doors shall not be left open when a space is being actively heated or cooled.
- the same space should not be heated and cooled at the same time (unless absolutely necessary for controlling specific laboratory conditions).
- when appropriate, close semi-automatic (or power assisted) doors manually to minimise draughts. These doors shut more quickly when operated manually.
- turn radiator thermostats down if a room is not being used or temperatures are too high.

4. Electric Heaters

These are expensive to use, produce high carbon emissions and can interfere with the correct working of the existing building heating system.

Therefore electrical heaters shall not be used in any University premises except where:

- they are installed as part of a fixed heating system;
- they are provided on a **strictly** temporary basis, by Facilities, when the existing building heating system has developed a fault. Once the fault is fixed the heaters must be returned;
- their use is agreed by the relevant persons (due to ongoing health issues) in order to maintain safe working temperatures. Relevant persons are: Technical - Facilities Managers; Residential - the appropriate area manager or Duty Manager.

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All electric heater use must be logged with written permission provided to justify the decision and it will be reviewed periodically to ensure that use is still appropriate.

Departments and individuals are not permitted to bring in their own electric heaters for use on campus. Only those provided by Facilities are permitted and these will be controlled by a thermostat and timeclock.

5. Electrical Equipment

5.1. Turn It Off

Turn equipment off when not in use, or put it in to hibernate or standby mode. As described in 5.2 below, computers, printers and photocopiers have PowerMAN controls installed but computers should be turned off at the end of your working day. Other common office items such as desk lamps should always be turned off when not in use. Similarly, laboratory and workshop equipment should also be turned off when not in use, but take care not to disrupt an ongoing experiment or to damage equipment. Some laboratory equipment is very sensitive to being turned on and off. If in doubt consult the laboratory and workshop technicians for best advice. It will be helpful to label equipment which is required to be left on for long periods, and to include a contact name if responsibility for its use is unclear.

5.2. Managed IT Equipment

All managed IT equipment, e.g. laptops, desktops, printers/photocopiers are power managed to ensure they are as efficient as possible. Power management software, PowerMAN, is installed on all PCs (unless a specific exclusion has been agreed) to ensure they enter a hibernation state when no activity has been detected for a given period of time. Multifunction devices such as printers/copiers have similar controls in place. This saves the University a large amount of energy and also ensures PCs are secure whilst people are away from their desks. N.B. It is **VERY** important to close all databases before leaving your PC unattended; this ensures the best performance of PowerMAN and is also a data security requirement.

5.3. Use Timers and Automatic Settings

To ensure that equipment is turned off when not being used, make use of automatic shutdown settings or use external timers to switch equipment off out of normal working hours.

5.4. Unused Fridges in Laboratories

When laboratory fridges are not in use for storing experimental samples they should be unplugged, cleaned and left with their doors propped open until they are needed again.

5.5. Provide Clear Instructions

Instructions shall be in place to clearly identify who is responsible for switching off equipment when leaving a lecture/meeting room, e.g. the last person to leave the room.



6. Lighting

Lighting is provided for safe and effective working. When lighting is not needed it should always be switched off, when possible, except where it is required for emergency access/exit ways. Many lights are now controlled by motion and light level sensors and will switch off, and/or dim down, automatically to provide sufficient artificial lighting considering natural daylight levels and occupancy. There will be a deliberate time delay before lights switch off to ensure safety.

7. Buildings

7.1. Energy Certificates

It is a legal requirement for a valid A3 size, colour, Display Energy Certificate (DEC) to be displayed in a prominent place, clearly visible to the public, in every building over 250m² which is frequently visited by the public. An associated Advisory Report must also be held on file for every such building and be made available if requested. The University's DEC's will be updated as required.

Energy Performance Certificates (EPCs) will be provided for all buildings upon construction, sale or rent in accordance with applicable legislation.

7.2. Energy Reporting

Regular reports are provided on the intranet highlighting the energy use of the main buildings on site. In January 2023, an energy Dashboard was developed to make it easier for staff and students to view this data and this has become a key resource in our energy saving campaign. Data is reviewed weekly by the Energy and Environment Team and there are regular update meetings with building Energy Champions to discuss saving opportunities.

8. Procurement

Equipment purchased by the University shall have the highest energy ratings where ratings are available. If less efficient energy equipment is to be purchased this shall be justified on a whole-life cost basis. Potential suppliers must be informed that selection of a particular goods or service will be partly based upon the supplier's energy efficiency performance.

9. References and Links

Links to the following key documents can all be found from the Energy and Environment Carbon Management intranet pages:

<https://intranet.cranfield.ac.uk/EnergyEnvironment/Pages/Carbon-home.aspx>

9.1. Cranfield University Energy Policy

9.2. Cranfield University Energy and Carbon Plan (updated annually)

The Energy Dashboard can be found in the following Intranet page:

<https://intranet.cranfield.ac.uk/EnergyEnvironment/Pages/Energy-Monitoring-and-dashboard.aspx>

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The University's website also includes relevant documents in the Carbon and Energy Management page:

<https://www.cranfield.ac.uk/about/environmental-credentials/carbon-and-energy-management>

10. Contacts

Report faulty heating, lighting, cooling and ventilation equipment to the Facilities Management Team via FacilitiesManagementTeam@cranfield.ac.uk.


Send suggestions for practical and cost-effective energy efficiency improvements to green@cranfield.ac.uk.



Energy Code of Practice

CU-SHE-CoP-7.0
Version 7.0

11. Document Control

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Name	Gareth Ellis
Title	Energy & Environment Manager

Policy

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Energy Plan 2024/25

Executive Summary

This document reviews building energy efficiency, looking at energy use per m² of floor area. It also sets out a plan for energy management for the current year and up to July 2025. This plan is a fundamental part of the University's ISO 50001:2018 certified Energy Management System and will also contribute to the ESOS submission.

The sustained, high unit cost of energy has continued to drive action to reduce energy wastage across the university Estate. The wide-ranging energy campaign, which began in 2022, to identify and implement energy savings, is still ongoing. It includes energy awareness promotion, an Energy Champions Network (comprising staff and student members), building surveys, improved operational efficiency of HVAC systems, a review of building usage, and regular data monitoring.

The University has secured a £7.8 Million grant through round 3c of the Public Sector Decarbonisation Scheme (PSDS3c) to install a large Ground Source Heat Pump installation to supply the campus district heating network and also further extend the network. This follows success with earlier rounds which have seen the district heating network updated with air source heat pumps, improved buildings controls, LED lighting, extra solar installations, battery storage (PSDS2), insulation of the two largest buildings onsite (PSDS3a), thermal storage and the expansion of the heat network to the residential estate (PSDS3b).

Recommendation to prioritise the following objectives:

1. Seek to continually improve energy management through ISO 50001.
2. Continue to improve the District Heating system and building HVAC system operation.
3. Continue to develop and improve the campus HV electricity system.
4. Review the reporting format for Risks and Opportunities relating to Issues and how they are actioned.

Energy Planning

An internal audit of the EnMS in 2023 identified that there needs to be clearer identification of risks, opportunities, and consequent actions in our Energy Management System (EnMS), and how they are reported on in our Energy Plan. Once the EnMS has been fully revised, the format of future Energy Plans will be updated to better present this information. The audit also identified that there needs to be greater clarity between objective, action, and evaluation of performance. Steps have been taken to address this in the revised "Action Plan" section of this document.

Buildings and Significant Energy Uses

The majority of energy use on site is associated with buildings in the form of heating, cooling, lighting, small and large power use. There are also centralised IT servers (with a mirror on site for backup), a sewage works, an airport, and a street lighting network.

The building energy uses split out into offices, teaching and meeting spaces, research spaces and equipment, workshops, hotels, halls of residence, flats, family houses, aircraft hangars, bus depot, kitchens, restaurants, and other eating outlets.

The energy to heat and power the buildings is delivered in a number of ways. Over 50% of the electricity for the campus is generated on site by a 1.4 MW combined heat and power unit along with 1.45 MW and 900 kW solar PV farms. The CHP also provides the base load heat for a district heating system which supplies most of the buildings on the technical site. A biomass boiler and air source heat pump also provide heat to this district heating system with gas boilers providing back up. Only one building on the technical site is still heated with oil, and when possible, this will be converted to district heating. The remaining buildings, including those which are residential, are heated with gas boilers, except for Chilver and Baroness Young Halls, which are electrically heated.

The new buildings being delivered as part of the Masterplan are having an impact on the campus energy consumption. Many are technical buildings with significant process energy demands in addition to building HVAC systems. They include the AIRC building, AIRC Test Cells, IMEC building, new Glasshouse, FAAM, Agri Tech, UKCRIC 1 and 2, and DARTeC. Two industrial scale research facilities for generating hydrogen are due to be brought into commission this year. One will significantly increase site gas consumption; the other is expected to significantly increase our electrical demand.

There are over 1000 electricity meters monitoring demand. When grouping these into major loads and building loads, the top 10 account for 40%.

The table below shows the top 10 electricity users (with the next 4 in grey) with the year-on-year change.

Table 1: Data for the top 10 electricity users for the reporting periods 21/22 and 22/23

Building	Electricity Use 21/22		Electricity Use 22/23		Annual change
	kWh	kWh/Sqm	kWh	kWh/Sqm	
Baroness Young Halls	1,311,149	144	2,093,007	107	60%
IT Servers	1,356,122	N/A	1,515,097	N/A	12%
C057	638,174	303	1,200,265	689	88%
C052A (inc Solt Building)	1,319,098	180	1,170,583	159	-11%
C083 (inc IMEC)	547,619	45	776,049	99	42%
Mitchell Hall	706,291	91	691,316	90	-2%
C052	698,435	71	650,508	60	-7%
C239 Conf Hotel	487,429	66	591,531	80	21%
C085	322,903	59	570,335	105	77%
C300 Martell	665,314	144	537,217	104	-19%
Stringfellow Halls	523,442	71	513,729	64	-2%
C055	258,060	75	416,323	129	61%
C240 CMDC	341,443	77	322,454	112	-6%
C070	430,721	212	273,014	201	-37%

Note: The floor area of Baroness Young Halls increased between 2020/21 and 21/22.

The impact of the new residential buildings at Baroness Young Halls is significant, as is the increase in the IT servers load. Elsewhere there are some changes in activity which may be explained by changes after Covid.

The above electricity sites will be reviewed on a regular basis using data from the University's Half Hourly Automatic Metering System.

There are 186 gas meters monitoring demand. Most (55%) of the gas imported is used to fuel the CHP which produced 34% of the electricity consumed in 22/23. Excluding the CHP, the top 10 users of gas account for 95% of natural gas consumption.

The tables below show the top 10 gas users (with the next two in grey) with the year-on-year change.

Table 2: Data for the top 10 gas users for the reporting period 21/22 and 22/23

Building	Gas Use 21/22		Gas Use 22/23		Annual change
	kWh	kWh/Sqm	kWh	kWh/Sqm	
Gas for District Heating	6,065,084	67	3,510,486	42	-42%
Gas for houses	2,635,045	174	2,445,861	162	-7%
Lanchester	2,189,034	196	2,049,641	182	-6%
Mitchell Hall	2,381,363	308	2,009,931	261	-16%
CMDC	1,705,679	593	1,455,945	506	-15%
Stringfellow	1,181,346	148	1,110,919	139	-6%
C300 Martell House	1,192,767	230	612,206	118	-49%
Test Area	619,372	404	611,572	399	-1%
Fedden	572,655	197	587,418	202	3%
Conference Hotel	445,931	60	446,531	61	0%
C046 Welding	156,873	133	216,539	183	38%
Sports Centre	137,920	62	160,471	72	16%

Degree days in 2022/23 were 1,659 compared with 1,570 in 2021/22 an increase of 6%. This makes the savings even more impressive. The gas for District heating does not allow for the other sources of heat including CHP waste heat and biomass heat and a so a year on year comparison is difficult. It is good to see a decrease in gas overall, reflecting a return to normal ventilation regimes after Covid.

The top 10 gas sites will also be reviewed on a regular basis using the gas supplier's Half Hourly data.

Energy Costs

Electricity and gas prices remain high in 2024 although they have fallen slightly from the 2022/23 peak and further falls are expected in April 2024. This still provides a significant imperative to reduce energy wastage but limits funding available for improvements, except for very quick payback measures.

Energy Management

The university's Energy Management System is based on ISO50001:2018. The manual documents how the system works, setting out responsibilities, the policy, the various procedures, tracking legislative changes to maintain compliance and setting a system for monitoring and targeting energy savings.

There are over 40 statutory annual DEC's (Display Energy Certificates) and 31 ten year DEC's (excluding new builds).

Training is provided to all staff and students (awareness training and online training). Training needs for FM's and Green Team members should be reviewed.

Monitoring and Targeting is being deployed on the operation of the District Heating and CHP with monthly reviews of performance. The maximum demand of the site is also being closely monitored and targeted during winter to reduce the risk of blackout. As described above. the top 10 electricity and gas users are monitored on a more frequent basis.

KPIs

The university has two KPI's specifically relating to energy:

- 1) To monitor building energy use on a kWh per m² basis
- 2) To reduce building energy demand per m² floor area

In addition to this ISO 50,001:2018 requires us to report progress against a fixed baseline.

Table 3: Changes in building energy demand by floor area

Building Energy Demand by floor area over last 5 years (kWh/m2)					
	2018/19	2019/20	2020/21	2021/22	2022/23
Electricity consumed*	108	96	93	100	102
Heat consumed**	165	142	145	128	111
Change in Elec efficiency against baseline 2018/19		-11%	-14%	-7%	-5%
Change in Heat efficiency against baseline 2018/19		-14%	-12%	-22%	-33%

*Electricity consumed excludes electricity specifically used for heating and also specific research activity

** Heat consumed includes electricity for heating, CHP waste heat and assumes a boiler efficiency of 80% where fuel and not heat is metered; specific research activity is excluded. Heat demand is adjusted for Degree Days.

There was a multiplication error for adjusting gas into heat in previous reports. This has been corrected here.

The dramatic improvement in heat efficiency has been helped by a number of factors:

- (i) New highly efficient student accommodation in Baroness Young Halls
- (ii) Improvements to heating scheduling since Covid.
- (iii) Large hangar space not being heated during refurbishment.

The counter trend for electricity is harder to explain. Although the decreases in 2019/20 and 2020/21 were likely affected by Covid. The other issue is that research process loads have yet to be accounted for properly and so increased research activity may be hiding improvements in buildings energy efficiency.

Energy Saving Opportunities

Improving energy efficiency of buildings

Reductions in heating requirement through improved control of heating systems, better insulation and air tightness are a key focus of ongoing improvements. Alternatives to gas boilers are also being sought.

Lighting is the main electrical load in some buildings. Replacing fluorescent lights with LED lighting and improved control can reduce this consumption by more than 50%. Opportunities to upgrade lighting to LED will continue to be sought. There are still opportunities in many of the buildings across campus, including CMDC, the Conference Hotel, Martell House, Mitchell Hall, and a number of car parks.

Modern motors with improved control can significantly reduce the electrical loads associated with air handling and heating systems. Our Mechanical Engineering Team have been asked to identify opportunities as part of their operation and maintenance of the heating and ventilation on site. They are also implementing a programme of works to improve the efficiency of compressed air systems across site.

Behaviour change

Alongside the University Energy Policy there is an Energy Code of Practice which provides more detail for the interpretation of the energy policy. This helps manage expectations and ensure operations are efficient. This code is reviewed annually.

All staff and students are given awareness raising training either through presentation (students) or via an on-line training platform (staff). Staff and students who are keen to volunteer to help improve the environment at Cranfield are organised in "Green Teams" and, more recently, an "Energy Champions Network." They are supported to help with campaigns to save energy.

Energy Campaign

Given the sustained high unit cost of energy, there is a continued emphasis on immediate energy savings. Staff and student Energy Champions have been recruited to help identify no cost and low-cost opportunities for cutting energy wastage across the site. Energy data has been made available, which is updated on a weekly basis.

A review of operations with laboratory managers, cleaning management, security, IT, and technical managers has helped identify opportunities to reduce energy use without affecting operations. Profile energy data is reviewed weekly to check for anomalies, such as sudden increases or decreases, which might indicate equipment or procedural failures, which can then be followed up.

More building temperature sensors have been installed to help prevent overheating whilst comfort is maintained. Temperature settings have been optimised and timings controlled more effectively. This has included the setting of TRVs to a set maximum consistent with 21 degrees C. Cooling in summer has also been restricted, in air-conditioned buildings where constant temperature is not required. Buildings have had hours of operation set to avoid heating, cooling and lighting being used unnecessarily.

Salix Projects

Energy efficiency projects planned but not yet committed using the amended Salix Revolving Green Fund are summarised below:

Table 4: Proposed Salix RGF projects for 2024

Planned	Title	Annual kWh Savings	Carbon Savings tCO ₂ e/y	Project Costs	Annual Savings	Payback Time
20/03/2024	B37 Connection to district heating	49,000	8	£110,000	-£3,000	
21/03/2024	LED lighting	88,000	20	£87,000	£25,000	3.5
22/03/2024	Compressor with inverter motor	41,000	10	£15,000	£11,500	1.3
Totals		178,000	38	£212,000	£33,500	6.3

The annual summary of the Commissioned Salix Revolving Green Fund is shown below:

Table 5: Annual summary of commissioned Salix RGF

Commissioned (Salix Year)	No of Projects	Annual kWh Savings	Annual Carbon Savings tCO ₂ e	Project Costs	Annual Savings	Average Payback / Years
2021/2022	2	60,073	16	£125,239	£13,611	9.2
2020/2021	2	141,960	39	£181,076	£28,576	6.3
2019/2020	6	101,282	132	£137,388	£28,924	4.7
2018/2019	5	310,380	149	£164,124	£32,114	5.1
2017/2018	4	210,942	91	£187,378	£37,029	5.1
2016/2017	4	154,979	49	£62,861	£12,667	5.0
2015/2016	6	308,408	157	£173,588	£36,631	4.7
2014/2015	12	383,479	119	£124,265	£40,633	3.1
2013/2014	11	377,587	131	£136,290	£45,918	3.0
2012/2013	11	470,628	162	£194,209	£48,897	4.0
2011/2012	8	767,842	262	£208,862	£67,459	3.1
2010/2011	2	17,712	10	£6,487	£3,069	2.1
2009/2010	11	1,684,911	567	£217,901	£118,959	1.8
Totals	84	4,990,183	1,884	£1,919,668	£514,487	3.7

In addition to the above, the following one-off loan funded projects have been completed.

Table 6: Completed one-off loan funded projects

Completed	Loan	Project	Carbon Savings tCO ₂ e	Annual kWh Savings	Project Costs	Annual Savings	Payback / Years
Apr 2018	SEELS 2017	1 MW PV farm in field	439	1,037,660	£1,262,609	£211,683	6.0
Jan 2018	SEELS 2017	B052 LED Lighting Upgrade Various	56	128,262	£27,680	£26,165	1.1
Dec 2017	SEELS 2017	B114 LED Lighting Upgrade	29	64,989	£43,255	£13,258	3.3
Dec 2017	SEELS 2017	B083 LED Lighting Upgrade Various	25	57,976	£14,077	£11,827	1.2
Dec 2017	SEELS 2017	B070 LED Lighting Upgrade Room F10	4	9,903	£3,187	£2,020	1.6
Nov 2017	SEELS 2017	Lanchester LED Lighting Upgrade Various	151	345,468	£208,881	£70,476	3.0

Sep 2017	SEELS 2017	B052 LED Lighting Upgrade F243-F251	4	7,981	£4,896	£1,628	3.0
Jul 2017	SEELS 2017	B045 LED Lighting Upgrade Throughout	16	39,009	£36,892	£7,958	4.6
Mar 2015	HEFCE RGF	Biomass Boiler (Wood chip replacing Gas)	527	20,767	£1,000,000	£154,638	6.5
Oct 2014	SEELS 6	District Heating Control Improvements (Pressure sensors)	289	1,560,000	£242,520	£66,898	3.6
Mar 2013	SEELS 5	Pipe insulation (B30,37,39,40,85,88)	59	322,348	£27,075	£9,348	2.9
Mar 2013	SEELS 5	Cavity Wall Insulation (Mitchell Hall)	19	104,714	£16,158	£3,560	4.5
Mar 2013	SEELS 5	Martell BMS improvements	107	375,337	£43,354	£20,977	2.1
Mar 2013	SEELS 5	Adiabatic coolers	74	141,988	£127,443	£29,817	3.3
Nov 2012	SEELS 4	DH Pipework improvements and Thermal Store	616	3,353,755	£638,772	£128,449	5.0
Jul 2010	SEELS 3	UPS Upgrade (IT Servers)	72	133,200	£71,362	£20,797	3.4
		Totals	2,488	7,703,357	£3,768,160	£779,499	4.8

And the following projects grant funded through BEIS/Salix PSDS2 in 2021/22

Table 7: Projects funded through BEIS/Salix PSDS2 in 2021/22

Measure	Project Costs	kWh Savings	Savings	CO2 savings
DH distribution improvements	£417,881	137,018	£4,111	25
Upgrading and installing new BMS	£1,012,616	1,111,421	£34,012	208
LED Lighting	£870,506	1,156,055	£100,929	619
Solar Farm	£465,215	452,927	£36,724	225
Battery	£811,195	-	£0	-
Air source heat pump (air to water)	£1,430,433	1,601,984	-£75,639	412
Connect B108 & B045 to existing district heating	£133,968	-	£12,505	11

Total PSDS2 Project Cost £5,141,814; Grant £4,993,701

And BEIS/Salix PSDS3 in 2022/23

Table 8: Projects funded through BEIS/Salix PSDS3 in 2022/23

Measure	Project Costs	kWh Savings	Savings	CO2 savings
Hangar insulation	£8,861,828	4,220,154	£211,008	776
Upgrading and installing new BMS	£82,249	195,710	£9,785	36
New heating	£804,697	271,539	£13,577	50
Solar Farm	£817,085	791,635	£106,978	393
Air source heat pump	£880,493	1,375,000	-£11,957	202

Total PSDS3 Project Cost £11,446,352; Grant £11,279,371

Table 9: Projects funded through BEIS/Salix PSDS3b

Measure	Project Costs	kWh Savings	Savings	CO2 savings
Thermal stores	£1,181,161	1,086,300	£108,630	200
BEMS - not remotely managed	£165,076	187,078	£18,708	34
Mitchell Hall Connection to DH	£314,222	136,103	£40,831	98
Conference Hotel Connection to DH	£987,497	75,628	£22,688	54
Stringfellow halls Connection to DH	£1,513,147	136,103	£40,831	98

Total PSDS3B Project Cost £4,161,101; Grant £3,661,769

Table 10: Projects funded through BEIS/Salix PSDS3c

Measure	Project Costs	kWh Savings	Savings	CO2 savings
GSHP	£6,702,420	2,611,319	-£528,643	974
BMS	£200,000	119,963	£11,996	36
Martell House Connection to DH	£1,164,963	-	£0	38
Fedden Flats Connection to DH	£825,054	-	£0	40

Total PSDS3C Project Cost £8,892,437; £7,825,344

Action Plan

The immediate plan for the current year is set out below:

Action	Resources required	Measure(s) of success	Who	By When
Reduce building energy consumption related to HVAC systems	<ul style="list-style-type: none"> - Financial, - Mechanical engineering support, - BMS engineering & controls support, - Monitoring capability (staff & infrastructure) 	HVAC system operation and maintenance is further optimised and building electricity baseloads related to HVAC system operation are seen to drop as a result. Any pumps which are currently on plug tops are rewired so that they can be controlled through BMS.	PM & MR & CD	July 2025
Improve stability and control of site HV network	<ul style="list-style-type: none"> - Financial, - Electrical Engineering, - Consultancy/ advice, - Competent contractors, - Monitoring capability (staff and infrastructure) 	Electrical engineer and E+E team have clear sight of load distribution across network. Physical mechanisms are in place to prevent export and blackout	GE, CD & DC	July 2025
Improve energy monitoring capability across site	<ul style="list-style-type: none"> - Financial, - E+E staff time, - Electrical engineering staff time, - Consultancy / expert advice, - Competent contractors, - IT support, - Mechanical engineering support - Support to shut some buildings down to undertake works - Reliable hardware and software, 	Metering and monitoring strategy is finalised. Meters are installed across the HV network on all plinths. All incomers and max demand can be monitored on a near real-time basis. Faulty building meters are replaced, and AMR is improved. IQ Vision sends data to SystemsLink	CD, GE, DC, PM	July 2025
Further reduce building energy wastage via energy saving campaign activities	<ul style="list-style-type: none"> - Monitoring capability (staff & infrastructure) - Staff time to drive energy campaign through meetings, training, roadshows, and messaging, and record and follow up on actions 	Energy saving ideas and progress with actions recorded. Data analysis and/or feedback from building users and Facilities Managers indicating success of actions	CD, BW, Energy Champions	July 2025
Clarify Risks and Opportunities associated with issues and how	<ul style="list-style-type: none"> - E+E staff time 	The relevant section of the EnMS will be revised. The next Energy Plan will follow a new format which makes this clear	CD & GE	June 2024 Jan 2025



Action	Resources required	Measure(s) of success	Who	By When
they are followed through in the planning process				
Ensure the procurement requirements set out in our EnMS and Energy Code of Practice are being followed.	- E+E staff time - Support from the Procurement team	Internal audit results in a positive outcome.	JN & CD	June 2024
Maintain EnMS and associated documents. Demonstrate improvement	- E+E staff time, - Support from Senior Management Team & all elements of the university which are covered by the EnMS	EnMS and all associated documentation is up to date. Re-certification to ISO 50,001:2018 is secured.	CD, GE, GF	Aug 2024

ESOS Reporting

ESOS reporting is in hand. Our compliance is largely through our maintenance of ISO 50,001 certification. Information is being gathered to upload to the portal for the deadline in June.

SECR reporting

SECR data for 2022/2023

Fuel Type	Energy Purchased kWh		tCO _{2e}				
	2022/23	2021/22	Sc 1	Sc 2	Sc 3	2022/23	2021/22
Gas	34,815,330	37,835,753	6,417.1			6,417.1	6,906.5
Electricity	13,345,446	12,186,252	-	2,763.5	239.2	3,002.6	2,572.0
Biomass	1,636,900	2,389,428	17.6			17.6	30.9
Gas Oil	406,128	246,330	105.6			105.6	64.0
Aviation Turbine Fuel	462,583	641,815	114.8			114.8	160.5
Diesel	282,550	231,980	67.5			67.5	55.7
Aviation Spirit	150,099	117,323	35.6			35.6	28.2
Petrol	14,205	9,771	3.2			3.2	2.2
Burning Oil	31,003	28,363	7.6			7.6	7.1
LPG	0	1,893	-			-	0.4
Sub-Total	51,144,244	53,688,908	6,769.0	2,763.5	239.2	9,771.6	9,827.5
Business Travel (mile							
(rental/employee							
owned vehicles	254,122	110,013			108.8	108.8	69.6
where fuel is							
purchased)							
Total Gross tCO_{2e}			6,769.0	2,763.5	347.9	9,880.4	9,897.1

Note: Numbers shown in the table above are rounded to the nearest whole number or tenth.

The Intensity Ratio in 2022/23 for all emissions reported in table is 4.49 tCO_{2e}/£100,000 turnover. In 2021/22 it was 4.92 tCO_{2e}/£100,000 on the same basis.

Notes:

1. The methodology used follows the UK Government Environmental Reporting Guidelines. The University has an energy management system certified to ISO50001. Data from invoices is used unless this relies on estimates otherwise the University has extensive automatic meter reading and manual reading processes. Where no data is available, estimates have been used in a few very minor instances amounting to less than 0.3% of the total. These estimates are based on existing data. The reporting period is August 2021 to July 2022. Government greenhouse gas emission factors for 2022 have been used.
2. The University generates more than half of its electricity from an on-site gas fuelled CHP with an output of 1.4 MW and also a 1.45 MW solar farm (with 0.9 MW solar farm just installed) and other smaller roof mounted PV systems. The output of the CHP in 2022/2023 was 6,904,220 kWh consuming 19,174,297 kWh of gas, and the output of the solar installations was 1,385,761 kWh. Note this means the overall consumption of electricity was 21,635,427 kWh.
3. More detailed information on the progress of the University towards reducing its greenhouse gas emissions and other aspects of environmental performance can be found in the annual environmental report on the website www.cranfield.ac.uk.


Conclusions and Recommendations

In terms of our KPIs, good progress is being made in improving heating energy efficiency and more needs to be done to improve electrical efficiency. There are still significant opportunities for further energy efficiency improvements and renewable energy investments. Continued investment in these measures will contribute to our target being achieved.

Recommendation to prioritise the following objectives:

1. Seek to continually improve energy management through ISO 50,001.
2. Continue to improve the District Heating system and building HVAC system operation.
3. Continue to develop and improve the campus HV electricity system.
4. Review the reporting format for Risks and Opportunities relating to Issues and how they are actioned.

Document Control

Document title	Energy Plan
Document number	CU-SHE-PLAN-07
Version number	2024/25
Originator name/document owner	Gareth Ellis – Head of Energy and Environment Team (Facilities)
Professional Service Unit/Department	Facilities/Energy and Environment Team
Implementation/effective date	March 2024
Date of last review and version number	March 2023
Date of this version	March 2024
Date of next review	January 2025
Standards reference	ISO50001:2018
Signature	
Name	Professor Chris Fogwill
Title	Pro-Vice Chancellor of SWEE and Chair of Energy and Environment Committee

Document Review			
Version	Amendment	By	Date
2.2	First Approved Issue of original Carbon Management Plan	John Street William Stephens	Feb 2009
2.2	Updated Version of original Carbon Management Plan	John Street William Stephens	Jul 2014
2017/18	New format for ISO 50001	Gareth Ellis	Apr 2018
2017/18v2	Verification of Tasks added to Action Plan	Gareth Ellis	Jun 2018
2018/23	Annual Updates	Gareth Ellis	Spring
CU SHE PLAN 07 2024/25	Annual update and split from combined Energy and Carbon Plan into two separate documents	Ceri Dawson	Mar 2024

Policy

Title: Climate Adaptations, Sustainable Buildings and Infrastructure

Description: Climate Adaptations, Sustainable Buildings and Infrastructure Webpage

Date: 15/10/2024

Language: British English

Sharing Rights: Public

Scope: Sustainable Building and Infrastructure

Enforcement Date: 31/12/2023

Revision Date: 31/12/2024

Number Of Pages: 1

Media: Webpage

Publisher: Cranfield University

URL:

• <https://www.cranfield.ac.uk/our-sustainable-university/climate-adaptation-sustainable-buildings-and-infrastructure>



Employee equity, diversity, inclusion

Policy

Title: Dignity at Cranfield Policy

Description:

This policy therefore aims to: • maintain the dignity of all members of the Cranfield Community • ensure that differences are respected and valued • demonstrate our commitment to diversity and inclusion

Date: 17/10/2024

Language: British English

Sharing Rights: Public

Scope: Dignity for both Staff and Students

Enforcement Date: 01/04/2017

Revision Date: 01/09/2022

Number Of Pages: 16

Publisher: Cranfield University Human Resources and Development

Media: Document



Dignity at Work & Study Policy

We are committed to providing and promoting an inclusive working and learning environment where all our staff and students are treated fairly and with dignity and respect, in line with our University [Values](#) and as set out in our Charter:

“The University will provide a collaborative and supportive working and learning environment which embeds equality of opportunity and the rights of individuals in all its operations and treats everyone with dignity and respect”.

The University will not tolerate any form of discrimination, harassment, sexual misconduct, bullying or victimisation (unacceptable behaviour) by or against any member of our Cranfield community or a third party such as a supplier or visitor to the University.

About this policy

We are committed to providing all staff, students and wider members of our Cranfield community with a range of mechanisms for them to raise concerns, seek support and be listened to if they believe they are being or have been subjected to unacceptable behaviour while working, studying or participating in a Cranfield activity.

This policy therefore aims to:

- maintain the dignity of all members of the Cranfield Community
- ensure that differences are respected and valued
- demonstrate our commitment to diversity and inclusion
- embed our University [Values](#)
- set out the responsibilities of individual members of the University community in recognising and preventing harassment or bullying in (or associated with) the workplace
- outline and promote the support available and procedures to be followed if harassment or bullying occurs.

This policy has been developed in line with ACAS guidelines and covers work/study-related events (including social events) whether they are on or off our sites (including overseas), as well as the normal working/learning environment and electronic communications (including social media platforms).

This policy covers cases of harassment, bullying, discrimination, sexual misconduct, or victimisation of:

- staff by other members of the University (staff/students/third parties)
- students by other members of the University (staff/students/third parties)

Definitions

Bullying

Bullying is defined as: “Intimidating, malicious or insulting behaviour and/or an abuse or misuse of power that undermines, humiliates or denigrates the person at the receiving end”.

It can take the form of physical, verbal and non-verbal conduct. Non-verbal conduct includes postings on social media platforms.

Bullying may include, but is not limited to:

- a) setting up someone to fail by giving them unachievable tasks, an unmanageable workload impossible deadline, or making unreasonable demands
- b) inappropriate monitoring of work or overbearing supervision
- c) giving someone too little work or work that is below their competence
- d) Instantaneous rages, over trivial matters, personal insults and name-calling, or public humiliation, put-downs or ridiculing
- e) removing or reassigning a person's responsibilities without justification
- f) deliberately withholding training, information, or resources from someone that are necessary for them to perform the role or course, or opportunities for advancement
- g) constant unfounded criticism of performance or study tasks
- h) withdrawing or refusing reasonable support

Cyber bullying and the use of social networking sites

Cyber bullying is a term used to refer to bullying through electronic media, usually via social networking sites, personal web pages, emails, text messages and internet presence including blogs such as Facebook, and all other social media, whether private, personal or public. In using all social media or posting online, all staff and students should consider the content, language and appropriateness of such communications.

The following guidance is relevant for both students and staff in relation to online behaviour:

- avoid using language which could be deemed to be offensive, threatening or humiliating to others in a face-to-face setting as the impact may be much the same or worse, as it may not be possible to delete the online information
- avoid forming or joining an online group that isolates or victimises fellow students or colleagues
- ensure that social networking sites are not used to access or share illegal content
- avoid defamatory comments in relation to staff, students, customers or suppliers of the University
- do not share confidential information regarding a University employee, student, customer or supplier.

Staff and students are encouraged to report incidences of inappropriate online behaviour. If alleged cyber bullying or harassment is reported, it will be dealt with in accordance with this policy and may lead to disciplinary action in the same way as incidents that take place in a face-to-face setting.

The University's Social Media policy can be found here: [Social media \(cranfield.ac.uk\)](https://www.cranfield.ac.uk/social-media)

Harassment

The Equality Act 2010 defines harassment as: “Unwanted conduct related to a protected characteristic, which has the purpose or effect of violating a person’s dignity or creating an intimidating, hostile, degrading, humiliating or offensive environment for that individual”.

Harassment will amount to unlawful discrimination if it relates to any of the protected characteristics.

Harassment may involve conduct of a sexual nature (sexual harassment/sexual misconduct), or it may be related to a protected characteristic such as age, disability, gender reassignment, gender expression or identity, pregnancy or maternity (including breastfeeding), race, colour, nationality, ethnic or national origin, religion or belief, sex or sexual orientation.

Harassment/sexual misconduct may include, but is not limited to:

- a) unwanted physical conduct or ‘horseplay’, including touching, pinching, pushing, grabbing, brushing past someone, invading their personal space and more serious forms of physical or sexual assault
- b) unwelcome sexual advances or suggestive behaviour (which the harasser may perceive as harmless), and suggestions that sexual favours may further a career or that a refusal may hinder it
- c) continued suggestions for social activity after it has been made clear that such suggestions are unwelcome
- d) sending or displaying material that is pornographic or that some people may find offensive (including e-mails, text messages, video clips and images sent by mobile phone or posted on the internet)
- e) offensive or intimidating comments or gestures, or insensitive jokes or pranks
- f) mocking, mimicking or belittling a person’s disability
- g) ignoring or shunning someone, for example, by deliberately excluding them from a conversation or a workplace social activity
- h) intrusion by pestering, spying or stalking.

A person may be harassed even if they were not the intended "target". For example, a person may be harassed by racist jokes about a different ethnic group if it creates an offensive environment.

Harassment or bullying may consist of sporadic or persistent behaviour, although one single act may be considered sufficiently serious to warrant disciplinary action.

Specific examples of the harassment related to specific protected characteristics can be found in **Appendix A**.

Discrimination and hate crime

Unlawful discrimination takes place when an individual or a group of people are treated less favourably than others based on a protected characteristic such as age, disability, gender reassignment, pregnancy and maternity (including treating a woman less favourably because they are breastfeeding), race, colour, nationality, ethnic or national origin, religion or belief, sex or sexual orientation and in relation to direct discrimination only, marriage and civil partnership.

Direct discrimination occurs where someone is treated less favourably because of one of the protected characteristics set out above; this can include association with or a perception of a particular characteristic.

Indirect discrimination occurs where someone is disadvantaged by an unjustified provision, criteria or practice that puts people with a particular protected characteristic at a disadvantage compared with others who do not share that characteristic.

Crimes committed against someone because of their disability, transgender-identity, race, religion or belief, or sexual orientation are classed as hate crimes and victims are encouraged to report these to the police (in addition to seeking support internally from the University).

Hate crimes can include:

- threatening behaviour
- assault
- robbery
- damage to property
- inciting others to commit hate crimes
- harassment
- online abuse.

Victimisation

Victimisation broadly refers to poor treatment directed towards someone who has made or is believed to have made or supported a complaint under the Equality Act. It is subjecting a person to a detriment because they have, in good faith, complained (whether formally or otherwise) that someone has been bullying or harassing them or someone else, or supported someone to make a complaint or given evidence in relation to a complaint. This would include isolating someone because they have made a complaint or giving them a heavier or more difficult workload.

Provided that person has acted in good faith and genuinely believes that what they are saying is true, they have a right not to be victimised for making a complaint or doing anything in relation to a complaint of bullying or harassment and the University will take appropriate action to deal with any alleged victimisation, which may include disciplinary action against anyone found to have victimised another member of staff.

Making a complaint that you know to be untrue, or giving evidence that you know to be untrue, may lead to disciplinary action being taken against you.

Roles and responsibilities

Students – Dignity at study

All students:

- have the right to study and live in an environment which is free from any form of harassment or bullying.
- have the right to complain if they believe they are being treated inappropriately and be assured that all complaints will be dealt with seriously, promptly and confidentially. At all times, they have the right to choose how what action should be taken.
- have the right not to be victimised if they make a complaint or give evidence in connection with a complaint. Any complaint of harassment and/or victimisation will be dealt with thoroughly, promptly, fairly and confidentially. Victimisation (if proven) will result in disciplinary action and may warrant dismissal/termination of studies.
- have the right to take action outside of the University, including if they feel it appropriate to involve the police. If such an offence occurs the attack/assault should be reported to the police: the University will support them fully in doing this but cannot do it on their behalf. The existence of this

policy does not replace or detract from an individual's rights to pursue a complaint under the relevant discrimination legislation.

- have a responsibility to help ensure a learning and teaching environment in which the dignity of everybody is respected. Everyone must comply with this policy and students should ensure that their behaviour does not cause offence and could not in any way be considered to be harassment.
- should discourage harassment by making it clear that they find such behaviour unacceptable and by supporting students who suffer such treatment and are considering making a complaint. They should alert appropriate staff of any incident of harassment to enable Cranfield University to deal with this matter.

Staff - Dignity at work

All staff:

- have the right to work in an environment which is free from any form of harassment or bullying
- treat colleagues and other members of the University community with dignity and respect and adhere to this policy, in line with our University [Values](#)
- value differences in others and the contribution they make
- report any suspected incidents of bullying, harassment, sexual misconduct or victimisation immediately to their line manager, their local HR team or a Dignity at Work Advisor (highlighted below)
- discourage inappropriate behaviour by making it clear that they find it inappropriate and by supporting colleagues who experience such behaviour and reporting incidents to enable the University to deal with it
- ensure that visitors/contractors they engage with do not encounter any inappropriate behaviour and that they comply with this policy themselves. Complaints of bullying or harassment by a contractor will be investigated and action taken may include severing links with them where the complaint is upheld
- have a right to complain if they believe they are being treated inappropriately, and to be assured complaints will be dealt with seriously, promptly and confidentially. The procedures under [Ordinance 29 'Resolution of Grievances'](#) should be referred to for 'Dignity at Work' complaints.

Line managers/Supervisors

Line managers and supervisors have a duty to implement this policy and to make every effort to ensure that bullying and harassment does not occur, particularly in the area they are responsible for. They should create a culture of respect, dignity and trust, and deal with any incidents in line with this policy.

Line managers/Supervisors:

- have a right to be treated with respect and dignity from the people they manage/supervise
- have a right to manage and monitor staff/student performance without fear of unfounded accusations of bullying or harassment
- should be responsive and supportive to any member of staff or student who makes an allegation of bullying or harassment, provide clear advice on the procedure to be adopted, maintain confidentiality and seek to ensure that there is no further problem of bullying, harassment or victimisation after a complaint has been resolved
- should lead by example by treating all staff and students with dignity and respect, listening, and responding to their views and being realistic about objectives and work programmes
- should be alert to unacceptable behaviour and take appropriate action

Staff and students may be suffering the effects of unacceptable behaviour without revealing it and feeling stressed, so it is important that managers/supervisors/tutors are aware of some typical signs, notably:

- absenteeism, regular or prolonged sick leave
- reduced performance, a decline in productivity or quality of work output
- lack of respect for others, low morale or a change of atmosphere at work/study.

Staff and students should not interpret firm and fair management or supervision as bullying or harassment. Harassment or bullying is always unfair and may undermine someone's efforts to perform well, whereas assertive/legitimate management actions could include:

- setting fair but achievable objectives and performance measures
- monitoring performance levels against objectives
- providing constructive feedback when staff/students are not performing at satisfactory levels or behaving inappropriately
- taking action where unsatisfactory work or levels of absence have been identified.

The University

The University regards all forms of bullying, harassment, sexual misconduct, discrimination and victimisation as unacceptable and will not be tolerated. Conduct may be deemed to be unacceptable whether or not the person behaving in that way intends to cause offence. This applies to people who are not the subject of the harassment or bullying, but who may witness it and be offended by it.

The University:

- will ensure that adequate resources are made available to promote dignity at work and study and to deal effectively with complaints of inappropriate behaviour. This includes ensuring that this policy is readily accessible to all members of staff and students and training is available for staff to understand their responsibilities under the Equality Act 2010.
- will support staff to offer confidential first line information and support on all Dignity at Work and Study matters.
- has a duty to take appropriate action where a criminal offence has taken place, or if there is an incident which represents a serious risk to the health and/or safety of staff or students. If a student wishes to report a criminal offence, the University will support them in that action. (Examples of serious criminal offences include physical assault, indecent exposure or sexual assault including "date rape".) The University may take separate and additional disciplinary action against a member of staff or student who has been convicted of a criminal offence. In exceptional circumstances, the University may suspend the person concerned pending the outcome of an investigation.
- may also take action against members of the University making false or malicious allegations under the appropriate disciplinary procedure.
- will monitor all incidents of harassment and will review the effectiveness of this policy and procedures annually.

Raising a concern/Informal resolution

Most incidents involving harassment or bullying can be resolved quickly and informally: often they can result from misunderstandings or cultural differences, or that feelings have not been recognised or understood. This is particularly true in isolated incidents or with people who you do not know well.

Where possible, every effort should be made to resolve a complaint or issue informally. Often a person will not realise their behaviour is unwelcome or offensive, so an informal conversation may help them to understand the effect of their behaviour and prevent it reoccurring.

Staff

If staff find it difficult to approach the other person directly (or raising it with their line manager), they can contact one of the following for confidential support, advice or assistance in the first instance:

- [Dignity at Work Advisors](#)
- [Trade Union representatives \(if a member\)](#)
- Equality, Diversity and Inclusion team
- [Local HR Teams](#)
- [Employee Assistance Programme](#)

Dignity at Work Advisors are volunteers who have been trained to provide staff with advice and guidance. An advisor can be contacted on a confidential basis at the informal stage.

A list of advisors, their departments and contact details are available on the [intranet](#). There may be occasions where the Dignity at Work Advisor selected is unable to offer support. If this is the case, they will refer the member of staff to another Dignity at Work Advisor who will be able to assist.

It should be noted that the Dignity at Work Advisors do not normally conduct formal investigations.

Students

Students may seek a confidential discussion with any of the staff listed below that they feel able to approach and have the right to be accompanied at such a discussion by a friend or representative of the Cranfield Students' Association. The purpose of the discussion will be to discuss the nature of the problem and how to arrive at an acceptable solution through informal channels.

The following members of staff can be approached for support, advice or assistance:

- Staff in the [Student Wellbeing and Disability Support Team](#) (including the Head of Student Support and Wellbeing)
- Tutors/Supervisors, Course Directors, or other staff closely linked with the management of your studies
- Directors of Education and Directors of Research
- Staff in Education Services (including the Academic Registrar and the Assistant Registrars)
- Staff in the Cranfield Students' Association
- Heads of Academic and Administrative Departments

Support may include:

- providing information on options available to the person seeking help
- advice on how to collate evidence to establish a complaint
-

When you seek advice from any of the above, you will be advised that:

- a formal investigation and possible disciplinary action can only take place if the complaint is investigated under one of the University's formal disciplinary procedures;

- a written record of the action taken will be made to assist with any formal proceedings which may arise if the behaviour does not stop;
- there may be circumstances where the conversation cannot remain confidential, particularly if the person you talk to believes that the circumstances represent a health or safety risk to any member of the University.

Staff in the Student Wellbeing and Disability Support Team can support you with attempts to resolve matters informally, with you:

- approaching the alleged harasser directly, making it clear to the person(s) harassing you that the behaviour in question is offensive, is not welcome and should be stopped;
- approaching the alleged harasser with the support of a friend, staff in the Student Advice Centre, your personal tutor or a representative of the Students' Association;
- writing the alleged harasser a letter, with the help of a friend or staff in the Student Advice Centre;

If you feel unable to tackle the person(s) concerned, this will not constitute consent to harassment nor will it prejudice any formal complaint that you may make. It is important that at all stages, you keep notes of any relevant incidents which distress you, including a record of the ways in which the incidents have caused you to change the pattern of your studies or social life. These may be helpful if the informal resolution does not resolve the matter.

However, if you feel you are being subjected to harassment or bullying in any form, you should not feel that it is your fault or that you have to tolerate it.

Formal Complaints

If you feel that either you are unable to attempt to resolve the matter informally, or that any attempts to resolve a complaint formally have not been successful you may make a formal complaint to the University.

Staff – see Appendix B

Submit a complaint in writing to your HR Team, ideally within 20 days from the incident that led to the complaint.

Students - see Appendix C

Any formal complaint will be considered using the University's student complaints procedures, as set out in the [Senate Handbook: Student Complaints](#). The outcome of this process may in turn lead to action being taken against any perpetrator under the University's student disciplinary procedures, as set out in the [Senate Handbook: Student Disciplinary Procedures](#).

Monitoring

While individuals will remain anonymous, we will monitor all reported incidents of bullying and harassment annually and will regularly review the effectiveness of this policy.

Further reference documents

- [University Diversity Strategy](#)
- [Student welfare handbook](#)

- [Mental Health & Wellbeing Strategy](#)

Confidentiality

Evidence provided under this policy will be treated in a sensitive and confidential manner and information will be shared on a need-to-know basis, including as appropriate with the reported staff member.

Unnecessary disclosure of such allegations may result in disciplinary action.

As part of the investigatory process the identity of the individual(s) providing the evidence may have to be revealed and, as appropriate, they may be requested to make a statement and/or attend an investigatory interview.

All information received in relation to this policy will be stored and processed in line with applicable data protection legislation. To learn more about how we handle your data, please review our [Privacy Notice](#).

Appendix A: Examples of harassment

Harassment can take place face-to-face, or in written form (e.g. by emails, or comments on social media sites). They may be heard or received directly by the intended person, or by others. Both such 'direct' and 'indirect' harassment are considered unacceptable behaviour.

Outlined below are some examples of harassment. Some, if occurring only once, may cause mild irritation but if repeated becomes harassing. Some on the other hand are clearly harassment even if they occur once. Nevertheless, all the forms of harassment are inappropriate for the University to maintain a culture of respect and dignity.

A.1 Sexual harassment/sexual misconduct

Sexual harassment/sexual misconduct is unwanted behaviour of a sexual nature. It can happen to men, women and people of any gender or sexual orientation. It can be carried out by anyone of the same sex, opposite sex or anyone of any gender identity. It can be physical, verbal or non-verbal in nature and can occur between members of the same or opposite sex. It is for individuals to determine what behaviour is acceptable to them and what they regard as offensive. However, any behaviour that could make the recipient feel that they are viewed as a sexual object may cause offence even if offence was not intended.

Examples of sexual harassment/sexual misconduct include:

- unwelcome advances, attention, invitations, or propositions
- offensive or unwelcome sexist comments or behaviour
- unwanted or derogatory comments about dress or appearance
- making unwelcome comments, jokes or gestures emphasising the gender of an individual or a group that are of a sexual nature
- threats of academic failure or promises of promotion or training in exchange for sexual favours
- serious criminal behaviour such as indecent exposure, indecent or sexual assault or rape are extreme examples of sexual harassment/sexual misconduct
- emailing, texting or messaging sexual content
- displaying pornographic or sexual images on posters, calendars and cards
- having pornographic or sexual images on computers and phones
- unnecessary and unwanted physical contact.

What some people might consider as joking, 'banter' or part of their workplace culture can still be

sexual misconduct if the behaviour is of a sexual nature and it's unwanted.

A.2 Racial harassment

Racial harassment is an incident, or a series of incidents intended or likely to intimidate, offend or harm an individual or group because of their ethnic origin, colour, race, religion or nationality or cultural difference. A racist incident is any incident that is perceived to be racist by the victim or any other person

Examples of racial harassment include:

- derogatory name-calling, insults, banter, taunts and racist jokes
- verbal abuse or threats
- the display of racist graffiti or images
- the transmission of racially offensive materials or statements via electronic or other means
- physical attack or threat of attack
- ridicule of an individual for cultural differences
- unnecessary comments or intrusive questioning about racial issues or racial origin

- open hostility, avoiding or refusing to work with an individual from a different racial group.

A.3 Disability harassment

Disability harassment is behaviour that makes direct or indirect insulting and offensive references to a person's disability.

Examples of disability harassment include:

- mockery, taunts or jokes regarding personal attributes or mental health
- offensive language or derogatory name-calling
- avoidance or refusal to work alongside a disabled person
- speaking to others rather than to the disabled person directly
- unwelcome discussion of the effects of disability on the individual's personal life
- excluding the disabled person from social events or meetings
- physical abuse or intimidation
- interfering with personal aids or equipment
- making assumptions about a person's ability to carry out certain types of work, based on their disability.

A.4 Harassment relating to sexual orientation

Harassment on the grounds of sexual orientation can be hostile or offensive acts or expressions by a person or group against another person or group because of their sexuality. Homophobia is a term used to describe hatred and rejection of gay, lesbian and homosexual people. It may be directed against individuals or groups of people who are, or are thought to be lesbian, gay, bisexual or transgendered.

Examples of harassment relating to sexual orientation include:

- unnecessary and degrading references to someone's sexual orientation, gender identity or their perceived sexual orientation or gender identity
- spreading rumours or gossip including speculating about someone's sexual orientation or gender identity, or outing them
- asking intrusive questions
- homophobic remarks, jokes, innuendo or gossip
- threats of disclosing sexuality of the individual
- expressing or acting on stereotypical assumptions
- display or transmission (including by electronic means) of offensive materials
- excluding people because they are bisexual, lesbian or gay
- offensive actions and physical attack
- using religious belief to justify anti-gay bullying and harassment.

A.5 Harassment relating to religion, belief or non-belief

Cranfield will not tolerate any form of religious harassment or discrimination against any faith group. Harassment may be defined as any hostile or offensive act or expression by a person or group against another person or group, based on their religion, belief (including a philosophical belief) or non-belief. It is imperative that behaviour towards others is at all times respectful and courteous, regardless of a person's religion, belief or non-belief and that the University's performance standards are adhered to.

Examples of harassment relating to religion, belief or non-belief may include the following:

- ridicule and offensive humour or jokes about a belief or non-belief
- abusive language, including racist or religious jokes and can include "banter"
- derogatory remarks or name calling

- exclusion from social activities or work-related events without justification
- display of or transmission (including by electronic means) of offensive materials
- (malicious) scorning of beliefs or non-belief
- proselytising
- physical attack or threats of attack
- the display of racially offensive written material.

On harassment relating to a specific religion, belief or non-belief, external guidance may be available e.g. the [IHRA definition of antisemitism](#) will be taken into account in any disciplinary case following a complaint or allegation of antisemitism.

A.6 Age harassment

Harassment on the grounds of age consists of hostile or offensive acts by a person or group against another person or group in relation to their age. It is recognised that younger or older workers may be harassed or bullied on account of their age.

Examples of age harassment include the following:

- ageist remarks, jokes
- negative or derogatory comments generalising about the age-group of the individual
- physical attack or threats of attack
- exclusion on the basis of age e.g. being too young or too old to participate in work-related events.

A.7 Harassment relating to gender reassignment

Transgender harassment is harassment on grounds that a person proposes to undergo, are undergoing or have undergone gender reassignment. Gender reassignment is the medical and social process whereby a person changes their birth sex to match their chosen gender identity.

A person harasses another if they engage in unwanted conduct related to gender reassignment, which has the purpose or effect of violating the other person's dignity or of creating an intimidating, hostile, degrading, humiliating or offensive environment.

Examples of harassment relating to gender reassignment include the following:

- derogatory name-calling derogatory remarks, jokes, innuendo or gossip
- offensive transphobic comments or jokes
- asking intrusive questions
- threats of disclosing the gender identity of the individual
- deliberately using the incorrect pronoun to address the member of staff when you have been informed of the correct one.
- expressing or acting on stereotypical assumptions
- exclusion of trans staff from facilities
- display of or electronic transmission of offensive materials.

A.8 Other forms of harassment

There are other forms of harassment that do not constitute harassment on the grounds of the above but nevertheless can seriously affect the well-being of colleagues if they occur.

Examples of such behaviour include:

- intrusion into the individual's personal life by pestering, spying or stalking
- persistent pressures to become involved in anti-social or criminal behaviour
- persistent intimidating behaviour based on the individual's membership or non-membership of a trade union.

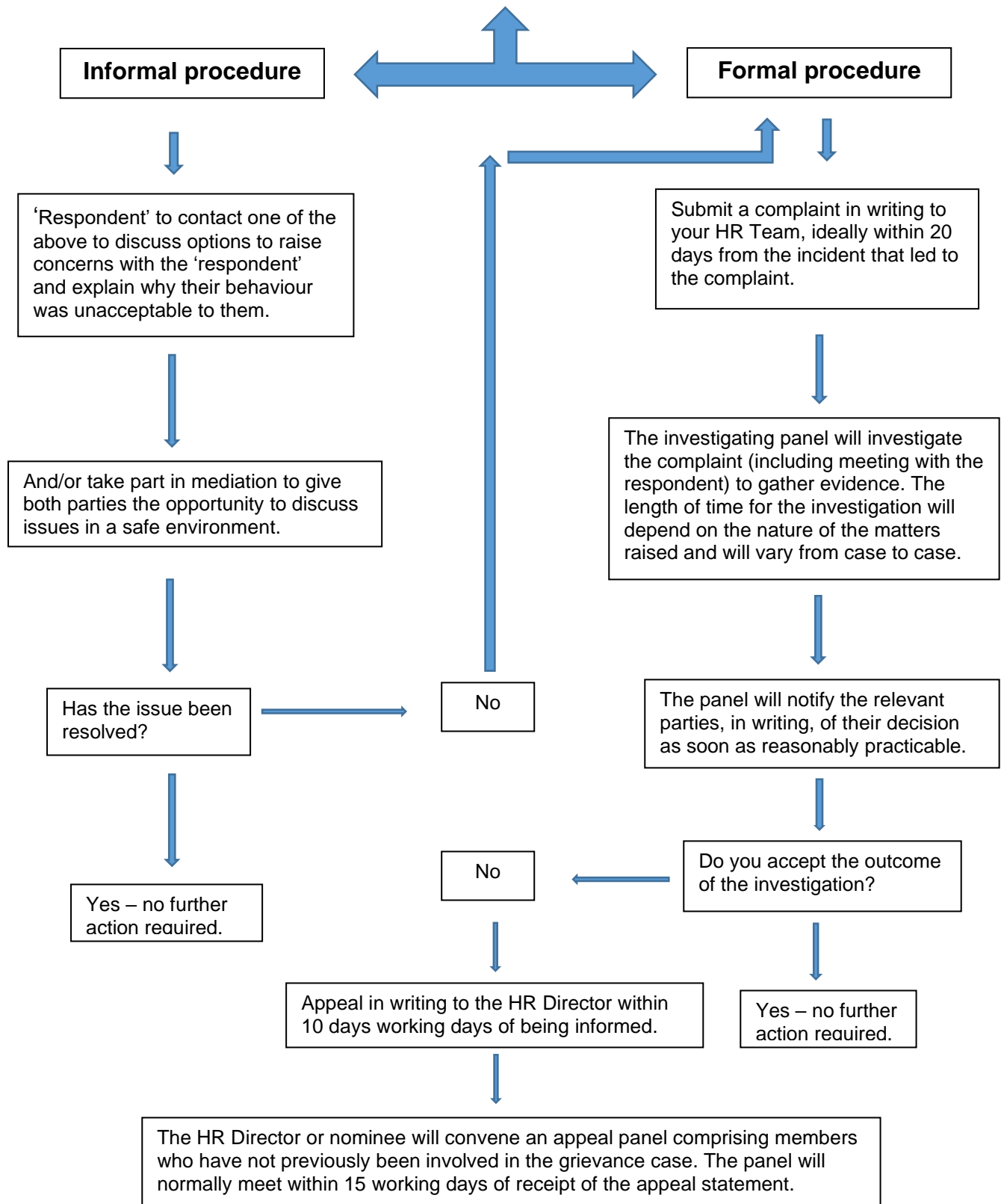
Any difficulty in defining what constitutes harassment should not deter staff from complaining of behaviour that causes them distress. Nor should anyone be deterred from making a complaint because of embarrassment or fear of intimidation or publicity.

Appendix B: Dignity at Work process

To be read in conjunction with Ordinance 29 – the resolution of grievances

If you feel that you have experienced a Dignity at Work issue you can discuss your concerns and seek advice from:

- Your Local HR Team
- Dignity at Work Advisor
- Equality, Diversity & Inclusion Team
- Local Trade Union representative

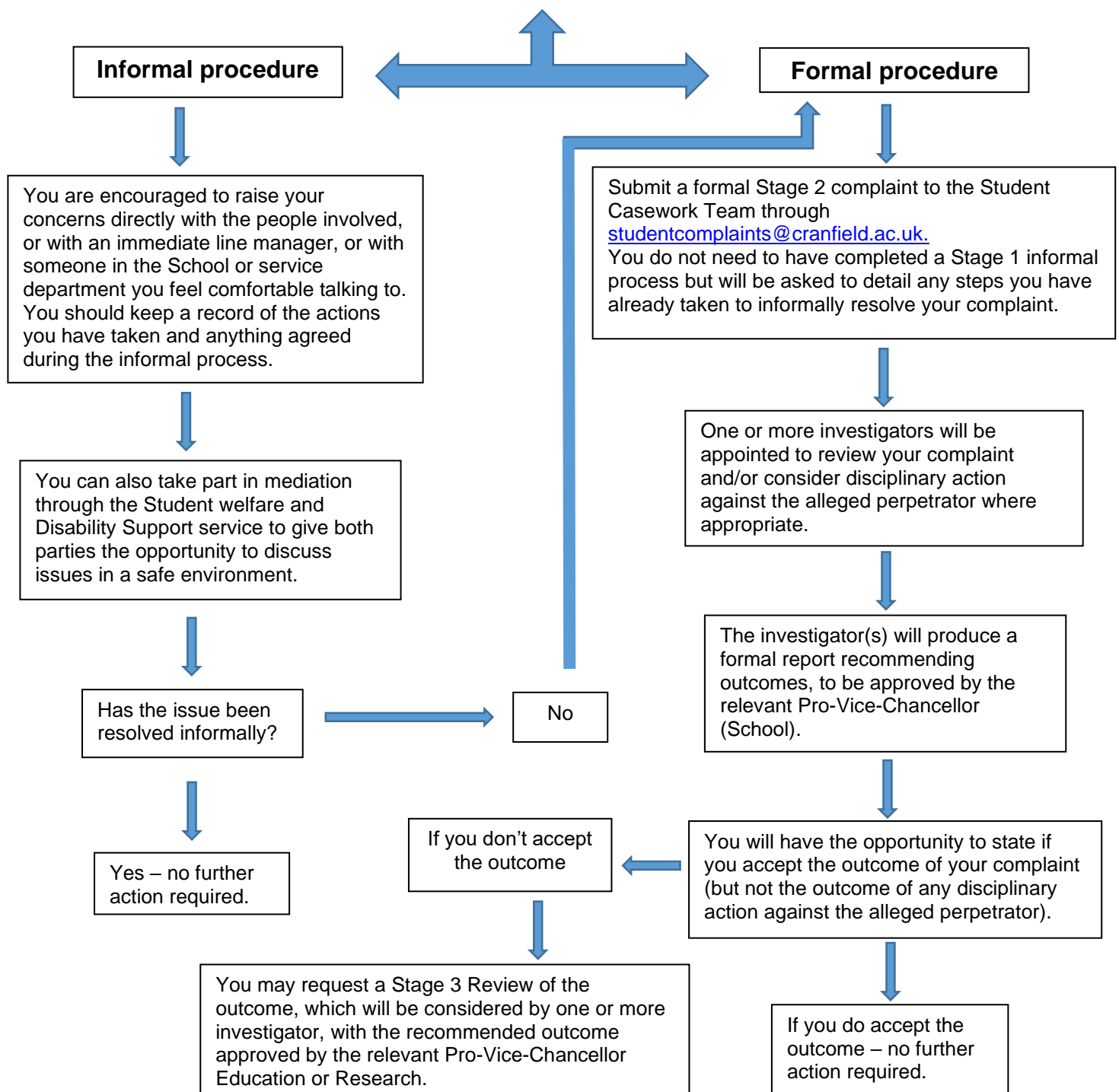


Appendix C: Dignity at Study process

To be read in conjunction with the Senate Handbook on Student Complaints

If you feel that you have experienced a Dignity at Study issue you can discuss your concerns and seek advice from:

- Staff in the Student Wellbeing and Disability Support Team (including the Head of Student Support and Wellbeing)
- Tutors/Supervisors, Course Directors, or other staff closely linked with the management of your studies
- Directors of Education and Directors of Research
- Staff in Education Services (including the Academic Registrar and the Assistant Registrars)
- Staff in the Cranfield Students' Association
- Heads of Academic and Administrative Departments



Document control

Document title	Dignity at Work Policy
Originator name/document owner	Head of Equality, Diversity & Inclusion
Professional Service Unit/Department	Human Resources & Development
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Date of last review and version number	April 2022, V4
Date of next review	January 2025

Version	Amendment	By	Date
V1	Policy updated	Equality, Diversity & Inclusion Business Partner	April 2017
V2	Amendment to Appendix A (A.5) to include reference to IHRA definition of antisemitism	Head of Equality Diversity & Inclusion	December 2020
V3	Policy reviewed	Head of Equality, Diversity & Inclusion	February 2021
V4	Policy reviewed to include sexual misconduct	Head of Equality, Diversity & Inclusion	April 2022
V5	Policy reviewed to combine Dignity at Work and Dignity at Study policies	Head of Equality, Diversity & Inclusion	September 2022

Policy

Title: Disability Policy For Staff

Description: The aim of this is policy is to promote a positive and supportive working environment and a framework for collaborative dialogue between candidates, staff and their line managers in cases where one or more parties is disabled or has a long-term condition(s).

Date: 17/10/2024

Language: British English

Sharing Rights: Public

Scope: To promote a positive and supportive working environment and a framework for collaborative dialogue between candidates, staff and their line managers in cases where one or more parties is disabled or has a long-term condition(s).

Enforcement Date: 01/09/2020

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Media: Document



Disability Policy and Procedure

For staff

We are committed to promoting an inclusive, safe and supportive environment in which all our staff are treated with respect and dignity, in line with our [University values](#).

The aim of this policy is to promote a positive and supportive working environment and a framework for collaborative dialogue between candidates, staff and their line managers in cases where one or more parties is disabled or has a long-term condition(s). Where appropriate, professional advice from HR&D and specialist services, such as Occupational Health, will be sought to ensure individuals are supported effectively.

This policy was written in consultation with the Business Disability Forum (BDF)¹ University disabled staff, Trade Unions, Health and Safety, IT and Facilities and HR&D.

The University is committed to removing barriers that current disabled staff and candidates, or those with a long-term condition(s), may face by making reasonable adjustments and providing support. Our objectives are to:

- promote a culture where disabled candidates and staff feel valued and supported,
- adapt the accessibility of our physical and virtual environment (where reasonable) - see [below](#) for further information on reasonable adjustments,
- ensure our selection and promotion criteria do not create unnecessary barriers,
- provide support to candidates and staff at all stages of their career with the University, including developing a disability or long term health condition(s) during employment. encourage supportive, two-way conversations between staff and line managers regarding disability, while maintaining confidentiality,
- work with staff to identify appropriate support needs,
- support managers in providing reasonable adjustments for staff.

By promoting the support available and encouraging job applications from disabled people or individuals with long-term condition(s), the University can:

- create a workforce that reflects our diverse student body and the community in which we operate,
- attract highly skilled applicants,
- bring additional skills and experience to the University,
- act on our commitment of being an inclusive employer.

¹ A not for profit membership organisation which exists to transform the life chances of disabled people, working through and with business to create a disability-smart world.

Definition

Under the Equality Act 2010, the definition of disability is wide and covers many different visible and non-visible conditions – for example, depression, chronic fatigue, heart condition, hearing loss/Deafness, diabetes, and neurodiverse conditions such as dyslexia and autism.

It is not possible in all cases to know whether someone meets the legal definition of disability, therefore our focus is on removing any barriers, where it is reasonable to do so, rather than determining if someone has a disability.

Roles and responsibilities

The University is responsible for embedding equality and diversity throughout the workplace and expects all members of staff to actively promote equality, value diversity and contribute to an inclusive culture.

Line managers should:

- ensure that disabled staff and those with long-term conditions are not at a disadvantage compared to non-disabled staff in the workplace,
- promote a climate of trust and respect, to encourage disabled candidates and staff to feel comfortable in sharing if they have a disability or long-term health condition(s),
- ensure that disabled staff and candidates are aware of available support,
- be aware that difficulties in the working environment can have an impact on an individual's wellbeing, so they may need to explore and identify further adjustments or seek additional support from the local HR team,
- support and implement appropriate adjustments, liaising with local HR teams/Facilities as needed to arrange any specialist equipment and to consider accessibility where required,
- liaise with local HR teams to organise Occupational Health referrals if further guidance is needed to establish adjustments required,
- keep confidential records of any adjustments agreed and review them annually.

Staff should:

- feel comfortable with sharing information with line managers on any disability, difficulties or health condition(s) that impact their work. The University encourages the sharing of this information to enable colleagues to be supported effectively, while maintaining confidentiality,
- inform their line manager of any problems they experience in the implementation of adjustments,
- participate in a referral to Occupational Health and associated reasonable adjustments process if required, to pursue any agreed actions and support recommendations,
- keep their line manager informed of any changes to their health that impacts on their ability to do their job, or requires a review of previously agreed adjustments.

University Health and Safety team will:

- offer advice on policies and procedures in relation to all safety and emergency procedures in all University buildings,

- provide advice in relation to the Personal Emergency Evacuation Plan (PEEP) process for disabled staff to evacuate safely in an emergency,
- provide evacuation chair training for fire marshals (and others on request) to assist a disabled person to exit from a building in the event of an emergency or fire (refresher training is provided every two years),
- provide advice on carrying out workstation/display screen equipment assessments, prior to carrying out an Occupational Health referral.

Occupational Health will:

- provide impartial advice to staff and managers following an assessment of how the individual's disability or long-term condition(s) impacts upon them at work and the specific barriers they are facing,
- provide advice, guidance and support as appropriate to all parties involved (with consent) to include psychological and musculoskeletal wellbeing and general wellness,
- provide advice on appropriate adjustments, equipment or software required.

To enable line managers to support staff appropriately, it is important that staff liaise with their line manager in the first instance and explain any concerns they may have. The member of staff and/or their manager will need to notify the local HR team if a referral is required. The local HR team may require an informal meeting with the member of staff to discuss the referral requirements.

Further information on the services provided by Occupational Health can be found [here](#).

Human Resources and Development (HR&D) will:

- ensure the University implements disability support and reasonable adjustments effectively.

Senior/HR Business Partners will be able to:

- provide advice to staff, prospective staff and line managers, signposting to relevant support mechanisms and resources both internally and externally,
- provide advice on the referral process to Occupational Health and the reasonable adjustment process.

Further information on the role of HR&D can be found [here](#).

Facilities

The Facilities Manager and Health and Safety teams are able to carry out DSE assessments, recommend specific furniture via the University's supplier; e.g. height adjustable desks. Chairs can be measured to suit individuals or prescribed for specific medical conditions. Facilities can alter light levels; fittings to a particular lux and colour to assist staff with viewing screens or improve their environment dependant on their needs. For staff based at Shrivenham, please liaise with your Facilities team in the first instance who will need to consult with MOD for any lighting issues.

Refer to [Facilities](#) for further information on support and access adjustments.

Information Services

IS is responsible for all aspects of IT, audio-visual and printing provision across the University. They are the first port of call for all IT-related queries and will capture and prioritise the response to any request for information or reporting of issues related to accessibility, technology or equipment by any member of staff.

IS provide a range of materials to help staff use their services, such as training and one-to-one support. More information can be found on the IS [intranet page](#). Requests for support can also be made via: servicedesk@cranfield.ac.uk

Reasonable adjustments

Employers are required to make reasonable adjustments in order to remove barriers that staff may face because of their disability or long-term condition(s).

An assessment of an individual's needs should be made by their manager and the individual and, where appropriate, Occupational Health, and HR Business Partner. The assessment should consider:

- the impact of disability or long-term condition(s),
- the job functions the individual can perform,
- the aids or modifications required,
- the need for training,
- revised work schedules or other adjustments,
- time off for medical treatment or rehabilitation.

Staff should be involved in discussions about how their disability or long-term condition(s) impact upon them while at work and in considering any reasonable adjustments that might help.

Reasonable adjustments are always made on a case-by-case basis, and may be temporary in nature. Some examples include:

- adapting or departing from the standard way of working e.g. a change in working hours – please refer to the [Flexible Working policy](#) for further guidance,
- considering external funding options to include [Access to Work](#),
- providing more time to complete tasks,
- offering a different way to communicate,
- providing specialist equipment or additional support,
- making sure our buildings do not present physical obstacles,
- agreeing a phased return after sick leave,
- providing a designated car park space,
- reviewing support available if absence is related to a disability,
- modifying performance objectives,
- reallocating some of the duties to another person – for example, if a job occasionally involves taking files to another floor, this task could be transferred to someone who does not have an ambulatory impairment

Whether an adjustment is considered reasonable depends on the individual circumstances in each particular case.

The University will not make assumptions about whether a person requires any adjustments or about what those adjustments should be. The line manager and where appropriate, the local HR team will discuss the requirements with the individual and seek to reach mutual agreement, informed by medical advice where appropriate.

Factors to be considered in determining 'what is reasonable' include:

- how effective the adjustment would be in overcoming the barrier,
- how practicable it is to make the adjustment,
- the extent of any disruption to activities that making the adjustment could cause,
- impact on other staff,
- the sustainability of the proposed adjustment,
- the likely financial and other costs incurred as a result of making the adjustment.

How to request a reasonable adjustment

Staff should liaise with their line manager in the first instance. This is an opportunity to explain the situation clearly and suggest possible adjustments required. This will allow the line manager to understand how best to support the member of staff. Advice can be sought from the local HR team if a referral to Occupational Health is needed to seek more clarity on the disability and advise on adjustments/support required.

For more information on reasonable adjustments, please see: <https://www.gov.uk/reasonable-adjustments-for-disabled-workers>

Access and the environment

The University recognises that physical access to facilities and buildings is key to honouring our commitment to supporting disabled staff.

The University will ensure:

- equality, diversity and inclusion training is mandatory for all staff to enhance disability awareness across the University,
- disabled staff/applicants have the appropriate adjustments in place to enable them to access their work/interview environment and carry out their job role/interview e.g. specialist equipment, furniture, communication devices etc,
- meetings are held in accessible locations and do not disadvantage those with physical disabilities,
- [flexible working](#) requests can be provided as a reasonable adjustment - [homeworking](#) can be considered as a reasonable adjustment,
- flexibility regarding start/finish times to accommodate travel to and from work arrangements e.g. consideration of public transport timetables,
- the promotion of policies and procedures that support disabled staff and review these regularly,

- Personal Emergency Evacuation Plans (PEEPs) are in place for those who require them,
- staff/visitors with a blue badge permit are given priority with regard to parking and access to buildings. If staff do not have a blue badge, but have a short-term medical condition(s) that impacts their mobility, please liaise with the local HR team who will be able to assist.

Reporting access issues

If you need to report an access issue on campus – for example an obstruction to an entrance, failure of automatic doors or damage to pathways, you can do so by reporting it to the Facilities Management Team: FacilitiesManagementTeam@cranfield.ac.uk.

In an emergency, such as being unable to gain access to a building, please contact the Facilities help desk on 01234 754100 or Ext: 4100.

For staff based at Shrivenham, you will need to raise a topdesk request with Serco who can be contacted on: 01793 788444 or sercoservicedesk@da.mod.uk

Processes and procedures

Recruitment

The University actively encourages applications from disabled people and those with a long-term health condition(s) and will always make reasonable adjustments to our recruitment and selection procedures when requested by job applicants. Diversity and inclusion training is mandatory for all staff. Those involved in recruitment and selection are encouraged to undertake specific recruitment and selection training which covers disability and the duty to make reasonable adjustments.

The University is currently a Level 1 [Disability Confident](#) Employer. This scheme demonstrates our commitment to ensuring disabled people are treated fairly and have access to the same opportunities as non-disabled people (as outlined in our [Diversity and Inclusion Strategy](#)).

Under the scheme, the University is committed to offering an interview to disabled candidates via the guaranteed interview scheme providing they meet the essential criteria for the role. To be considered under this scheme, candidates need to inform the University about a disability or long-term condition(s) in their application. The nature of the disability or long-term condition(s) will be held in strictest confidence and not disclosed to the hiring manager. However, the information may be used to make appropriate adjustments to the interview process, if needed.

All offers of employment (excluding temporary and casual workers), are subject to the completion of a health declaration form prior to the commencement of employment. Depending on the responses given and/or the duties of the role offered, individuals may be referred to the Universities Occupational Health service for further discussions and/or assessment prior to the commencement of their employment. In addition, some roles may require individuals to attend relevant health surveillance appointments with Occupational Health and/or internal Health and Safety team throughout their employment in the role to maintain the University's duty of care under health and safety regulations.

Further information on employing disabled people and people with health conditions can be found [here](#).

Performance review and development opportunities

The [P&DR process](#) is for all staff to support their development and performance.

The University will endeavour to provide appropriate learning and support to all staff to enable them to undertake their role and responsibilities confidently and effectively. Opportunities for promotion and career development are available to all staff and reviewed regularly to ensure they are inclusive and do not create barriers for any particular groups of staff.

HR&D can offer support to disabled staff and line managers to provide access to information, specialist advice, guidance and to tailor or adjust the support needed in their work.

Monitoring and evaluation

Under the Equality Act 2010, the University is obliged to request information regarding the recruitment, retention and development of staff across the range of protected characteristics. Any information relating to the equality and diversity of staff and applicants will be stored in accordance with Data Protection legislation and in accordance with our [Staff](#) and [Job Applicant](#) Privacy Notice. Please see our [GDPR](#) intranet pages for further information.

To assist the University in creating and maintaining a supportive environment which promotes equality of opportunity alongside dignity and respect, the University aims to create an environment where members of our community feel confident and supported to share personal information referring to any of the protected characteristics. Instances of discrimination based on the grounds of protected characteristics will be considered under Ordinance 29 – The Resolution of Grievances. Complaints regarding staff harassment or bullying should also be raised via this Ordinance, in accordance with the [Dignity at Work Policy](#).

Sickness monitoring

The University acknowledges that sickness absence may result from a disability or long-term condition(s). The University records disability related absences separately from other categories to enable managers to make [adjustments](#) (where reasonable) in relation to the sickness absence of the disabled member of staff.

Staff have the opportunity to report their absence on Agresso as disability-related sickness absence.

Although it may be difficult to implement reasonable adjustments if a member of staff does not reveal that they are disabled, it may still be possible to implement them discretely and confidentially, for example time off to attend appointments in relation to their disability.

Time off for a disability-related medical appointment

The University acknowledges that staff with on-going condition(s) may require on-going treatment and time off from work to attend medical appointments. This may include physiotherapy, counselling, dialysis etc. These appointments will be accommodated wherever possible in agreement with line management and will not normally be counted as sickness.

Advice on sharing information about a disability

The University endeavours to provide an environment where staff feel confident and comfortable sharing information about a disability or long-term condition(s). The University treats all staff with respect, compassion and empathy. The University (via HR&D and Occupational Health) commits to making adjustments to the working environment, so far as is reasonably practicable.

Notifying the University about a disability or long-term condition(s) is an individual decision, and there is no obligation to do so. However, there are many reasons why sharing this information is a positive action that will empower, protect and assist our disabled staff and those with long-term condition(s), while maintaining confidentiality, where possible.

Benefits of sharing information about a disability or long-term condition(s)

- The University can provide effective and tailored support if a member of staff shares this information.
- Reasonable adjustments can be put in place to remove barriers and enable staff to perform their role to the best of their ability.
- Staff may be able to access additional funding to support with equipment, e.g. via the [Access to Work](#) scheme.
- It allows the University to ensure we are representative of the communities we operate in.

Staff may have concerns about discrimination, or may feel uncomfortable discussing their disability or health condition(s) for other reasons. If this is the case, the local HR team or Diversity and Inclusion team can be contacted to discuss these concerns with you.

What to expect if a member of staff discloses a disability

To disclose a disability/health condition(s) or the need for reasonable adjustments, staff are encouraged to discuss this with their line manager in the first instance to highlight any barriers or difficulties they are facing at work.

Staff are also encouraged to share their disability or long term health condition(s) on their Agresso staff record for monitoring purposes. This will enable the University to have a more accurate view of our staff profile and provide appropriate support. Any information shared will be in confidence.

Staff who are enrolled for University courses should also consider disclosing their disability or long-term condition to their Learning Support Officers as detailed in the [Student Disability Policy](#), to ensure appropriated adjustments are in place.

If staff do not feel comfortable notifying their line manager in the first instance, please seek advice from the local HR team or Diversity and Inclusion team: diversity@cranfield.ac.uk. However, in order that line managers can provide the necessary support and understand the nature of the requirements, it is normal for them to be included in any discussions on whether any reasonable adjustments are required (with the member of staff's consent).

Additional support may need to be put in place if staff become disabled or if a disability changes during the course of employment. Support needs will also need to be considered if staff have an ongoing condition(s) but the nature of employment changes (for example, if staff are relocated or if duties change).

What if I suspect I have a disability that has not been formally diagnosed? E.g. Dyslexia

In the first instance, staff are advised to discuss any concerns they may have in relation to an undiagnosed condition(s) particularly if it is impacting on their ability to perform in their role with their line manager who may need to seek advice from the local HR team. The University will ensure the relevant support and adjustments (where reasonable) are considered and implemented.

A dyslexia/specific learning difficulty assessment may be required (with the individual's consent) to facilitate the implementation of appropriate adjustments. This may be funded by the member of staff's department. Other conditions may require a GP appointment or referral. Please seek advice from your local HR team or the Diversity and Inclusion team, should further guidance be required.

Mental health

People with long-term mental health conditions, such as 'pronounced depression' and 'bipolar' are disabled people within the [definition](#) contained in the Equality Act.

The University is committed to making mental health and neurodiversity an inclusive subject that everyone can talk about without fear or stigma, and recognise that looking after our minds is essential for our overall wellbeing in today's environment.

Staff who declare to their managers and/or colleagues that they have a mental health condition should be reassured that the University will take all reasonable steps to ensure that they have a supportive working environment and that confidentiality will be respected.

For information about where and how to seek support and advice on mental health, please see the University's [Wellbeing](#) intranet pages, make [reasonable adjustments](#) (where reasonable) as well as the University's confidential [Employee Assistant Programme](#) available 24/7.

Support available to staff

Human Resources and Development / Diversity and Inclusion

HR&D colleagues are available to offer general advice and guidance to managers and individuals to co-ordinate the consideration and organisation of disability support where needed. You can find out about the resources available on the [HR&D pages](#), including the [Dignity at Work Policy](#) and further [diversity and inclusion resources](#).

Internal resources available via HR&D include:

- [Your Wellbeing](#)
 - Ensuring the wellbeing of our staff is extremely important and a key area of work being taken forward by the University. Here you can find a variety of wellbeing sessions to book onto as well as internal and external resources to look through.
- [Working Life Hub](#)
 - A career development resource called the Working Life Hub is available to help you think about where your career could take you, how to plan the next steps and get the most out of your current role.
- [Flexible Working](#)

- Flexible working can help you to have a good work-life balance which, in turn, can have a positive impact on your wellbeing. Flexible working requests are available to all staff as a statutory right and can also be provided as a reasonable adjustment to support disabled staff.

Disabled Staff Forum

The University is working towards bringing together a disabled staff forum to discuss and raise issues about the management of disability within the University, helping to inform decisions about specific disability-related issues. The forum will exist for all staff with long-term condition(s) or disability that affects everyday life or the work undertaken. If you would like to join, please email: diversity@cranfield.ac.uk

Employee Assistance Programme

The University's Employee Assistance Programme (PAM Assist) offers a free, confidential 24-hour helpline which provides access to information, advice and support, and onward referral to telephone or face-to-face counselling where appropriate.

Further information on the service can be found here [Employee Assistance Programme](#) and the contact details are as follows:

- 24-hour, free telephone helpline: 0800 882 4102
- Or visit online: www.pamassist.co.uk
- User name: CranfieldEAP
- Password: CranfieldEAP1

Access to Work (AtW)

[AtW](#) is a publicly funded employment support programme that aims to help disabled people start or stay in work. It can provide practical and financial support for people who have a disability or long term physical or mental health condition. Support can be provided where someone needs help or adaptations beyond what the University can financially or practically provide.

The type of support or funding available (depending on circumstances) may include:

- an initial work-based assessment,
- special aids, equipment and software,
- adaptations to equipment,
- training in the use of any specialist equipment or software,
- travel to work and travel in work,
- a wide variety of support workers.

Eligibility

To get help from Access to Work you must:

- have a disability or health condition (physical or mental) that makes it hard for you to do parts of your job or get to and from work,
- be 16 or over,
- live in England, Scotland or Wales.

You will be offered support based on your needs. This may include a grant to help cover the costs of practical support in the workplace, or getting to and from work.

Access to work grant/costs

Funding levels will depend on how long staff have been employed and what support they need:

- Job applicants and new recruits in the job for less than six weeks: up to 100% of the approved costs will be paid.
- Those accessing the Access to Work Mental Health Support Service: up to 100% of approved costs will be paid.
- In the job for six weeks or more: costs will usually be shared by Access to Work and Cranfield.

Cost band	Funding source
Up to £1,000	100% Cranfield University
Between £1,000 and £10,000	20% Cranfield University + 80% AtW scheme
Over £10,000	Normally met by AtW scheme

Individuals are responsible for applying for support or funding from Access to Work. However, please contact your local HR team in the first instance or a member of the Diversity and Inclusion team for support on this process as you will need to have explored reasonable adjustments with the University prior to making your application.

Access to Work helpline:

- Telephone: 0800 121 7479
- Textphone: 0800 121 7579
- Relay UK (if you cannot hear or speak on the phone): 18001 then 0800 121 7479
- Monday to Friday, 9am to 5pm

Document title	Disability Policy and Procedure for staff
Originator name/document owner	Head of Diversity and Inclusion
Professional Service Unit/Department	Human Resources and Development
Implementation/effective date	September 2020
Date of next review	September 2023

Policy

Title: Supporting LGBTQ+ Staff and Students Policy

Description:

This guidance is intended to equip members of staff/managers with the understanding and expertise they need to support LGBTQ+ members of staff/students and create an inclusive, high-performing team.

Date: 17/10/2024

Language: British English

Sharing Rights: Public

Scope: To provide staff/managers with the understanding and expertise they need to support LGBTQ+ members of staff/students and create an inclusive, high-performing team.

Enforcement Date: 25/05/2021

Revision Date: 11/02/2022

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Media: Document



Supporting Lesbian, Gay, Bi Trans, Queer, Questioning (LGBTQ+) staff and students

We aim to maintain and promote an environment where members of the Cranfield community whatever their sexuality, gender identity or expression, feel equally welcome and valued, in line with our [University Values](#).

Introduction

LGBTQ+ identities can seem like a complex area especially for members of staff/managers who are not LGBTQ+ themselves, do not know any LGBTQ+ people or who have little experience of managing diverse teams. This guidance is intended to equip members of staff/managers with the understanding and expertise they need to support LGBTQ+ members of staff/students and create an inclusive, high-performing team.

According to Stonewall, it is estimated that that 5-7% of the population in the UK define themselves as LGBTQ+.

What is the definition of lesbian, gay, bi,trans, queer and questioning (LGBTQ+)?

Sexual orientation is an enduring sexual, emotional and/or romantic attraction towards others. Heterosexuals are attracted to members of the opposite gender while homosexuals are attracted to members of their own gender.

- **Lesbian** - refers to a woman who has an emotional, romantic and/or sexual orientation towards women.
- **Gay** - refers to a man who has an emotional, romantic and/or sexual orientation towards men. It is also a generic term for lesbian and gay sexuality - some women or non-binary people define themselves as gay rather than lesbian.
- **Bi** - Refers to a person who has an emotional and/or sexual orientation towards more than one gender.
- **Trans** – an umbrella term to describe people whose gender is not the same as, or does not sit comfortably with, the sex they were assigned at birth. Trans people may describe themselves using one or more of a wide variety of terms, including (but not limited to) transgender, cross dresser, non-binary, genderqueer (GQ).

- Queer – is a term used by those wanting to reject specific labels of romantic orientation, sexual orientation and/or gender identity.
- Questioning – is the process of exploring your own sexual orientation and/or gender identity.

Further definitions can be found here on the Universities [LGBTQ+ Glossary of Terms](#).

For the purpose of this guidance:

- the term 'identity' will cover (but is not limited to) sexual orientation, gender identity and gender expression.
- 'harassment and bullying' will cover (but are not limited to) homophobic, biphobia and transphobic behaviour.

Being 'out' at work/at University

Some members of staff/students may regard others or their own 'identity' as a private matter. However, whether a staff member/student feels comfortable to be 'out' at work or University (open about their identity) or not can impact on their performance and wellbeing. Research by Stonewall has demonstrated that staff who are out at work are overwhelmingly more content at work and consider that their performance improves too.

LGBTQ+ people who are not 'out' are unlikely to complain about harassment or bullying for fear that if they do, their identity will become widely known. Those who are not out at work/University may feel they need to adopt different identities between home and work/University, and act in a way that is inconsistent with their own identity. They may therefore experience isolation and invisibility because their true self is not known to others.

LGBTQ+ people are often vulnerable to being 'outed' against their will (perhaps inadvertently by colleagues or fellow students). This may have consequences where some members of staff or students have strongly opposing beliefs, as it may cause concerns about the possibility of homophobic, biphobia or transphobic bullying or harassment.

LGBTQ+ members of staff and students should be in control about who they are out to and when. Some LGBTQ+ people may be comfortable for some colleagues/students to know and not others – partially out - so it is not appropriate to assume that others know about a colleague or fellow student's identity. Deliberately outing a colleague or student can be very harmful and considered harassment under the University's [Dignity at Work](#) and/or [Dignity at Study policy](#).

The experience of LGBTQ+ people

LGBTQ+ people can face particular issues in wider society. For example:

- They may experience pressure to conform to 'cultural norms' and have to acquire coping strategies to confront bias and hostility. Knowing that being out can make them more vulnerable to prejudice, and deciding who to trust can be stressful;
- Where an LGBTQ+ person is not out, they may be concerned about work events and social gatherings where there is an expectation of being accompanied by a partner;
- According to research by Stonewall, some lesbians and bi women consider that being a woman is a bigger barrier at work than being gay, and so will be wary about being out at work to avoid double discrimination;
- There is a conflict for some people between their faith and sexual orientation. Some people of faith can be hostile to LGBTQ+ people, which can alienate LGBTQ+ people of faith. Similarly, some LGBTQ+ people of faith face discrimination from people who believe people cannot be LGBTQ+ and a person of faith.
- LGBTQ+ staff may be seen by colleagues as role models for LGBTQ+ students and thus it may be assumed that they will undertake all the pastoral care of LGBTQ+ students, which may be burdensome. There may also be assumptions that an out LGBTQ+ staff member will take responsibility for LGBTQ+ issues in the workplace;
- Bi people may face a struggle for acceptance with either lesbian or gay people as well as with heterosexual colleagues;
- Black and minority ethnic LGBTQ+ people sometimes feel they have to choose whether to identify with their ethnicity or sexual orientation, rather than both. They may face racism from other LGBTQ+ people or homophobia from people from the same cultural or ethnic background.

It is important not to make assumptions about someone's identity, for example, try use 'partner' rather than 'girlfriend' or 'husband' in conversation unless they state otherwise.

Harassment of LGBTQ+ people at work/at University

LGBTQ+ people, and those perceived to be LGBTQ+, sometimes experience homophobia, biphobia or transphobia, hostility, harassment or prejudice which can go unrecognised and unchallenged.

One of the most common manifestation of this is 'jokes' and banter in their place of work or study, which members of staff/managers need to 'nip in the bud' where it promotes negative stereotypes of LGBTQ+ people or uses offensive language e.g. the word 'gay' in a pejorative sense.

When used appropriately, banter can be fun, team-building, reduce stress and raise morale. However, it can also contribute towards a hostile environment, even when it

is not directed towards a singular individual banter may cause an LGBTQ+ person who is not open about their sexuality to feel unsafe. Managers or members of staff should intervene if they think someone is feeling uncomfortable and stop any offensive comments. If in doubt seek advice from the Equality, Diversity and Inclusion Team.

Managers or members of staff who do not take firm action to curtail inappropriate banter and jokes could be viewed as complicit in the harassment and risk low team morale, reduced productivity, and complaints from staff.

Trans staff/students

Trans issues are distinct from sexual orientation issues, although they are sometimes conflated. Someone who identifies as Trans is someone whose gender identity and/or gender expression differs to the gender they were assigned at birth. They might have identified with the opposite gender from an early age.

Some trans people may choose to affirm their gender through medical treatment instead of using gender reassignment. Gender reassignment is an outdated and contested term, and largely focused on binary and medical notions of transitioning.

Transition at work is a crucial part of the process, 40% of Trans people are not living permanently in their affirmed gender because of fear of discrimination in the workplace.

Examples of transphobia may include:

- Deliberately ignoring someone's preferred gender pronouns or using their former name
- Disclosing someone's trans history without consent
- Gossiping or speculating about someone's gender
- Questioning someone's ability to 'pass' as their affirmed gender

It is best not to assume how someone identifies but to ask which terms they use and the gender pronouns they would prefer you to use.

Reclaiming 'queer'

The word queer has a complex history and has been used pejoratively against members of the LGBTQ+ community. However, the word is being reclaimed by LGBTQ+ people with some seeing it as an inclusive term that encompasses different sexual orientations, gender expressions and gender identities.

Not all members of the LGBTQ+ community are comfortable with this word because of the way it has been used in the past, but some people choose to identify themselves as queer. It is not appropriate to refer to a person as queer unless they have explicitly stated that they identify as such.

Being an LGBTQ+ Ally

Listen, learn: With an open mind speak with your LGBTQ+ colleagues/students, but be respectful if people don't want to talk about their personal experiences.

Challenge assumptions: Don't assume you know your colleagues' or students' gender and/or sexual orientation. Remember, even if someone has a same-gender partner they may not identify as gay or lesbian, they might be bi or queer or rather not label themselves at all.

Speak up: Banter or jokes about someone's sexual orientation and/or gender identity /expression can be harmful. As an ally it is important not to let others do this and to call it out. Gently but firmly let them know that it's not ok. Sometimes LGBTQ+ people don't want to be the only ones calling people out, and your voice can make a powerful difference to someone else's life. However, please do consider when it might be more appropriate to give the floor to an LGBTQ+ person to allow them to speak for themselves (but if the situation becomes more contentious, they should contact their local HR team for support).

Information and support for LGBTQ+ students

The University understands that LGBTQ+ students may face different challenges during their time at the University, therefore the following information has been provided regarding welfare support and information.

Support

The University has a confidential counselling service that is available to all students free of charge. When required, personal counsellors seek to help students to focus clearly on their problems and to work towards an outcome which the individual student feels to be appropriate. Further details can be found [here](#).

Dignity at Study

Underpinning the University's [Dignity at Study Policy](#) is the belief that staff and students should be free from intimidation or discrimination, harassment and bullying. Harassment in any form is unacceptable behaviour and will not be permitted or condoned by the University.

You may seek a confidential discussion with any of the staff listed below that you feel able to approach. You have the right to be accompanied at such a discussion by a friend or representative of the Cranfield Students' Association. The purpose of the discussion will be to discuss the nature of the problem and how to arrive at an acceptable solution through informal channels.

The following members of staff can be approached for support, advice or assistance:

- Staff in the Student Advice Centre (including the Head of Student Support and Wellbeing)

- Tutors/Supervisors, Course Directors, or other staff closely linked with the management of your studies
- Directors of Education and Directors of Research
- Staff in Education Services (including the Academic Registrar and the Assistant Registrars)
- Staff in the Cranfield Students' Association
- Heads of Academic and Administrative Departments

Other useful internal resources

[General Student Handbook](#)

[Student Handbook \(Student Welfare\)](#)

[Student Advice Centre](#)

Further Resources (Staff and Students):

Internal support

- Equality, Diversity and Inclusion Team diversity@cranfield.ac.uk
- [Glossary of Terms](#)
- [Dignity at Work Policy](#)
- [Diversity & Inclusion Strategy](#)
- [PAM Assist](#)

External support

- [stonewall.org.uk/](https://www.stonewall.org.uk/) UK's leading LGBTQ+ advocacy organisation
- [LGBT+ switchboard](#) provide an information, support and referral service considering issues around their sexuality and/or gender identity.
- [Helpline – Galop](#) support all LGBT+ people who've experienced hate crime, domestic abuse or sexual violence
- [QTIPOC organisations](#) - This is a list curated by the Black, Asian, Minority Ethnic/People of Colour Staff Network of the organisations, community groups and social spaces that are creating incredible work and support for QTIPOC (queer, trans and intersex) people in the UK.
- [Opening Doors London](#) is the largest UK charity providing activities, events, information and support services specifically (LGBTQ+) people over 50.
- [Mermaids](#) supports transgender, nonbinary and gender-diverse children and young people until their 20th birthday, as well as their families and professionals involved in their care.
- [Biscuit](#) is a mixed purpose organisation catering to modern bi women, femmes and those assigned female at birth. Biscuit also has a [list of Bi organisations around the UK](#)

For other groups in the UK, consult [What's in my area](#)

Document control

Document title	Supporting LGBTQ+ Staff and Students
Document owner	Director of Human Resources
Professional Service Unit/Department	Human Resources and Development
Implementation/effective date	May 2021
Approval by and date	Head of Equality, Diversity & Inclusion
Date of last review and version number	February 2022, V2
Date of next review	May 2024

Document Review

Version	Amendment	By	Date
V1	Guidance launched	Head of Equality, Diversity & Inclusion	25 May 2021
V2	Updated language	Head of Equality, Diversity & Inclusion	11 Feb 2022

Policy

Title: Flexible Working Policy

Description: This policy provides a framework within which Cranfield University can consider how best to enable employees to achieve a balance between work and personal commitments.

Date: 17/10/2024

Language: British English

Sharing Rights: Public

Scope: To provide a framework within which Cranfield University can consider how best to enable employees to achieve a balance between work and personal commitments.

Enforcement Date: 01/09/2019

Revision Date: 01/09/2021

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Flexible Working Policy and procedures

Flexible working describes a variety of working arrangements which give employees a degree of choice over how long, where, when and at what times they work. A flexible working environment is key in helping the University achieve its corporate and diversity objectives, particularly to attract and retain diverse talent and to address the gender pay gap. There is also well-established evidence that there are significant business benefits to be gained by allowing employees to work flexibly.

This policy provides a framework within which Schools/PSUs can consider how best to enable employees to achieve a balance between work and personal commitments (which go beyond caring responsibilities). We recognise that there are already areas which operate flexible working patterns successfully, so this policy sets a framework to provide a more consistent approach across the University moving forward, and allowing more staff to have a degree of flexibility over their working arrangements.

Where possible, the approach of the University is to agree any flexible working requests or find a compromise, unless there are valid reasons not to.

Policy statement/principles

We are committed to providing an inclusive and flexible working environment for all. We recognise the benefits that flexible working arrangements can bring to both the University and our people, by committing to the following principles:

Performance is more important than presence

Staff performance should be measured by what they achieve rather than how many hours they work or how much time they spend at the workplace.

Flexibility can improve the effectiveness and efficiency of our people and the University

When flexible working options are implemented successfully and offered proactively, they can support us to reach our business goals, improve customer service and manage space more efficiently.

Prioritising students, customers and research excellence

All staff are entitled to make a case to work flexibly, but there may be particular situations where a specific arrangement is not feasible because of our commitments to students, customers and research excellence. However, in these circumstances the line manager and the employee are

encouraged to examine whether there are alternative ways of helping the employee gain some flexibility.

Different arrangements work for different departments, services and individuals

There is no one size fits all solution. The best working arrangements are tailored to the role, the individual and the needs of the business.

Flexibility involves give and take

Responsibility for making it work must be shared by the employee and their manager. Together they need to assess opportunities and challenges in any proposed arrangement openly and honestly and look for the best way to make it work.

Flexibility can help us achieve a positive working environment for staff

It can improve work life balance and help create an engaged, happy and healthy workforce. Research by our School of Management and Working Families, one of the leading work life balance charities, has shown considerable business benefits, such as enhanced performance, greater commitment and job satisfaction and reduced staff turnover, absence and stress.

Flexible working should support career development

Staff working flexibly should have the same opportunities to develop their careers as those who do not. Business need, performance and skills should be the basis of promotion. As new job opportunities arise, employees and managers should discuss and decide the location and hours of work required.

Arrangements should be regularly reviewed

New working patterns need to be flexible enough to respond to business requirements and changes in individual circumstances. Arrangements should be regularly reviewed to ensure they are still working for the member of staff and the University.

Meeting times should be inclusive

Managers are encouraged to operate 'core business in core hours' for key meetings (between 10am and 4pm). This provides an inclusive approach and ensures maximum attendance.

We will actively consider flexible working options and commit to exploring the possibilities for each role for any request made by a member of staff. All flexible working arrangements are subject to the overriding requirements of the University to deliver services effectively and on time.

Options for flexible working

Flexible working arrangements can be any working pattern which varies from the normal 37 hour, five-day a week pattern at the workplace, for example:

- part-time working
- job-sharing
- annualised hours
- varying start/finish times
- compressed hours
- term-time working
- remote working (e.g. from home)
- ad-hoc arrangements (to cover emergencies)

Line managers and individuals are recommended to seek guidance and fully explore the options suitable for/available to the particular role through open conversations, balancing both the needs of the individual and the School/PSU, as well as considering the [other forms of leave](#) the University has to offer.

Eligibility

We seek to go beyond the statutory requirement; therefore this policy is applicable to all staff regardless of their length of service. The statutory right to request flexible working applies to employees who have a minimum of 26 weeks' continuous service.

Requests for flexible working

It is advised that a member of staff considering making a flexible working request (either formal or informal) will have a conversation with their line manager in advance, to consider which options would be most suitable for the role, the individual and the needs of the business.

1. Informal requests (no contractual change required)

Informal arrangements are based on an agreement between the individual and their line manager. However, they should not require a change to the individual's employment contract.

There may be occasions where requests for limited or short-term changes to working arrangements may be made. Often, it is more appropriate for these to be considered on an informal basis. Examples of this may include ad hoc requests to work from home on a specific day, or to vary working hours. Such requests should be made to the line manager in the first instance who may agree them without need for further formalising. However, in order to be open and transparent, line managers and staff are encouraged to keep a record of what has been agreed.

Flexible working arrangements which start off as informal arrangements e.g. later or earlier start and finish times but continue for a significant period of time (12 months or more) should be reviewed regularly (as a minimum annually) and considered under the formal procedure outlined below. Particularly if they are to continue on an ongoing basis.

2. Formal requests (contractual change required)

Formal arrangements will require formal agreement by a line manager, as they will require a change to the staff member's employment contract.

Following a conversation between an individual and line manager to discuss the request. It is recommended that a formal request is made where changes are long-term and/or significant in nature using the procedure outlined below, which can be followed by any employee.

2.1 Making a formal application

The employee should complete the Flexible Working Application form and send this to their line manager well in advance of the intended change, so that both parties can explore what opportunities are available to them. The line manager will acknowledge receipt of the application form and send a copy to the local HR Team.

2.2 Criteria for dealing with flexible working requests.

Managers should take the following into account in considering flexible working requests:

- The potential benefits of the request may include improved productivity, morale and commitment, retention of key staff and/or salary or other cost savings.
- The proposed change must be feasible and not be detrimental to the work of colleagues, the team, students, external clients/sponsors or service users.
- The arrangements must not be detrimental to the wellbeing or health, safety or security of the individual concerned, or their colleagues.
- If a proposal will affect an individual's pay they should be advised to consult the payroll team to understand how their pay/pension may be affected.
- Where the arrangement proposed cannot be accepted for operational reasons, possible alternatives should be considered and discussed with the individual before a final decision is reached.
- Each request should be considered under its own merit. There should be no limit to the number of staff who can work flexibly as long as the operational needs of the department are met.

2.3 Meeting to discuss a request

- The line manager will arrange a meeting with the employee to consider the request within 28 days after the date an application is received. There may need to be flexibility regarding the location of the meeting if, for example, the employee is on maternity or sickness absence.
- An employee may be accompanied at the meeting if they wish, by either a workplace colleague or a trade union representative. The local Senior HR business partner or HR business partner would normally attend too.
- The meeting will provide both the employee and the line manager with an opportunity to discuss the requested working pattern in depth and consider how it might be accommodated.
- If the requested working pattern cannot be accommodated, the meeting also provides an opportunity to explore alternative arrangements.
- It will normally be expected for both sides to agree to a trial period (usually a minimum of three months) in order to see how the new working pattern suits both the department and the employee. At the end of the agreed trial period, the employee and the line manager should meet to review the trial period and discuss how to take this further.

2.4 Decision and notification

The University is not under a legal duty to agree to the request, but it is expected to consider the request seriously, meet with the employee, and notify its decision in writing. The approach of the University is, where possible, to agree any requests or find a compromise, unless there are good reasons not to on one or more of the following grounds:

- the burden of additional costs
- detrimental effect on ability to meet service/customer needs
- inability to re-organise work amongst existing staff
- inability to recruit additional staff
- detrimental impact on quality of work/service provided
- detrimental impact on performance

- impact on the individual or team's wellbeing
- insufficiency of work during the periods the employee proposes to work
- planned structural changes that may be incompatible with the proposed working pattern.

If a request is made and accepted it will be a permanent change to the employee's contractual terms and conditions, subject to any trial period that may apply. The employee has no right to revert back to the previous working pattern (subject to any review arrangements), unless explicitly agreed otherwise, or as a result of a further formal flexible working request.

The line manager, in consultation with his/her Head of Department and HR, will reach a decision. The decision should be recorded on Part B of the application form and sent to the Senior HR Business Partner or HR Business Partner, who will write to the employee within 14 calendar days of the meeting to:

- confirm that the request has been accepted and detail the appropriate arrangements and dates from which these will start or;
- confirm details of any alternative arrangements that have been agreed and date from which these will start or;
- confirm that the request cannot be accommodated giving a short explanation of the reasons for this and setting out the appeal procedure.

2.5 Making an appeal

Where a request has been refused, an employee has 14 calendar days from the date of notification to appeal in writing to a senior manager in the School/PSU (which would normally be the line manager's, line manager) setting out the grounds for appeal.

Within 14 days of the receipt of appeal, an appeal meeting will take place involving the senior manager in the School/PSU who will chair the meeting and the line manager of the original decision maker. The HR Business Partner or Senior HR Business Partner will also normally attend.

The employee may be accompanied at the appeal meeting if they wish by a workplace colleague or a trade union representative. The line manager who made the initial decision will normally also attend.

Within 14 days of the hearing, the Senior HR Business Partner or HR Business Partner will write to the individual to inform them of the outcome of their appeal. The letter will set out responses to any points raised in the appeal.

Where the appeal panel overturns the original rejection of the request or suggests an alternative outcome, the individual will be consulted on the implications and implementation. *Note: depending on the organisational hierarchy, the line of referral/attendees may be different to that outlined above; however, the principle of a more senior manager hearing the appeal will stand.*

2.6 Timescales

Timescales may be delayed by mutual consent to allow for periods of leave etc.

All information received in relation to this policy will be stored and processed in line with applicable data protection legislation. To learn more about how we handle your data, please review our [Privacy notice](#).

Flexible working application form

Part A: Flexible Working Request *(to be completed by the employee)*

Name: _____

Job Title: _____

School/PSU: _____

(1) Type of flexible working request *(please tick as many as appropriate):*

Change in total hours of work ☐

Job share ☐

Change in start/finish times ☐

Term time ☐

Compressed hours ☐

Annualised hours ☐

Remote working (e.g. from home) ☐

Other (please state): ☐

(2) Details of requested changes to working arrangements *(please give full details of proposed changes to timing of work, place of work, number of hours etc):*

(3) Proposed effective date(s) *(please enter dates below):*

From: _____

Until _____ in the first instance (if applicable):

(4) Impact of proposed changes

I think the effect on the University and my colleagues can be dealt with as follows:

(5) Other relevant information

Employee’s signature: _____ Date: _____

Please pass this form to your line manager who will then arrange a meeting with you to discuss your application further. You have a right to be accompanied at this meeting by a trade union representative or workplace colleague.

Part B: Management decision *(to be completed by the line manager following the meeting with the employee)*

Please refer to the Flexible Working Policy and consult your Senior HR Business Partner or Business Partner as necessary.

Within 28 days of receipt of this form, you should arrange a meeting with your member of staff to discuss their request. You should ensure that you advise your member of staff in advance of their right to be accompanied at the meeting by a trade union representative or workplace colleague.

Following the meeting, you should consult with your Head of Department and Senior HR Business Partner or Business Partner (if not present at the meeting) before finalising a decision. The decision should be recorded below and the form sent as soon as possible to the Senior HR Business Partner or Business Partner who will write to the individual within 14 days of the meeting to confirm the outcome.

Date of meeting with employee: _____

Decision: 1. ☐ Request approved

2. ☐ Request approved with amendments as follows:

Amendments:

3. ☐ Request declined for the following reasons:

Reasons:

Effective date of agreed change(s): _____

End date if for a fixed period: _____

If for an initial trial period, the date of review: _____

Line Manager's name: _____

Signature: _____ Date: _____

Head of Department _____

Signature: _____ Date: _____

Document title	Flexible Working Policy and Procedure
Document version	V8
Document owner	Head of Diversity & Inclusion
Professional Service Unit/Department	Human Resources and Development
Implementation/effective date	September 2019
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Date of last review and version number	May 2018 V7
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Information categorisation	Open

Document review

Version	Amendment	By	Date
V7	Data protection legislation update	Head of HR Compliance, Policy & Data	May 2018
V8	Policy update	Head of Diversity & Inclusion	September 2019

Policy

Title: EDI Annual Report

Description: This Equity, Diversity and Inclusion (EDI) report provides an account of our staff data and actions for the period August 2022 - July 2023

Date: 17/10/2024

Language: British English

Sharing Rights: Public

Scope: This Equity, Diversity and Inclusion (EDI) report provides an account of our staff data and actions for the period August 2022 - July 2023.

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Policy

Title: EDI Strategic Plan

Description: EDI Strategic Plan 2022 - 2027

Date: 17/10/2024

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Scope: EDI Strategy for both staff and students

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Equity, Diversity and Inclusion Annual Report

August 2022 – July 2023

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Introduction

This Equity, Diversity and Inclusion (EDI) report provides an account of our staff data and actions for the period August 2022 - July 2023. It has been written in line with our statutory reporting to the Higher Education Statistics Agency (HESA) and to demonstrate compliance with the Public Sector Equality Duty and Equality Act (2010). This report also offers the opportunity to highlight Cranfield's ongoing progress and successes in EDI while acknowledging the challenges we continue to face.

This report covers the period 2022-2023. During this time, we [published our new EDI strategy - Making Change Happen, together with a video bringing it to life](#). As well as summarising our progress against our previous EDI strategy, we set four new strategic ambitions. By 2027 our ambitions are to be:

1. A diverse organisation that is more representative of our local and global communities and partners than we were in 2022.
2. An inclusive organisation where all our staff and students have a voice and feel safe (physically and psychologically) and respected, and where everyone can fulfil their own potential.
3. An organisation where EDI is strongly integrated across all our activities and everyone feels confident when talking about EDI matters.
4. An organisation that continues to take decisions and actions which are informed by our data.

This report for the period 2022-2023 therefore spans across our previous and our current strategies.

Our commitment to equity, diversity and building an inclusive culture is interwoven throughout our corporate plan, [Ambition 2027](#). The corporate plan was also launched during the reporting period and is supported by a number of enabling strategies and areas of focus, including "Applied Research Powerhouse", "Distinctive Cranfield Learner" and "Employer of Choice". All these elements reflect our EDI aspirations.

Overview 2022-2023

We regularly analyse our EDI data, not only to meet our statutory obligations, but to assist us with understanding our staff demographics. By understanding our staff data, we can tailor actions that, in turn, support our goal of being an Employer of Choice, in line with Ambition 2027.

In summary, over the period we have made positive progress against our four new EDI strategic ambitions (outlined above). The data in this report are presented in line with statutory requirements, by individual protected characteristics. We do also acknowledge that there are complexities and barriers experienced by people with intersecting identities in our workplace which will require further analysis.

The charts and tables provide a detailed account of our data. Some of our positive actions and successes during this period are summarised now.

Highlights

Gender

- Introduced a sector-leading enhanced maternity leave policy offering 22 weeks of paid leave at full pay.
- For the second year running we were recognised in the Top 30 Employers in the UK by the charity Working Families, reflecting our innovative, flexible and family-friendly policies and practices that support parents and carers.
- Our gender pay gap continues to reduce. In the relevant period, our mean pay gap reduced from 22.2% to 21.0% and our median from 18.7% to 18.4%. While this progress is positive, we recognise the need for ongoing improvement. For details, please refer to the [published report on our website](#).

Ethnicity

- Reported our ethnicity pay gap for the first time. While this is not currently a statutory requirement, it signals our commitment and provides a benchmark for us to make continued improvements. For details, please refer to the [published report on our website](#).
- Celebrated Black History Month by inviting Nels Abbey, a writer, media executive and corporate leadership & diversity consultant to join us and run a workshop.
- In January 2023, Cranfield's executive leadership team signed individual pledges supporting race equality as part of [Race Equality Matter's Big Promise](#).

Disability

- Members of our community who chose to share a disability, condition or impairment increased during the reporting period. Sharing rates have improved and at 7% are in line with the sector benchmark.
- Organised a series of events, blogs and speakers for Neurodiversity Celebration week in March 2023, and established a Neurodiversity working group.
- Launched a Digital Accessibility YouTube playlist with video guides to help staff and students produce accessible documents and presentations.

Sexual orientation

- Developed a new Sexual Orientation report on our EDI data dashboard, which helped to achieve an increase in the percentage of people who chose to share their LGBTQ+ status from 2% to 3%.

- Celebrated LGBTQ+ History Month by sharing information about Cranfield's LGBTQ+ community and what we can all do to promote an inclusive culture.
- During Pride 2023, our community members shared how they would be celebrating throughout the month, and their experiences of inclusivity at Cranfield.

Intersectionality

To support our communities and EDI agenda more broadly, recognising the intersectional challenges we face, we have taken additional actions, some of which are highlighted below:

- established a new University Executive Forum with a broader, more diverse membership to support the Chief Executive and Vice Chancellor and the Executive Team in the operation of the University, in particular the delivery of the corporate plan. The first forum included a session on inclusive, candidate centric recruitment practices;
- established a men's mental health community and support network as a forum to provide a space for male colleagues to open up, share their experiences and show they're not alone;
- ran Inclusive Leadership Development and Conscious Decision-making workshops which were well attended and positively received; and
- launched a [new report + support tool](#) which makes it easier for staff and students to seek support and report behaviours such as bullying, harassment and discrimination which are not acceptable and have no place at Cranfield.

Recruitment

Attraction, recruitment and selection continued to be a focus, and many initiatives were implemented in the year to enhance the candidate experience, and improve our practices, including:

- collaborated with local recruitment providers and attended careers fairs in our region to help us attract and recruit more diverse talent from our local community;
- launched a new in-house workshop, "The Art of Successful Recruitment" which has been well attended and positively received; and
- enhanced the inclusivity of our recruitment practices which included:
 - reviewing the "essential" criteria for a role to ensure we are not causing people to self-select out of applying;
 - promoting job opportunities through video content shared on social media;
 - writing our adverts in an engaging, candidate focused way, in plain, gender-neutral language; and
 - using assessments to evaluate candidates, not just relying on a single interview.

Student engagement

Throughout this period, we have been working more closely with our student community. This includes delivering a variety of EDI workshops and sessions to students, collaborating with the [Student Wellbeing and Disability Support team](#) to support students with their needs, and engaging with the Cranfield Students Association and [Cranfield Careers and Employability Service](#).

New Senior Academic Promotions Process

In 2022, we launched a new Senior Academic Promotions Process, after a comprehensive review. This involved consultation with colleagues and trade unions, and significant research into sector best practice to inform our new process. One of the key principles guiding this review was to ensure an inclusive process, where decision makers are aware of, and mitigate bias, and outcomes are subject to independent review.

The positive impact of our new process is reflected in the demographics data and analysis section of this report, and we hope to see further improvements in our data in the next reporting period.

We conducted an equality impact assessment (EIA) on the promotion candidates and their success rates which is summarised in Table 1. Please note, the number of candidates who chose to share if they are disabled or their sexual orientation was too low to be able to conduct analysis. Contract hours were evaluated, distinguishing between full time and part time staff. The EIA revealed that a higher proportion of staff working full-time hours were considered for promotion compared to those working part-time. This insight will inform our approach to the 2023-2024 promotions round.

Characteristic	% of eligible candidates considered	% Successful
Female	21%	79%
Male	15%	72%
White	17%	77%
Minority ethnic	19%	68%
Full time	19%	75%
Part time	2%	0%

Table 1 EIA - Senior Academic Promotions

Research Acceleration Fellowship

We introduced a Research Acceleration Fellowship to provide funding for additional time in support of personal research and research career development from January 2023-July 2023. We actively encouraged applications from researchers belonging to minoritised or underrepresented groups. We conducted an EIA of the applications and awarded fellowships, the results of which were:

- 27% of applicants were female, and 40% of the fellowships were awarded to women;
- 6% of applicants shared they are disabled, and 10% of fellowships were awarded to people who shared they are disabled;
- 6% of applicants shared their sexual orientation as being LGBTQ+ and 7% of fellowships were awarded to LGBTQ+ applicants; and
- 62% of applicants were from Black, Asian or minoritised ethnic groups and 42% of fellowships were awarded to Black, Asian and minoritised ethnic people.

The relatively small applicant numbers did not allow more detailed analysis to be conducted into individual characteristics, or intersecting identities.

Positive pulse survey results

We regularly carry out pulse surveys to ask our staff how they feel about working at Cranfield. This includes questions about Cranfield's progress on EDI and how they perceive Cranfield as an "employer of choice".

The survey results from January 2023 showed:

- 84% of staff agree they are proud to work at Cranfield from a baseline of 82% in 2022;
- 77% of staff agree they feel part of a supportive community from a baseline of 71% in 2022; and
- 63% of staff agree we are making progress on our EDI agenda from a baseline of 55% in 2022.

Staff networks

Our staff networks continue to gain momentum and have created active calendars of meetings and events. We have established a new parent and carers staff network, and are members of [Employers for Carers UK](#). We established a forum specifically to bring together our network chairs and to provide support in their roles and encourage intersectional sharing of perspectives and ideas. Our networks are supporting cultural change at Cranfield through fostering a wider understanding of the EDI agenda.

Data Analysis

In this section we provide a snapshot of our staff demographic data in a series of tables and charts, with brief commentary to help interpret the data.

Staff gender profile

When looking at the gender balance across the University, this is stable compared with the previous years – women now make up 48% of all University staff, a small increase from 47% last year.

The proportion of female staff increased within all schools and professional services units (PSUs), with the exception of the School of Aerospace Transport and Manufacturing (SATM) which remained the same as shown in Figure 1 below. It should be noted that while the percentage of female staff within SATM remained static, the actual number of female staff has increased.

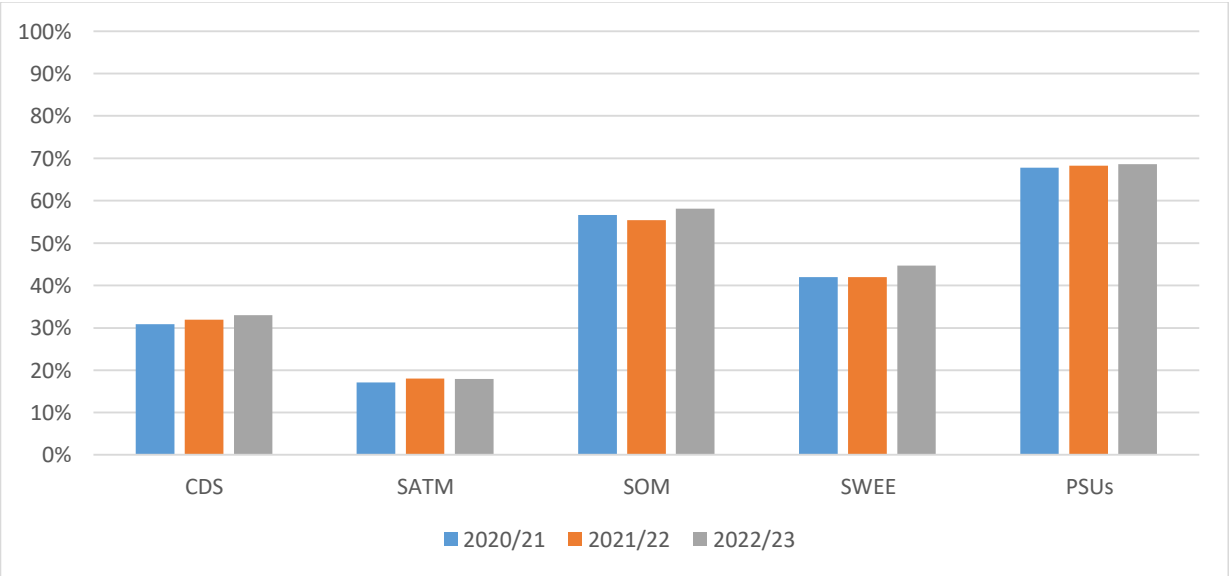


Figure 1 Female staff by School/Professional Support Units (PSUs)

As shown in Figure 2, when looking at gender representation by job family, it is pleasing to see the number of female academics has risen steadily over last three years, from 84 in 2021 to 103 in 2023. The number of female professors has also increased by three since last year.

We have seen a small rise in the number and percentage of female technicians compared to last year, another positive result.

Women continue to be the majority in business services roles. The apparent fall in the percentage of women within the operational job family this year is as a result of an increase in men in this job family, rather than a fall in the number of women employed in these roles.

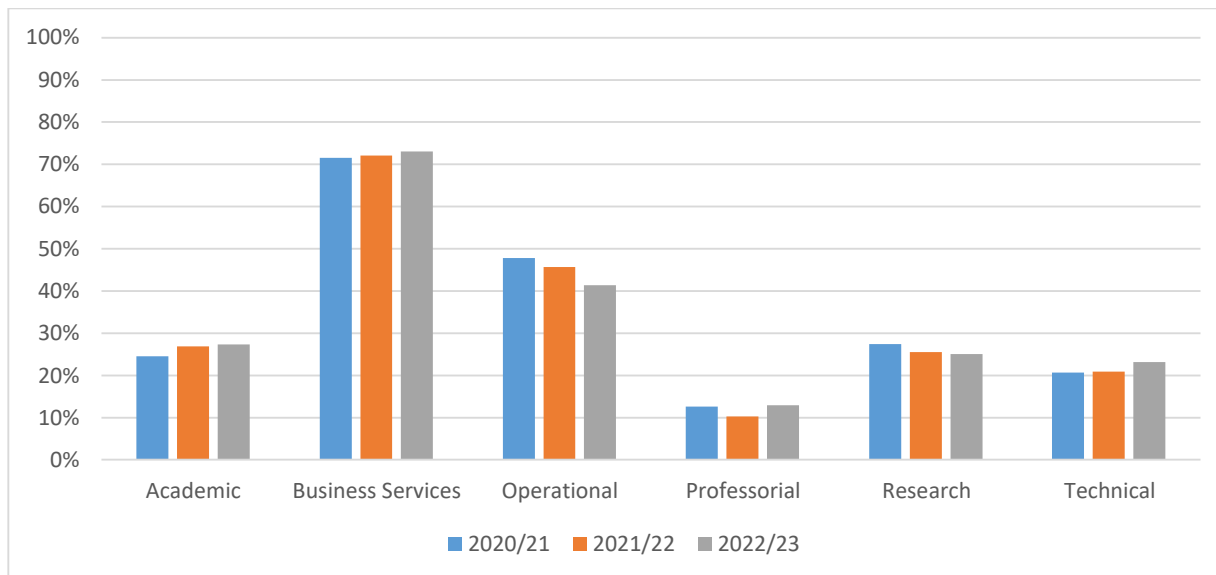


Figure 2 Female staff by job family

Gender representation on senior committees of the University

We improved representation on University senior committees in the reporting period, shown in Table 2. In 2023, the University established a new University Executive Forum with a broader, more diverse membership, replacing the previous Senior Management Team structure. Representation on Senate has also improved based on the previous reporting year, now with 20% female representation (Senate has authority delegated by Council to oversee the academic work of the University, assure academic quality and standards and regulate student affairs. Membership is predominantly made up of the Cranfield's professoriate).

Committee	2022 - 2023		2021- 2022	
	% Female	% Male	% Female	% Male
Council	53	47	50	50
University Executive	31	69	31	69
University Executive Forum*	43	57	28	72
Senate	20	80	13	87
* Created in 2023. Previous to this we had a Senior Management Team in place.				

Table 2 Gender representation on senior committees of the University

Staff ethnicity profile

Our staff nationality and ethnicity data for the period are shown in the tables and figures below. When looking at the ethnicity of our staff in Table 3, staff from a minority ethnic background represent 22% of all University staff, a rise of 3% from last year. This is explained by a

significant increase in the number of non-UK minority ethnic and an increase in UK minority ethnic staff. This increase in UK minority ethnic staff is very positive, as we continue to seek to become more representative of our local demographic*.

Frustratingly, we experienced a significant increase in the number of “undisclosed” ethnicity data amongst our staff. This is a direct result of changes to the ethnicity categories made by HESA which required staff to re-share their personal data with us. Significant efforts are being made to encourage re-sharing of this information.

*UK Census 2021 ethnic minority people: Milton Keynes – 28%, Bedford 24%, Shrivenham 9%, Swindon 18%.

	2020/21		2021/22		2022/23	
	Count	%	Count	%	Count	%
Non-UK Minority Ethnic	188	11%	197	12%	244	14%
Non-UK White	228	14%	231	14%	61	3%
UK - Minority Ethnic	118	7%	116	7%	136	8%
UK - White	1049	64%	1053	64%	434	25%
Undisclosed*	58	4%	56	3%	894	51%
University	1641	100%	1653	100%	1769	100%

Table 3 Staff nationality and ethnicity

There has been little change from last year in the specific ethnicities of UK minority ethnic staff. The changes to HESA categories for general ethnicity mean a direct comparison year on year is not made, but the current ethnicities are shown in Table 4.

Ethnicity	Count	%
Asian - Indian or Indian British	34	25%
Any other Asian background	16	12%
Asian - Chinese or Chinese British	15	11%
Asian - Pakistani or Pakistani British	13	10%
Any other ethnic background	12	9%
Black - African or African British	11	8%
Black - Caribbean or Caribbean British	9	7%
Mixed - White or White British and Asian or Asian British	7	5%
Any other Mixed or Multiple ethnic background	5	4%

Mixed - White or White British and Black Caribbean or Black Caribbean British	5	4%
Asian - Bangladeshi or Bangladeshi British	5	4%
Arab	3	2%
Mixed - White or White British and Black African or Black African British	1	1%

Table 4 UK ethnicity

Figures 3 and 4 show the ethnicity of our staff by school/PSU and by job family. These figures highlight the high percentage of 'Undisclosed' ethnicity that has resulted from recent changes to the ethnicity categories made by HESA which required us to seek the information anew from staff. Efforts are being made to encourage re-sharing of this information by all our staff.

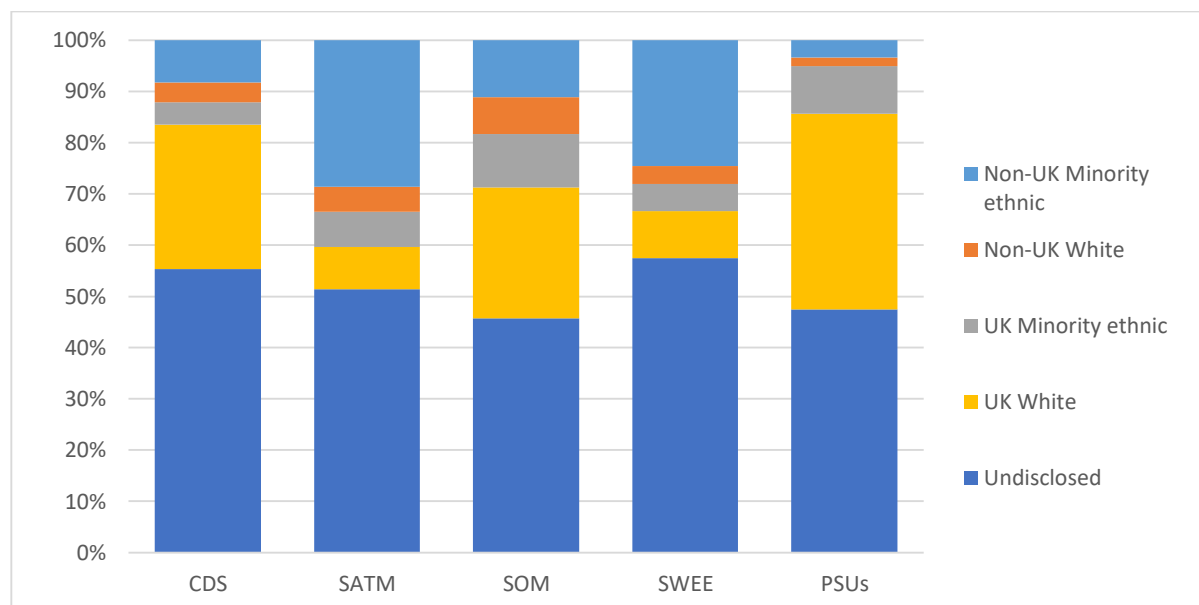


Figure 3 Ethnicity by School/PSUs

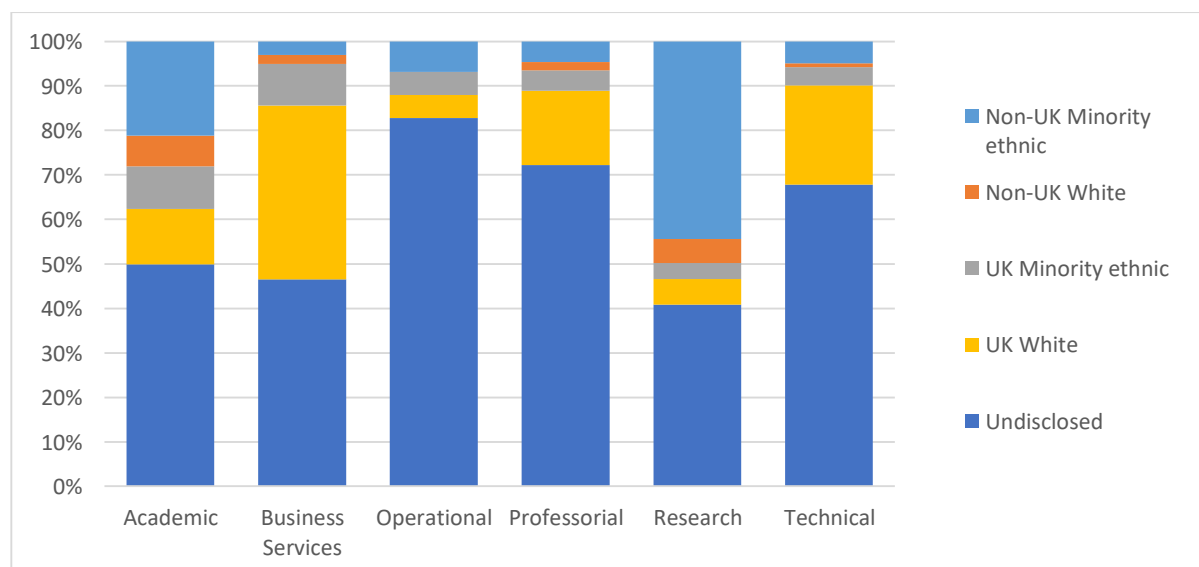


Figure 4 Ethnicity by job family

Staff disability profile

When analysing the staff disability data, we are very pleased that the percentage of staff sharing a disability, condition or impairment has increased from 5% to 7%, as shown in Table 5.

	2020/21		2021/22		2022/23	
	Count	%	Count	%	Count	%
No shared disability	1545	94%	1552	94%	1593	90%
Disability shared	71	4%	78	5%	126	7%
Undisclosed	25	2%	23	1%	50	3%

Table 5 Staff sharing a disability, condition or impairment

A further positive this year is a new option to share details of more than one disability, condition or impairment, making our data more inclusive and relevant. This is shown in Table 6.

The increase in sharing rates is particularly notable in the following areas:

- increase in long-term conditions, was 12 last year, now 30;
- increase in sharing of learning differences, was 14, now 25;
- increase in sharing mental health conditions, was 14, now 22; and
- increase in sharing hearing difficulties, was 4 now 12.

Disability, condition or impairment	Count	%
Long-term illness or health condition such as cancer, HIV, diabetes, chronic heart disease, or epilepsy	30	24%
Learning difference such as dyslexia, dyspraxia or AD(H)D	25	20%
Mental health condition, challenge or disorder, such as depression, schizophrenia or anxiety	22	17%
An impairment, health condition or learning difference not listed above	20	16%
D/deaf or have a hearing impairment	12	10%
Physical impairment (a condition that substantially limits one or more basic physical activities such as walking, climbing stairs, lifting or carrying)	11	9%
Two or more impairments and/or disabling medical conditions	3	2%

Social/communication conditions such as a speech and language impairment or an autistic spectrum condition	2	2%
Blind or have a visual impairment uncorrected by glasses	1	1%

Table 6 Disability, condition or impairment

Staff sexual orientation profile

The number of staff sharing their LGBTQ+ sexual orientation with us has increased, but remains relatively small as a percentage of our total staff. However, we are pleased to report a 36% increase in the number of people sharing they are LGBTQ+ during the six-month period after first publishing these numbers in a new data dashboard. This is a reflection of the work of our staff network, Q at Cranfield. This is shown Table 7.

	Count	%
Heterosexual	1331	75%
LGBTQ+	57	3%
Undisclosed	381	22%
University	1769	100%

Table 7 Sexual orientation

Staff age profile

There has been little change in the age profile of our staff compared with last year, as shown in Figure 5. We have seen a slight increase in the proportion of University staff under the age of 30. The percentage of staff over the age of 60 in our professorial and operational job families, shown in Table 8, is significant for our succession planning.

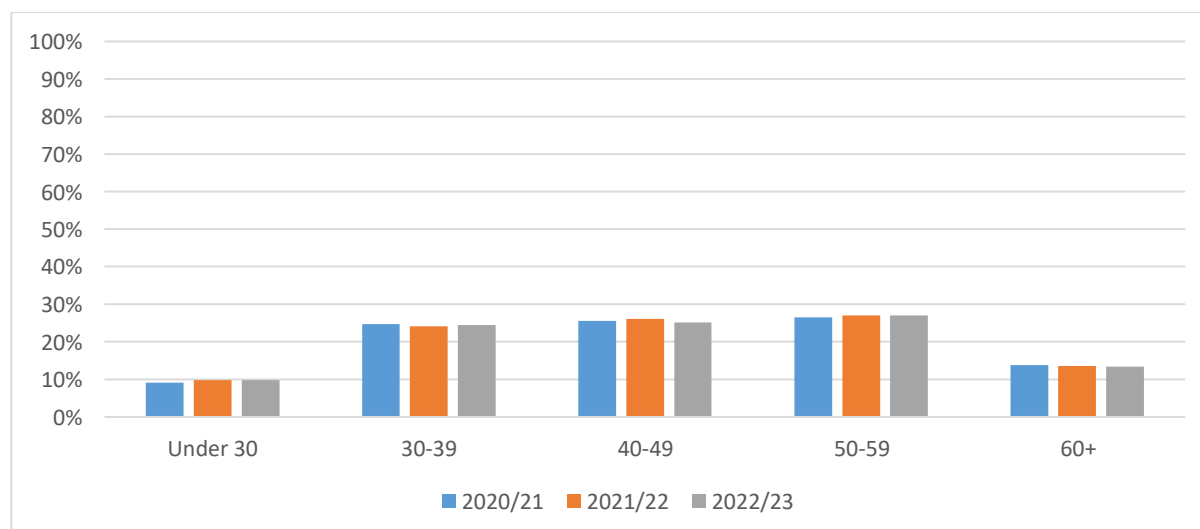


Figure 5 Age profile

	% age within job family						
	Academic	Business Services	Operational	Professorial	Research	Technical	University
< 30	1%	9%	10%	0%	23%	26%	10%
30-39	27%	21%	9%	1%	48%	16%	24%
40-49	35%	26%	22%	22%	17%	15%	25%
50-59	26%	33%	31%	38%	8%	24%	27%
60+	12%	12%	28%	39%	4%	19%	13%

Table 8 Staff age by job family

Staff recruitment data

The data presented in this section are summary results from analysing recruitment activity for the six-month period August 2022 to January 2023, covering the gender, ethnicity and disability of applicants. The data are presented to show our recruitment activity by job family.

Gender in recruitment data

Overall, women represented 41% of all applicants, and 58% of those hired, resulting in a higher overall success rate of 15% for female applicants compared to that of 7% for male applicants. This is an increase on the year 2021-2022, when overall 38% of all applicants were female.

These results were replicated across all job families except for technical and apprentice roles where the number of female applicants and those shortlisted was lower. Similar female success was seen in roles across the pay scales, including those at senior level.

As in previous years, male applicants continue to have a low success rate for business service roles, with men making up 37% of all applicants, but only 17% of those hired for these roles. The percentage of offers made to women remained stable compared to last year, at 53%. The data are provided in Table 9

Female					
Job Family	Applications	Shortlisted	Offered	Hired	Conversion Rate
Academic	31%	34%	37%	35%	6%
Professorial	40%	100%	100%	100%	50%
Research	19%	25%	29%	29%	14%
Business Services	63%	72%	83%	83%	16%
Operational	42%	55%	58%	58%	28%
Technical	23%	26%	14%	14%	10%
Apprentice	26%	10%	17%	17%	7%
All University	41%	53%	58%	58%	15%

Male					
Job Family	Applications	Shortlisted	Offered	Hired	Conversion Rate
Academic	69%	66%	63%	65%	5%
Professorial	60%	0%	0%	0%	0%
Research	81%	75%	71%	71%	8%
Business Services	37%	28%	17%	17%	6%
Operational	58%	45%	42%	42%	15%
Technical	77%	74%	86%	86%	18%
Apprentice	74%	90%	83%	83%	13%
All University	57%	46%	40%	40%	7%
Elected not to share	1%	1%	1%	2%	13%

Table 9 Recruitment activity by gender for August 2022 - January 2023

Ethnicity in recruitment data

Compared to the reporting period in 2021-2022, our recruitment data for ethnicity shows little change. UK white applicants continued to have the highest success rate across all roles with 21% of this group being successfully hired (compared to 19% last year), shown in Table 10. Non-UK ethnic minority applicants again had a low conversion rate of 4% (3% last year); non-UK white had a 11% conversion rate (9% last year), shown in Table 11.

Encouragingly, UK-ethnic applicants had a conversion rate of 11% this year which was up from 6% last year.

Overall, the conversion rates for minority ethnic staff have improved since the last reporting period, by 5% for UK ethnic applicants, and by 1% for non-UK ethnic applicants. This is evidenced in the overall increase in ethnic minority staff numbers this year.

As in previous years, ethnic minority applicants from outside the UK make up the largest proportion of all applicants at 47% in the reporting period. This is a slight decrease over previous years (around 50%) and may reflect changes in the immigration landscape in the UK in the previous period. Non-UK ethnic minority applicants had the lowest success rate in terms of being appointed across all job family roles. In particular, they had a low success rate for academic and research roles even though they comprised the majority of applicants for roles of this type. UK ethnic minority applicants were shown to have low success rates in academic, operational and apprentice roles.

Our focus for 2023 -2024 will continue to be on increasing candidate attraction and identifying and removing barriers in the recruitment process to improve hiring levels for minoritised ethnic candidates.

UK White					
Job Family	Applications	Shortlisted	Offered	Hired	Conversion Rate
Academic	10%	26%	37%	41%	22%
Professorial	60%	100%	100%	100%	33%
Research	5%	13%	19%	19%	35%
Business Services	50%	71%	77%	76%	19%
Operational	51%	80%	100%	100%	38%
Technical	32%	63%	67%	67%	33%
Apprentice	45%	76%	83%	83%	21%
All University	28%	52%	58%	58%	21%

Non-UK White					
Job Family	Applications	Shortlisted	Offered	Hired	Conversion Rate
Academic	17%	28%	42%	41%	13%
Professorial	20%	0%	0%	0%	0%
Research	12%	14%	21%	21%	16%
Business Services	8%	5%	3%	3%	5%
Operational	5%	3%	0%	0%	0%
Technical	16%	6%	0%	0%	0%
Apprentice	6%	5%	17%	17%	33%
All University	10%	9%	11%	11%	11%

Table 10 Recruitment activity by white or non white ethnicity for August 2022 - January 2023

UK Minority Ethnic					
Job Family	Applied	Shortlisted	Offered	Hired	Conversion Rate
Academic	9%	13%	5%	6%	4%
Professorial	0%	0%	0%	0%	
Research	3%	3%	4%	4%	15%
Business Services	15%	15%	14%	14%	12%
Operational	4%	3%	0%	0%	0%
Technical	5%	6%	17%	17%	50%
Apprentice	11%	14%	0%	0%	0%
All University	9%	11%	9%	9%	11%

	Non-UK Minority Ethnic				
Job Family	Applied	Shortlisted	Offered	Hired	Conversion Rate
Academic	64%	33%	16%	12%	1%
Professorial	20%	0%	0%	0%	0%
Research	80%	70%	55%	55%	6%
Business Services	27%	8%	7%	7%	3%
Operational	40%	13%	0%	0%	0%
Technical	46%	25%	17%	17%	6%
Apprentice	38%	5%	0%	0%	0%
All University	47%	24%	19%	19%	4%
Elected not to share	5%	4%	4%	4%	9%

Table 11 Recruitment activity by minoritised ethnicity for August 2022 - January 2023

Disability in recruitment data

The sharing rates among candidates who apply for posts at Cranfield remain relatively low as a percentage of candidates. We aim to improve our understanding of the candidate experience for disabled candidates, and therefore request people share their data with us, in line with our commitments as a Disability Confident Employer. Of those applicants who chose to share that they are disabled, 8% were successfully appointed, whereas 13% of applicants who did not share any disability-related information with us were appointed, as shown in Table 12. It is important to note that this lower success rate may be due to the fact that many applicants elect not to share their personal information until they have been offered a role. This analysis marks the first year we have published this form of analysis and serves as a benchmark for our ongoing progress. In addition, the changes to HESA codes in 2023, which have made the categories of data that we collect more inclusive, may further assist us with increasing sharing rates.

Shared Disability					
Job Family	Applications	Shortlisted	Offered	Hired	Conversion Rate
Academic	3%	7%	5%	6%	9%
Professorial	0%	0%	0%	0%	
Research	2%	4%	0%	0%	0%
Business Services	7%	9%	5%	5%	8%
Operational	7%	10%	0%	0%	0%
Technical	2%	5%	0%	0%	0%
Apprentice	6%	10%	17%	17%	33%
All University	5%	7%	3%	4%	8%

None Shared					
Job Family	Applied	Shortlisted	Offered	Hired	Conversion Rate
Academic	97%	93%	95%	94%	5%
Professorial	100%	100%	100%	100%	20%
Research	98%	96%	100%	100%	10%
Business Services	93%	91%	95%	95%	12%
Operational	93%	90%	100%	100%	22%
Technical	98%	95%	100%	100%	17%
Apprentice	94%	90%	83%	83%	10%
All University	94%	92%	95%	95%	11%
Elected not to share	1%	1%	1%	2%	13%

Table 12 Recruitment activity by disability for August 2022 - January 2023

Sexual orientation in recruitment data

Our data on sexual orientation of candidates during the recruitment process is currently too small to perform meaningful analysis. We maintain our commitment to encouraging applicants to share their sexual orientation with us during recruitment stages through our engagement with the LGBTQ+ community. We have demonstrated good progress with increasing sharing rates with our employees when they join us, and we will continue to promote this practice. In addition, the changes to HESA codes in 2023, which broaden the categories of data we collect for sexual orientation, may further aid us in this regard.

Staff voluntary turnover data

Voluntary turnover occurs when staff willingly leave an organisation, as opposed to leaving at the end of a fixed term contract or other reasons initiated by the employer.

At Cranfield, our voluntary turnover rate for the six-month period to January 2023 was 5% which when extrapolated to a full year, is in line with the previous EDI annual report when voluntary turnover was 11% for the full year. This slightly lower voluntary turnover rate could reflect a stabilising of the general recruitment climate in the UK following the peak during the 'Great Resignation' and 'Great Retirement' that affected the country as a whole in 2021-2022. This rate continues to be in line with the rest of the sector.

During the six-month period, women and men experienced similar turnover rates, with women having a voluntary turnover rate of 6% and men 5%. The primary reasons for leaving were similar for both men and women, with career prospects and retirement being the most common reasons provided, however some women also referred to 'work/life balance' as a contributing factor. This is an important trend that also reflects the broader UK trends and is being considered as part of our wellbeing initiatives.

Variations in turnover can be seen within different ethnic groups. UK ethnic minority staff had the highest voluntary turnover rate of all groups during the six-month period, at 7%. The ethnic groups of non-UK ethnic, UK white and non-UK white all had a voluntary turnover rate of 5%.

Sector Benchmarks

Referencing [HESA staff data](#) for the academic year 2021/22, and the latest [AdvanceHE staff statistical report](#) which looks at staff data for the academic year 2020/21, the tables below benchmark Cranfield's key staff demographic metrics against the wider HEI sector where comparisons are available. The HESA data is a year older than the Cranfield reported data, due to HESA reporting timelines.

The tables below also show our People strategy KPIs to benchmark our progress towards our goals for 2027.

Gender	Cranfield July 2023	Strategy KPI by 2027	HESA 2021/22	Advance HE 2020/21 (rounded)
Females as % of all staff	48%	-	55%	54%
Females as % of all academics	27%	35%	-	-
Females as % of all professors	13%	20%	30%	28%

Ethnicity	Cranfield July 2023	Strategy KPI by 2027	HESA 2021/22	Advance HE 2020/21 (rounded)
Ethnic staff as % of all staff	21%	-	16%	16%
UK Ethnic staff as a % of all staff	8%	12%	-	9%
Ethnic staff as % of all professors	9%	-	12%	11%
Black staff as a % of all professors	0%	-	1%	1%

Disability	Cranfield July 2023	Strategy KPI by 2027	HESA 2021/22	Advance HE 2020/21 (rounded)
Shared disability as % of all staff	7%	6%	7%	6%

Sexual Orientation	Cranfield July 2023	Strategy KPI by 2027	HESA 2021/22	Advance HE 2020/21 (rounded)
Staff sharing their LGBTQ+ status as a % of all staff	3%	-	-	4%

Making Change Happen 2023 – 2024

Cranfield has strong ambitions to continue our progress and make change happen as outlined in our new [EDI strategy](#). While this report demonstrates good progress in a number of key areas, we recognise there is still more we aim to achieve. We acknowledge the need to make firm commitments to take the necessary actions to enable us to achieve our aspirations. A summary of some of our operational actions for 2023-2024 is provided below.

Operational actions

We will continue our EDI work in recruitment, career development, wellbeing, pay and reward and retention. In addition, we have planned new operational actions for the period 2023-2024, including:

1. establishing an executive committee for EDI and Wellbeing to further strengthen leadership and governance;
2. commencing the pilot for small and specialist institutions for [AdvanceHE's Race Equality Charter](#) submission;
3. applying for recognition as a [Trailblazer by Race Equality Matters](#). The Trailblazer series spotlights forward-thinking organisations that are implementing impactful solutions to drive race equality;
4. re-establishing our [Athena Swan](#) self-assessment team for our Bronze level Charter re-submission;
5. expanding our outreach activities with local communities, including participation in job shows, and ongoing engagement with organisations such as Women Leaders UK.
6. implementing a working group to review our disability adjustments processes;
7. submitting evidence towards achieving [Disability Confident Leader](#) status under the Disability Confident Scheme, building on our current level 2 status, Disability Confident Employer;
8. developing an enhanced shared parental leave policy to remove a barrier that may disincentivise co-parents from returning to work;
9. reviewing our People KPIs for staff sharing rates which have made strong progress in the past 12 months and may be revised upwards if this trend continues; and
10. sustaining our momentum of engaging with students, by increased partnering with the Cranfield Students' Association, and collaboration with colleagues such as our [Student Wellbeing and Disability Support team](#) and [Careers and Employability Service](#).

Policy

Title: Equity, Diversity and Inclusion Webpage

Description: Equity, Diversity and Inclusion Webpage

Date: 17/10/2024

Language: British English

Sharing Rights: Public

Scope: Equity, Diversity and Inclusion Webpage

Enforcement Date: 31/12/2023

Revision Date: 31/12/2023

Number Of Pages: 1

Publisher: Cranfield University

Media: Webpage

URL:

• <https://www.cranfield.ac.uk/working-at-cranfield/diversity>



Greenhouse gas emissions

Policy

Title: Energy Code of Practice

Description: Energy Code of Practice

Date: 09/10/2024

Language: British English

Sharing Rights: Public

Scope: Greenhouse gasses and energy

Number Of Pages: 7

Publisher: Cranfield University

Media: Document

Enforcement Date: 01/04/2023

Revision Date: 01/09/2025



Equity Diversity Inclusion

Strategic plan to 2027

Making change happen

Strategy overview



Ambitions

We are a diverse organisation that is more representative of our local and global communities and partners than we are in 2022.

We are an inclusive organisation where all our staff and students have a voice and feel safe (physically and psychologically) and respected, and where everyone can fulfil their own potential.

We are an organisation where EDI is strongly integrated across all our activities and everyone feels confident when talking about EDI matters.

We are an organisation that continues to take decisions and actions which are informed by our data.

Priority areas

Take down barriers to diversity and inclusion



We will:

- Adopt bolder, more inclusive, agile, and best practice recruitment initiatives that enable the attraction and selection of diverse, high-performing talent, including positive action.
- Retain people by helping everyone to realise their potential through effective and inclusive development and talent management.
- Offer targeted career development opportunities for women, and black, Asian and minority ethnic people, who our data tells us face organisational barriers to career progression and are underrepresented at senior levels at Cranfield.
- Undertake research to identify organisational barriers faced by underrepresented groups for whom we don't have the data, including people who are disabled, and members of the LGBTQ+ community. This will enable us to take a targeted approach to taking down organisational barriers.
- Develop and implement actions to achieve physical and digital accessibility for all.

Build an inclusive, values-based culture



We will:

- Provide a distinctive employee experience through regular engagement and two-way communication with our employees, recognised trade unions, our staff network groups and working groups.
- Provide a distinctive student experience through regular engagement and two-way communication with students, the Students' Association, loop groups and other forums, as noted in Cranfield's Student Voice framework.
- Actively support and further promote our staff networks, School and PSU EDI groups, cross-University Working Groups, and their action plans.
- Continue to promote agile, flexible and inclusive working practices that support the diverse needs of staff, students, partners and the wider Cranfield community.
- Continue to demonstrate Cranfield's reputation as a diverse and inclusive employer through awards/charter marks and memberships of external bodies.
- Develop and embed a culture where leadership drives positive change.

Weave EDI into all we do



We will:

- Further enhance our student experience through creating an environment of access and inclusion, by all our stakeholders working together, including our staff, wider community and external partners.
- Further enhance our research culture through promoting opportunities to collaborate and by extending opportunities for stakeholders to work together.
- Create opportunities to increase knowledge and awareness of EDI and practical actions that can be taken across our sites.
- Create opportunities for learning and micro opportunities so that everyone can increase their confidence and feel empowered when talking about diversity and inclusion, in particular with regards to race and ethnicity, disability, neurodiversity and LGBTQ+. This will help foster a culture of trust and allyship.

Ensure all EDI objectives and actions continue to be evidence-based



We will:

- Improve sharing rates for people with protected characteristics and ensure people understand how that data will be used by the University.
- Continue to leverage robust data and management information reporting capabilities to support the delivery of key strategic objectives and actions, and measure their success.
- Continue to carry out Equality Impact Assessments of pay awards, and analysis of gender and ethnicity pay gaps, and act upon the findings.

Introduction

“Being a modern, inclusive organisation is at the heart of our future success. It is absolutely crucial that we make more rapid progress so that Cranfield can be recognised and celebrated as a university with diverse, high-performing and world-class talent.”

Professor Karen Holford CBE FREng, Vice-Chancellor and Chief Executive



This is Cranfield's second, five-year EDI strategic plan, building on the 2017-2022 plan. The 2017 plan contained seven strategic aims (outlined in Appendix 1) and led to substantial progress against each. That progress provides the foundation upon which we can build more ambitious plans for 2023-2027.

Since the previous strategy document was published, we have defined a set of shared, common **values** and a number of internal strategies and commitments, not least our corporate plan, **Ambition 2027 – creating impact together**. Building a diverse and inclusive community where we can all thrive, and bring our diverse perspectives is central to achieving our vision and corporate aims.

Cranfield's commitments to the principles of equity, diversity and inclusion (EDI) are woven like golden threads throughout Ambition 2027 and its supporting strategies.

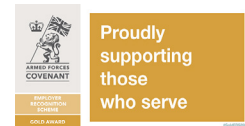
The purpose of this new EDI strategic plan is to articulate our ambition for EDI over the next five years and weave these golden threads into one clearly articulated set of objectives. This will enable us to set goals and monitor and track our progress against them.

The trajectory we have charted over the past five years can be further heightened, and there remains a great deal we can do to build on our culture of inclusion and improve our diversity. As well as it being the right thing to do, we know that by managing and embedding EDI successfully, we will enhance creativity and innovation.

Further improvement and 'Making change happen' will require bold, positive actions. Consistent with our values, we recognise that for Cranfield to be a diverse community where all our people, (staff, students and partners) feel included, we need to be more ambitious and take bolder steps to create bigger impact.

This report was written with significant contributions from our University Executive, chairs of our staff networks and School EDI groups, and colleagues from People and Culture, Student Experience and Communications and External Affairs. We thank everyone for sharing their insights.

Recognition: current charters, accreditations and memberships



In the past five years, Cranfield has been recognised as an inclusive, welcoming employer. We have gained external endorsement, notably through HREiR, TALENT, and Athena SWAN. We are a Disability Confident employer and we are proud to be recognised by Working Families in their Top 30 Employers 2022 rankings.

We have been granted a Gold Defence Employer Recognition award in acknowledgement of our support for the defence and armed forces community and alignment with the Armed Forces Covenant. In addition, we are sponsors of International Women in Engineering Day and signatories of the Women in Defence and Women in Aerospace and Aviation Charters.

We will look to maintain the recognition, charters, accreditations and status in the years to come.

Through regular surveys, our staff and students will let us know whether they agree if we are making progress in our EDI ambitions.

In 2022, signalling the University's ongoing commitment to sustainability and environmental responsibility, Professor Karen Holford, our Vice-Chancellor and Chief Executive, signed the Sustainable Development Goals Accord. The United Nations Sustainable Development Goals (SDGs) are a framework for action by all countries in a global partnership to achieve social, environmental and economic sustainability by 2030. The SDGs aim to tackle climate change, poverty and inequality, and to develop health, education and economic growth. Cranfield's research and teaching is directly contributing to each SDG.

We will work to help deliver the University's commitment to the SDG Accord beyond our research and teaching. In particular, SDG 5, Gender Equality; SDG 8, Decent Work and Economic Growth; and SDG 10, Reduced Inequalities are relevant to our ambitions for EDI.



"More than ever, our people are at the heart of our corporate plan. We want to establish and promote a fully inclusive culture where all our people feel part of a diverse, skilled, ambitious and motivated community. We want everyone to feel empowered and engaged through working in a collaborative, supportive and safe working environment."

Helen Perkins, Director of People and Culture

Our understanding of equity, diversity and inclusion at Cranfield

We are raising our ambition following the first five-year plan, strengthening our commitment from 'equality' to 'equity'. To express this commitment, the 'E' in EDI at Cranfield will now refer to equity.



There are many different ways that EDI can be defined, and each person will have their own understanding of what EDI means to them. You may also see some organisations using the 'E' in EDI to refer to equality. We have decided to move to using the term equity rather than equality so we thought it would be helpful to provide our understanding of the terms EDI at Cranfield.

Equity and equality are both terms that are linked to the idea of 'fairness' and can often be used interchangeably, but they do differ in their meaning.

Equality is based on the idea that everyone should be treated the same. It's about fair treatment and equal opportunity for all. However, the drawback of equality is that it does not consider individual differences or needs. At Cranfield, we will continue our work to achieve and maintain equality and uphold the Equality Act (2010).

Equity is understanding and giving individuals what they need to achieve their full potential. In line with our values of community and respect, at Cranfield we believe that equity means treating people as individuals and aims to give everyone what they individually need to be successful. We acknowledge structural barriers exist that put some people at a disadvantage and we therefore need to consider organisational practices, systems, and processes that put some people at a disadvantage, and seek to overcome them.

"Understanding these issues and balancing equity is a crucial step to achieving true equality in the workplace."

Jenny Garrett (Equality v Equity)

This definition aligns with Cranfield's ambition of embedding inclusive practices and operationalising our strategic aims across our organisation.

Diversity is about recognising difference. It's acknowledging the benefit of having a range of perspectives in decision-making and our workforce being representative of our organisation's customers and communities.

Inclusion is where people's differences and experiences are valued and used to enable everyone to thrive. We believe that an inclusive working environment is one in which everyone feels that they belong, can be their true selves, their contribution matters and they are able to perform to their full potential, no matter their background, identity or circumstances.

How equality and equity differ

Equality ▼	Equity ▼
Treat everyone the same	Consider systems that disadvantage and seek to overcome them
Collective approach	Individual approach
Needs management	Needs leadership
Hold power	Share power
Input driven	Outcomes driven

Table: copyright @Jennygarrett.global

Quote: Garrett, J. (2023) Equality vs Equity.
Bingley: Emerald Group Publishing Ltd.

"Equity, diversity and inclusion needs to run as a golden thread collectively through our education and student experience. This aligns with our University values and aspirations to nurture a fully-inclusive culture."

Professor Sean Tyrrel, Pro-Vice-Chancellor - Education

EDI Strategic Plan to 2027

Making change happen

By 2027 our ambition is that Cranfield is:

1

A diverse organisation that is more representative of our local and global communities and partners than we are in 2022.

2

An inclusive organisation where all our staff and students have a voice and feel safe (physically and psychologically) and respected, and where everyone can fulfil their own potential.

3

An organisation where EDI is strongly integrated across all our activities and everyone feels confident when talking about EDI matters.

4

An organisation that continues to take decisions and actions which are informed by our data.

These four ambitious EDI objectives have been identified to continue the momentum from the past five years, and directly support us to achieve Ambition 2027.

Progress against them will be evaluated, in part, through monitoring our progress towards the measures and key performance indicators (KPIs) agreed in our People strategy, which are provided in Appendix 2.

In addition to these KPIs, annual EDI operational action plans will enable us to set specific actions and goals each year.



1

OBJECTIVE ONE

Take down barriers to diversity and inclusion.

Our ambition: We are a diverse organisation that is more representative of our local and global communities and partners than we are in 2022.

We recognise that despite making incremental progress, women, and Asian and ethnic minority people remain underrepresented at Cranfield, especially at senior levels.

To achieve this objective we will: recruit, retain, and develop...

- 1.1. Adopt bolder, more inclusive, agile, and best practice recruitment initiatives that enable the attraction and selection of diverse, high-performing talent, including positive action.
- 1.2. Retain people by helping everyone to realise their potential through effective and inclusive development and talent management.
- 1.3. Offer targeted career development opportunities for women, and black, Asian and minority ethnic people, who our data tells us face organisational barriers to career progression and are underrepresented at senior levels at Cranfield.
- 1.4. Undertake research to identify organisational barriers faced by underrepresented groups for whom we don't have the data, including people who are disabled, and members of the LGBTQ+ community. This will enable us to take a targeted approach to taking down organisational barriers.
- 1.5. Develop and implement actions to achieve physical and digital accessibility for all.



2

OBJECTIVE TWO

Build an inclusive, values-based culture.

Our ambition: We are an inclusive organisation where all our staff and students have a voice and feel safe (physically and psychologically) and respected, and where everyone can fulfil their own potential.

We see from our pulse surveys that we have made good progress to support our people, however not all members of our community currently have an equal voice, and we recognise that lived experiences do differ.

To achieve this objective we will communicate, support, embed and demonstrate ...

- 2.1. Provide a distinctive employee experience through regular engagement and two-way communication with our employees, recognised trade unions, our staff network groups and working groups.
- 2.2. Provide a distinctive student experience through regular engagement and two-way communication with students, Student Association, loop groups and other forums, as noted in Cranfield's Student Voice Framework.
- 2.3. Actively support and further promote our staff networks, School and PSU EDI groups, cross-University working groups, and their action plans.
- 2.4. Continue to promote agile, flexible and inclusive working practices that support the diverse needs of staff, students, partners and the wider Cranfield community.
- 2.5. Continue to demonstrate Cranfield's reputation as a diverse and inclusive employer through awards/charter marks and memberships of external bodies.
- 2.6. Develop and embed a culture where leadership drives positive change.

3

OBJECTIVE THREE

Weave EDI into all we do.

Our ambition: We are an organisation where EDI is strongly integrated across all our activities and everyone feels confident when talking about EDI matters.

We have made clear progress in unifying our vision for EDI through our values and Ambition 2027, and we can do more.

To achieve this objective we will enhance our student experience and research culture, and create opportunities ...

- 3.1. Further enhance our student experience through creating an environment of access and inclusion, by all our stakeholders working together, including our staff, wider community and external partners.
- 3.2. Further enhance our research culture through promoting opportunities to collaborate and by extending opportunities for stakeholders to work together.
- 3.3. Create opportunities to increase knowledge and awareness of EDI and practical actions that can be taken across our sites.
- 3.4. Create opportunities for learning and micro opportunities so that everyone can increase their confidence and feel empowered when talking about diversity and inclusion, in particular with regards to race, ethnicity, disability, neurodiversity and LGBTQ+. This will help foster a culture of trust and allyship.



"If we are to truly engage with our students, the principles of equity, diversity and inclusion must be the foundation, to enable everyone to feel part of the Cranfield community."

Alison Whaley, Director of Student Experience

4

OBJECTIVE FOUR

Ensure all EDI objectives and actions continue to be evidence-based.

Our ambition: We are an organisation that continues to take decisions and actions which are informed by our people data.

We have built on our statutory obligations to provide a suite of data reporting which we can now leverage to develop the case for bolder action and make change happen. We recognise that building trust is critical so that people feel able to be honest in self-identifying and share this information. We also recognise that our data about some protected characteristics, such as disability and LGBTQ+, is limited. So, improving sharing rates will be a focus over the course of this strategic plan.

To achieve this objective we will share, report and evaluate...

- 4.1. Improve sharing rates for people with protected characteristics and ensure people understand how that data will be used by the University.
- 4.2. Continue to leverage robust data and management information reporting capabilities to support the delivery of key strategic objectives and actions, and measure their success.
- 4.3. Continue to carry out equality impact assessments of pay awards, and analysis of gender and ethnicity pay gaps, and act upon the findings.

Legal context, roles and responsibilities

The Equality Act 2010

Under the 'General Duty' of the Equality Act 2010, the University has due regard to the need to:

- Eliminate unlawful discrimination/harassment and victimisation.
- Promote equality of opportunity between people who share a protected characteristic and those who do not share it, namely age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, sex, sexual orientation and marriage and civil partnership.
- Foster good relations between people who share a protected characteristic and those who do not.

Roles and responsibilities

The University Council provides support and challenge to the University Executive in endorsing the EDI strategy and monitoring the University's delivery against its EDI objectives. Council is responsible for ensuring compliance with UK legislation, including the public sector equality duty, promoting an inclusive culture, and leading by example in its decision making and in considering its own membership.

The University Executive is responsible for championing EDI and driving the strategy to ensure it is implemented and maintained within their areas of responsibility. They undertake EDI related training as appropriate to enable them to feel confident and able to role model inclusive behaviour and embed processes to enable the University to create and maintain an inclusive, safe working and learning environment. An EDI and Wellbeing Committee will be established as a further channel for accountability in 2023.

The Equity, Diversity and Inclusion team is part of the People and Culture PSU and responsible for the management, development and implementation of the University's EDI strategy and action plans and supporting people to be informed about their responsibilities under the Equality Act 2010.

Senior managers are responsible for leading and role modelling inclusive behaviour and embedding processes to enable the University to create and maintain an inclusive, safe working and learning environment. Senior managers are also responsible for ensuring people are informed about their responsibilities under the Equality Act 2010 and for supporting the EDI strategy in their areas of work.

Line managers are responsible for supporting and enabling their teams to perform their roles effectively. This includes making

reasonable adjustments to support all people in our community. Line managers undertake EDI training as appropriate to help them to demonstrate appropriate behaviours and embed processes to enable the University to create and maintain an inclusive, safe working and learning environment. Managers are also responsible for ensuring people are informed about their responsibilities under the Equality Act 2010 and for supporting the EDI strategy in their areas of work.

Staff networks, School and PSU EDI groups, cross-University working groups and Trades Unions provide the 'employee' voice, helping to identify and support actions, and enable people to connect and share experiences across a range of protected characteristics.



All staff have a responsibility to ensure that their actions comply with the requirements of the Equality Act 2010, namely, to eliminate unlawful discrimination, promote equality of opportunity and promote good relations between people of different groups. They undertake EDI training as appropriate to enable them to demonstrate appropriate behaviours and enable the University to create and maintain an inclusive, safe working and learning environment.

All students actively embrace the Cranfield experience, respecting everybody in our diverse, international community.

Student Experience Committee has a responsibility to bring forward relevant matters and topics for discussion within the student community so can be shared and discussed, and progress made.

Cranfield Students' Association (CSA) Executive, and EDI representative work alongside the University to share insight and expertise. The CSA is an independent voice, representing student needs as part of a diverse student population.

"Our Research and Innovation strategy contains ambitious plans, and we know that the principles of equity, diversity and inclusion are fundamental to enabling us to solve the complex challenges of today."

Professor Leon Terry, Pro-Vice-Chancellor - Research

Appendix 1 – Diversity and Inclusion 2017-2022 final report

Cranfield's first, five-year EDI strategic plan ran from 2017 to 2022. The 2017 plan contained seven strategic aims.

	Strategic aims 2017-2022	Status
1	Ensure all objectives are evidence-based and impact can be measured and monitored	Achieved
2	Increase recruitment, selection and retention of diverse staff	Significant progress
3	Increase diversity present in senior management roles	Significant progress
4	Embed an inclusive and respectful culture, which enables staff to value the benefits of diversity.	Significant progress
5	Demonstrate Cranfield's reputation as a diverse and inclusive employer by achieving diversity awards, in particular Athena SWAN, Stonewall and HR Excellence in Research.	Significant progress
6	Champion a culture where disabled staff are able to fulfil their potential.	Under Way
7	Develop a consistent approach to work life balance and family friendly policies and procedures.	Achieved

The 2017-22 plan has achieved some substantial successes (see below) leading to Executive support for the development of a second five-year plan to cover the period 2023-27 and coinciding with the introduction of Ambition 2027.

Diversity and Inclusion outcomes 2017-2022

Strategic Aim 2017-2022	2017-2022 Actions	Progress
Strategic Aim 1 – Ensure all objectives are evidence based and impact can be measured and monitored	<p>1.1 Improve declaration rates for protected characteristics data.</p> <p>1.2 Implement a central monitoring process to capture and share data.</p> <p>1.3 Interpret and analyse the data to inform targeted action plans.</p>	<p>Achieved: Management information and reporting underpins all we do. The reports are available to all staff and the staff networks.</p> <p>We continue to focus on creating a culture where all staff feel safe to share information relating to individual, intersecting protected characteristics.</p>
Strategic Aim 2 – Increase recruitment, selection and retention of diverse staff	<p>2.1 Promote Cranfield as an inclusive employer.</p> <p>2.2 Provide support to line managers so that they are aware of the steps they can take to increase the diversity of their departments.</p> <p>2.3 review recruitment and selection processes, procedures and training to ensure they are fair, unbiased and inclusive.</p>	<p>Significant progress: including improving our campus based imagery, website; recruitment and selection training and development, and an Advance HE audit of our recruitment and promotion practices.</p> <p>This continues to be a focus as more progress needs to be made.</p>
Strategic Aim 3 – Increase diversity present in senior management roles	<p>3.1 Continue to develop and promote targeted career development activity for women and other groups of staff who are underrepresented at senior levels.</p> <p>3.2 Develop the Cranfield Step-Up women's network and support the launch of additional staff networks</p> <p>3.3 Develop and deliver career support workshops (particularly for academic roles).</p> <p>3.4 Develop mentoring/sponsorship schemes (particularly for female staff, black, Asian and minority ethnic staff, and disabled staff).</p>	<p>Significant progress: Staff networks have been established for specific communities: EmbRace; Disability; Q at Cranfield; and Step Up continues to flourish. The academic promotion process has been relaunched with significantly increased emphasis on inclusion. Staff career development has been a priority, e.g. technicians' career pathways created.</p> <p>Representation at senior levels still needs further improvement, as evidenced by our gender pay and ethnicity pay gap reports, and our staff demographic data.</p>
Strategic Aim 4: Embed an inclusive and respectful culture, which enables staff to value the benefits of diversity.	<p>4.1. Provide essential development so all staff are aware of their roles and responsibilities.</p> <p>under the legislation and help to eliminate bias and inappropriate behaviours.</p> <p>4.2. Support the University Senior Management Team to demonstrate their visible commitment to the diversity and inclusion strategy in their areas and lead by example.</p> <p>4.3. Develop a culture where it is 'safe to speak up' and challenge inappropriate behaviours without fear.</p> <p>4.4. Provide and encourage regular communications and staff engagement activities to help staff understand the benefits of diversity and feel valued.</p>	<p>Significant progress: our values of Community and Respect helping to support our culture and behaviours.</p> <p>Our staff pulse surveys show that people feel part of an inclusive community, but further progress can be made.</p>

Diversity and Inclusion outcomes 2017-2022

Strategic Aim 2017-2022	2017-2022 Actions	Progress
Strategic Aim 5: Demonstrate Cranfield's reputation as a diverse and inclusive employer by achieving diversity awards, in particular Athena SWAN, Stonewall and HR Excellence in Research.	<p>5.1. Build on the success of achieving the Athena SWAN Bronze award and develop plans to submit a Bronze renewal under the new criteria (which goes beyond STEM) in November 2019.</p> <p>5.2. Maintain our HR Excellence in Research award.</p> <p>5.3. Develop a co-ordinated outreach strategy across the University.</p> <p>5.4. Engage with local community groups to attract under-represented groups to the University.</p> <p>5.5 Align with our stakeholders and other HEIs and join Stonewall to assess our position on the LGBT agenda through their Global Workplace Index.</p>	<p>Significant progress: demonstrated through our Athena SWAN award, HREiR award, Stonewall membership and other accreditations.</p> <p>Our outreach activities into our local communities require further prioritisation as our staff data shows we are not representative of our local communities in terms of black, Asian and minority ethnic staff.</p>
Strategic Aim 6: Champion a culture where disabled staff are able to fulfil their potential.	<p>6.1. Engage with staff to identify and remove any institutional barriers that exist which may disadvantage disabled applicants and staff.</p> <p>6.2. Ensure our disability policies and procedures effectively support disabled staff and line managers. 6.3. Become a 'Disability Confident' employer, by joining the Government's Disability Confident scheme to demonstrate our commitment to supporting disabled staff.</p> <p>6.4. Increase staff declaration rates on disability.</p>	<p>Under way: Working with our disability staff network we have achieved Disability Confident Level 2 employer and will apply for level 3 in 2023.</p> <p>More needs to be done to ensure that we are continuing to dismantle ongoing barriers faced by disabled staff at Cranfield.</p>
Strategic Aim 7: Develop a consistent approach to work-life balance and family-friendly policies and procedures.	<p>7.1. Understand the perceptions and barriers of flexible working to inform a consistent University-wide approach.</p> <p>7.2. Review maternity provisions to enable staff to feel more supported during and after maternity leave.</p> <p>7.3. Provide more comprehensive support for staff with all types of caring responsibilities.</p> <p>7.4. Provide a consistent approach to keeping in touch with staff during periods of extended leave for family or caring responsibilities.</p>	<p>Achieved: A working group for flexible working was established and we had developed a fair and progressive flexible working policy prior to the pandemic.</p> <p>Post-pandemic we have embraced hybrid and flexible working, with staff working 40-60% of their time on site and remotely where their roles allow.</p> <p>We will need to continue to monitor the long-term impacts of the pandemic and hybrid working on underrepresented groups at Cranfield.</p>

Appendix 2. People KPIs – 2022-2027

EDI Objective	People Strategy KPI	Measures
1: We are a diverse organisation that is more representative of our local and global communities and partners than we are in 2022.	Talented people Increase in representation of our under- represented groups on current baseline figures.	<p>📈 Baseline – Disability (4%), UK Ethnic Minority (7%), female academics (24%), female professors (11%).</p> <p>🎯 Target – Disability (6%), UK Ethnic Minority (12%), female academics (35%), female professors (20%) by 2027.</p> <p>📊 Measure – measured through our various EDI action plans, such as Athena SWAN, continuous improvement in our pay gaps, together with recruitment and retention data.</p>
	Staff satisfaction Increase the percentage of staff agreeing they are ‘proud to work at Cranfield’.	<p>📈 Baseline – 82%.</p> <p>🎯 Target – 90% by 2027.</p> <p>📊 Measure – Monitored through pulse survey feedback, staff turnover and resignation reasons, VC live events (via the question-and-answer sessions) and exit interviews.</p>
2: We are an inclusive organisation where all our staff and students have a voice and feel safe (physically and psychologically) and respected, and where everyone can fulfil their own potential.	Distinctive working environment Percentage of staff agreeing that ‘Cranfield University cares about my wellbeing’.	<p>📈 Baseline – 61%</p> <p>🎯 Target – 75% of staff who agree that CU cares about their wellbeing by 2027.</p> <p>📊 Measure – Measured through our regular pulse surveys, sickness absence levels, take up of mental health and wellbeing initiatives.</p>
	Respectful culture Staff agree/strongly agree we are making progress with our ED&I agenda.	<p>📈 Baseline – 55%.</p> <p>🎯 Target – 70% by 2027.</p> <p>📊 Measure – Monitored through pulse survey feedback, through our various diversity action plans and our staff network groups – EmbRace, Disability Network, Step Up, Q at Cranfield.</p>
4: We are an organisation that continues to take decisions and actions which are informed by our data.	Engaged employee community Increase in staff participation rates for our pulse surveys.	<p>📈 Baseline – 57%.</p> <p>🎯 Target – 70% by 2027.</p> <p>📊 Measure – increasing participation rates for each survey undertaken.</p>
	Meaningful reward Maintain an inclusive pay and reward structure monitored through regular equal pay reviews.	<p>📈 Baseline – Equal Pay - 2019 +/-5% (excluding Level 8)/Gender Pay – 18.7%.</p> <p>🎯 Target – Equal Pay - improving University tolerance level +/-3% within each pay level by 2027/Gender Pay Gap – year on year improvement.</p> <p>📊 Measure – Equal Pay - regular equal pay reviews undertaken with improving University tolerance levels from +/- 5% to +/-3% /Gender Pay Gap – year on year improvement.</p>

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1. Purpose

Since August 2018 the University's Energy Management System has been certified to the internationally recognised ISO 50001:2018 standard. By July 2021 the University reduced its Scope 1 and Scope 2 carbon emissions by 42% compared to a 2005 baseline. It now aims to be net zero by 2030. This Code of Practice outlines recommendations relating to good housekeeping measures intended to reduce energy use on campus.

1.1. Covid Secure Sites and Ventilation

For the avoidance of any doubt, where the requirements below are in conflict with measures put in place by the University to provide Covid secure sites, the Covid measures ALWAYS take priority. AHU Control Dampers are to be set a proportion of recirculation where appropriate and the impact on CO₂ levels is to be monitored to gauge whether sufficient fresh is being made available in the spaces concerned.

To ensure good ventilation it may be necessary to keep some windows open and some fire doors may also be wedged or propped open. Computers may also be left running 24/7 where there is a business need when working from home to use a Remote Desktop Gateway to access functionality only possible on a University LAN connected machine.

2. Temperatures

2.1. Space Temperatures

Heating or cooling more than necessary is very wasteful of energy. A one degree Celsius increase in temperature can use 10% more energy.

Temperatures in the indoor workplace are covered by the Workplace (Health, Safety and Welfare) Regulations 1992, which place a legal obligation on employers to provide a 'reasonable' temperature in the workplace. The associated Approved Code of Practice suggests the minimum workplace temperature should normally be at least 16°C. If the work involves rigorous physical effort, the temperature should be at least 13°C. There is no such suggestion for a maximum working temperature.

Facilities will endeavour to maintain comfortable working conditions in buildings whilst minimising energy use. Comfortable temperature levels for offices, residences, meeting rooms and lecture rooms will depend on air movement, humidity, radiant heat and other factors. It is very important for people to wear appropriate clothing for the prevailing weather conditions.

2.2. Heating

If a room is being heated, ensure the windows and doors are closed and set thermostats to the lowest comfortable temperature setting. Please remember that a thermostat simply sets the temperature required – turning it up higher does **NOT** make the temperature rise any quicker. It is important to ensure there is no cooling and heating operating simultaneously. If the heating is not working, please report it.

Do NOT use electric heaters without written permission – see Section 4.



As part of the Energy Campaign, work is being undertaken across the main Cranfield campus to improve the efficiency of heating infrastructure (replacement of radiators, installation of thermostatic radiator valves, lagging of pipework, and improvements in building insulation). Building opening times have also been restricted and Building Management System controls have been modified to reflect these so that buildings are not heated unnecessarily.

2.3. Cooling

Air conditioning will be avoided where possible. Where it is used it shall be set at an appropriate level and doors and windows shall be kept closed.

2.4. Hot Water Temperatures

Hot water temperatures will be set to ensure energy is saved whilst not compromising safety measures to guard against Legionella and scalding.

2.5. Reporting Issues

Any problems with the above should be reported as soon as possible. See section 10 for contact details.

3. Sensible Management of Conditioned Space

There are a number of measures, which will help to reduce energy use in a room:

- windows and doors shall not be left open when a space is being actively heated or cooled.
- the same space should not be heated and cooled at the same time (unless absolutely necessary for controlling specific laboratory conditions).
- when appropriate, close semi-automatic (or power assisted) doors manually to minimise draughts. These doors shut more quickly when operated manually.
- turn radiator thermostats down if a room is not being used or temperatures are too high.

4. Electric Heaters

These are expensive to use, produce high carbon emissions and can interfere with the correct working of the existing building heating system.

Therefore electrical heaters shall not be used in any University premises except where:

- they are installed as part of a fixed heating system;
- they are provided on a **strictly** temporary basis, by Facilities, when the existing building heating system has developed a fault. Once the fault is fixed the heaters must be returned;
- their use is agreed by the relevant persons (due to ongoing health issues) in order to maintain safe working temperatures. Relevant persons are: Technical - Facilities Managers; Residential - the appropriate area manager or Duty Manager.

	<h1>Energy Code of Practice</h1>	CU-SHE-CoP-7.0 Version 7.0
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All electric heater use must be logged with written permission provided to justify the decision and it will be reviewed periodically to ensure that use is still appropriate.

Departments and individuals are not permitted to bring in their own electric heaters for use on campus. Only those provided by Facilities are permitted and these will be controlled by a thermostat and timeclock.

5. Electrical Equipment

5.1. Turn It Off

Turn equipment off when not in use, or put it in to hibernate or standby mode. As described in 5.2 below, computers, printers and photocopiers have PowerMAN controls installed but computers should be turned off at the end of your working day. Other common office items such as desk lamps should always be turned off when not in use. Similarly, laboratory and workshop equipment should also be turned off when not in use, but take care not to disrupt an ongoing experiment or to damage equipment. Some laboratory equipment is very sensitive to being turned on and off. If in doubt consult the laboratory and workshop technicians for best advice. It will be helpful to label equipment which is required to be left on for long periods, and to include a contact name if responsibility for its use is unclear.

5.2. Managed IT Equipment

All managed IT equipment, e.g. laptops, desktops, printers/photocopiers are power managed to ensure they are as efficient as possible. Power management software, PowerMAN, is installed on all PCs (unless a specific exclusion has been agreed) to ensure they enter a hibernation state when no activity has been detected for a given period of time. Multifunction devices such as printers/copiers have similar controls in place. This saves the University a large amount of energy and also ensures PCs are secure whilst people are away from their desks. N.B. It is **VERY** important to close all databases before leaving your PC unattended; this ensures the best performance of PowerMAN and is also a data security requirement.

5.3. Use Timers and Automatic Settings

To ensure that equipment is turned off when not being used, make use of automatic shutdown settings or use external timers to switch equipment off out of normal working hours.

5.4. Unused Fridges in Laboratories

When laboratory fridges are not in use for storing experimental samples they should be unplugged, cleaned and left with their doors propped open until they are needed again.

5.5. Provide Clear Instructions

Instructions shall be in place to clearly identify who is responsible for switching off equipment when leaving a lecture/meeting room, e.g. the last person to leave the room.



6. Lighting

Lighting is provided for safe and effective working. When lighting is not needed it should always be switched off, when possible, except where it is required for emergency access/exit ways. Many lights are now controlled by motion and light level sensors and will switch off, and/or dim down, automatically to provide sufficient artificial lighting considering natural daylight levels and occupancy. There will be a deliberate time delay before lights switch off to ensure safety.

7. Buildings

7.1. Energy Certificates

It is a legal requirement for a valid A3 size, colour, Display Energy Certificate (DEC) to be displayed in a prominent place, clearly visible to the public, in every building over 250m² which is frequently visited by the public. An associated Advisory Report must also be held on file for every such building and be made available if requested. The University's DEC's will be updated as required.

Energy Performance Certificates (EPC's) will be provided for all buildings upon construction, sale or rent in accordance with applicable legislation.

7.2. Energy Reporting

Regular reports are provided on the intranet highlighting the energy use of the main buildings on site. In January 2023, an energy Dashboard was developed to make it easier for staff and students to view this data and this has become a key resource in our energy saving campaign. Data is reviewed weekly by the Energy and Environment Team and there are regular update meetings with building Energy Champions to discuss saving opportunities.

8. Procurement

Equipment purchased by the University shall have the highest energy ratings where ratings are available. If less efficient energy equipment is to be purchased this shall be justified on a whole-life cost basis. Potential suppliers must be informed that selection of a particular goods or service will be partly based upon the supplier's energy efficiency performance.

9. References and Links

Links to the following key documents can all be found from the Energy and Environment Carbon Management intranet pages:

<https://intranet.cranfield.ac.uk/EnergyEnvironment/Pages/Carbon-home.aspx>

9.1. Cranfield University Energy Policy

9.2. Cranfield University Energy and Carbon Plan (updated annually)

The Energy Dashboard can be found in the following Intranet page:

<https://intranet.cranfield.ac.uk/EnergyEnvironment/Pages/Energy-Monitoring-and-dashboard.aspx>

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The University's website also includes relevant documents in the Carbon and Energy Management page:

<https://www.cranfield.ac.uk/about/environmental-credentials/carbon-and-energy-management>


10. Contacts

Report faulty heating, lighting, cooling and ventilation equipment to the Facilities Management Team via FacilitiesManagementTeam@cranfield.ac.uk.

Send suggestions for practical and cost-effective energy efficiency improvements to green@cranfield.ac.uk.

	Energy Code of Practice	CU-SHE-CoP-7.0 Version 7.0
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11. Document Control

Document title	Energy Code of Practice
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Implementation/effective date	April 2023
Date of last review and version number	October 2021, Version 6.0
Date of this version	April 2023
Date of next review	September 2025
Standards reference	ISO 50001:2018
Signature	
Name	Gareth Ellis
Title	Energy & Environment Manager

Policy

Title: Energy Policy Statement

Description: Energy Policy Statement

Date: 09/10/2024

Language: British English

Sharing Rights: Public

Scope: Greenhouse
gasses and energy

Enforcement Date: 01/11/
2023

Revision Date: 01/11/202
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Number Of Pages: 2

Publisher: Cranfield
University

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Policy

Title: Carbon Management Plan

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4

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University

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Local staff/student/faculty transportation



Context

Cranfield University's mission is to work in partnership with business, academia, governments and other organisations to develop and deliver applied research and innovative education in science, technology, engineering, and management.

In achieving this mission, it is essential we manage our use of energy in a sustainable manner. Since August 2018 the University's Energy Management System has been certified to the internationally recognised ISO 50001:2018 standard.

Aims

By July 2021 the University achieved a 42% reduction in greenhouse gas emissions from the University estate against a 2005 baseline. We now aim to be net zero by 2030 and are committed to continually improving our overall energy performance by cutting out wasteful use of energy, improving energy efficiency, purchasing energy-efficient products and services, designing for energy performance improvements and complying with relevant energy legislation and other requirements to which we subscribe.

Approach

The Energy and Environment Committee (EEC) oversees the management of energy across the University estate and holds regular reviews to ensure that adequate progress is being made against these main targets, taking remedial action if not. The Carbon Management Plan underpins this policy and is regularly reviewed and updated.

The Energy & Environment Team in Facilities coordinates and delivers energy management, with support from relevant working groups, reporting progress to EEC.

The University provides the necessary resources and information systems to ensure that the targets and objectives are being met. This includes an effective data collection system.

To be successful the University needs everyone who works, studies or lives on campus to help achieve this policy, in particular by:

- being aware of how much energy they are responsible for using
- preventing waste by turning off lights and all other equipment when not needed
- sharing suggestions for cost-effective improvements in energy performance
- abiding by the University's Energy Code of Practice

This policy is communicated within the University and available to the general public, students and all persons working for, in or on behalf of the University.

Approved:

A handwritten signature in black ink, appearing to read 'K. Holford'.

Professor Karen Holford
Chief Executive and Vice-Chancellor


Date:

18 March 2024



Energy Policy Statement

CU-ENV-POL-02
Version 7.0
Approval date: Jan 2024

Document title	Energy Policy Statement
Document number	CU-ENV-POL-02
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Date of next review	November 2024
Standards reference	ISO 50001:2018
Signature	
Name	Professor Chris Fogwill
Title	Chair of the Energy and Environment Committee

Carbon Management Plan 2024

Executive Summary

This Carbon plan reviews the current performance against the University target to reduce carbon emissions and sets out a plan for carbon reduction up to 2025. The University target is to achieve net zero carbon emissions by 2030.

The University has invested significantly in energy efficiency and renewable energy since 2010. More recently the transition from gas for heating has become a priority. The Public Sector Decarbonisation Scheme (PSDS) has been incredibly important in facilitating this and a series of projects from rounds 2, 3a, and 3b have resulted in changes which will translate into savings of 3,500 tCO₂. Further funding has just been secured from the PSDS3c round. This will enable the installation of a 3 MW ground source heat pump and further extend the district heating network on site, resulting in a further 1,000 tCO₂ saving.

The plan projects how the University can reduce scope 1 & 2 emissions from just over 9,000 tCO₂ in 2022/23 to around 2,000 tCO₂ in 2030/31. Suggestions are made for how the gap to achieve zero emissions can be achieved. These include seeking further renewable energy opportunities both on site and near site potentially in partnership with others.

An initial estimate of scope 3 emissions is detailed in this plan. The figures suggest that scope 3 emissions could be over three times the amount of scope 1 and 2 emissions. Further work is required to verify the figures a working group has been established to do this and to develop a plan to address them.

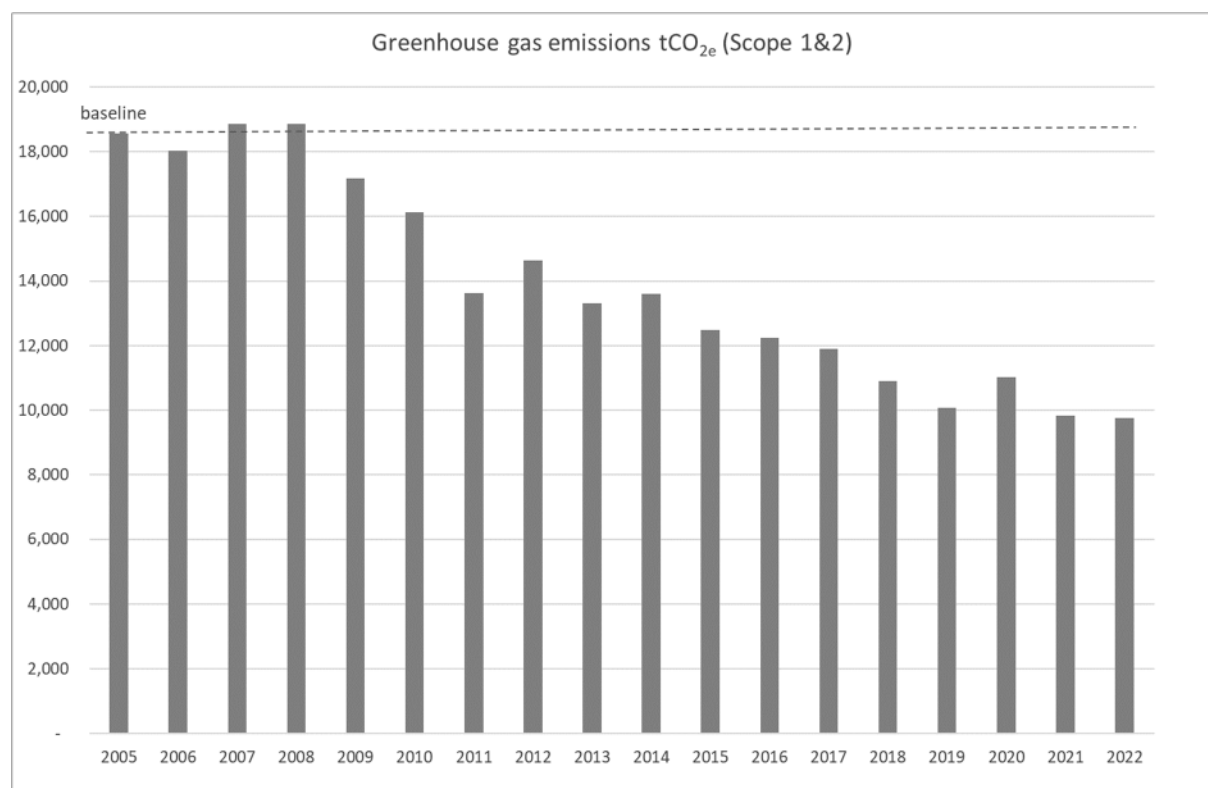
Recommendation to prioritise the following objectives:

1. Continue to improve the energy efficiency of operations on site.
2. Reduce gas usage on site by seeking alternatives to gas boilers and CHP.
3. Continue to develop and improve the district heating network.
4. Continue to develop and improve the campus high voltage electricity system, including options for a SLES.
5. Explore the feasibility of more on and off-site generation including renewable energy options and identify funding opportunities for this.
6. Develop a strategy for electrifying the University vehicle fleet.
7. Develop a system for verifying and reporting reliable Scope 3 data, along with a plan for reducing emissions where possible.
8. Develop a Carbon Offset Strategy.

Carbon Progress

The University has a target to reduce its Carbon emissions to Net Zero by 2030/31 academic year. Since the implementation of carbon management planning in 2009 Scope 1 and 2 emissions have reduced steadily. They are now hovering around half the original 2005 baseline. Our carbon footprint has been restated for previous years in accordance with Government Greenhouse Gas reporting guidelines which take account of changes in our estate and also national conversion factors.

Table 1: Scope 1 & 2 Carbon emissions



Note the years on x axis are for the University year, so 2005 represent August 2005 to July 2006.

The decrease reflects the significant investment the University has put into energy saving initiatives such as a large Combined Heat and Power unit in 2011, a new Biomass boiler in 2014, improvements to the district heating system, a solar farm in 2018 and continuous annual energy efficient refurbishments to the real estate. The successful Public Sector Decarbonisation project installed in 2022 enabled an extension to the solar farm, a large-scale Air Source Heat Pump for the district heating, new Building Management System for the district heating along with other improvements, LED lighting installations and a 1 MWh battery to help balance the University's private wire network. The full energy savings from these improvements have yet to transpire as the complexities of the changes take time to bed in. A further Public Sector Decarbonisation project this year is seeing the two large aircraft hangars being fully insulated, with quick closing doors interlocked to a new heating system with improved control and a further installation of solar increasing on site capacity to over 2.3 MW.

Planning has begun for another Public Sector Decarbonisation project due to start next year which will take the district heating onto the residential part of the campus.

The emissions reported above are for scope 1 and 2 greenhouse gas emissions (excluding scope 3 electricity transmission and distribution emissions) including electricity, heating, process fuels and on-site vehicle fuels for the whole University estate but excluding activity at Shrivenham Campus which is managed by the MOD. Reporting years are from August to July. Other transport emissions and emissions associated with waste and water are not included at present although there are plans to include these within the footprint for future reports. Further information on the Carbon Management Plan can be found on the University website.

For SECR reporting purposes additional scope 3 emissions from business travel involving cars and motorbikes has been included. A breakdown of the emissions is detailed below. SECR data for 2022/2023

Table 2: SECR report

Fuel Type	Energy Purchased kWh		tCO _{2e}				
	2022/23	2021/22	Sc 1	Sc 2	Sc 3	2022/23	2021/22
Gas	34,815,330	37,835,753	6,417.1			6,417.1	6,906.5
Electricity	13,345,446	12,186,252	-	2,763.5	239.2	3,002.6	2,572.0
Biomass	1,636,900	2,389,428	17.6			17.6	30.9
Gas Oil	406,128	246,330	105.6			105.6	64.0
Aviation Turbine Fuel	462,583	641,815	114.8			114.8	160.5
Diesel	282,550	231,980	67.5			67.5	55.7
Aviation Spirit	150,099	117,323	35.6			35.6	28.2
Petrol	14,205	9,771	3.2			3.2	2.2
Burning Oil	31,003	28,363	7.6			7.6	7.1
LPG	0	1,893	-			-	0.4
Sub-Total	51,144,244	53,688,908	6,769.0	2,763.5	239.2	9,771.6	9,827.5
Business Travel (mile							
(rental/employee							
owned vehicles	254,122	110,013			108.8	108.8	69.6
where fuel is							
purchased)							
Total Gross tCO_{2e}			6,769.0	2,763.5	347.9	9,880.4	9,897.1

Notes:

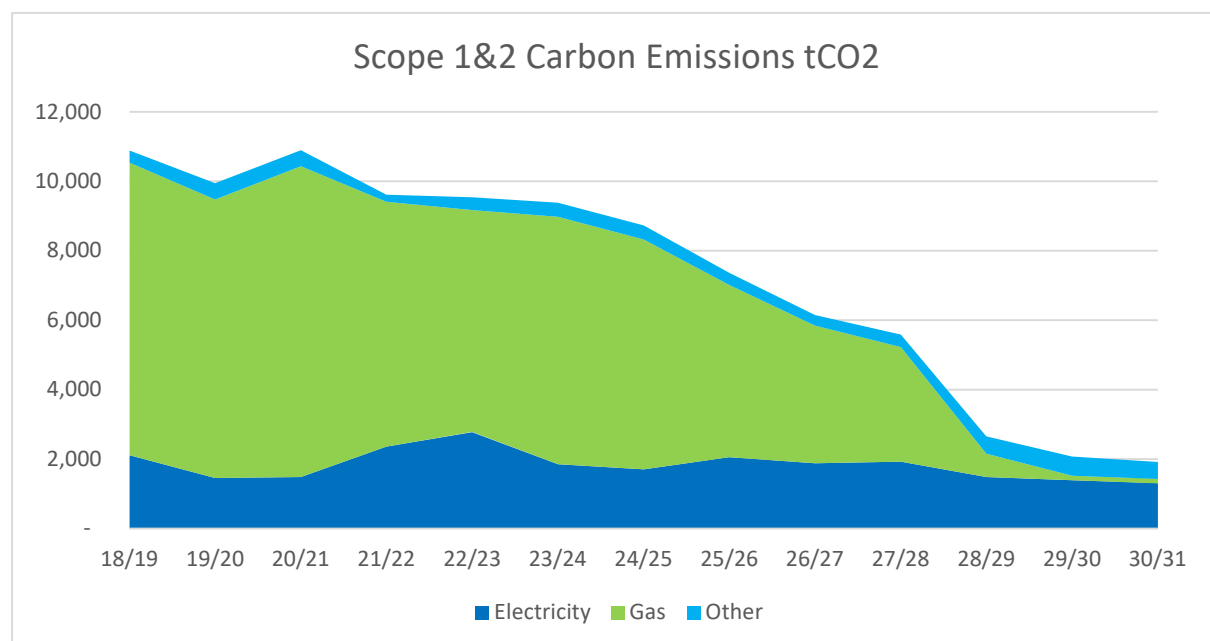
1. The Intensity Ratio in 2022/23 for all emissions reported in table is 4.49 tCO_{2e}/£100,000 turnover. In 2021/22 it was 4.92 tCO_{2e}/£100,000 on the same basis.
2. Numbers shown in the table above are rounded to the nearest whole number or tenth.
3. The methodology used follows the UK Government Environmental Reporting Guidelines. The University has an energy management system certified to ISO50001. Data from

invoices is used unless this relies on estimates otherwise the University has extensive automatic meter reading and manual reading processes. Where no data is not available, estimates have been used in a few very minor instances amounting to less than 0.3% of the total. These estimates are based on existing data. The reporting period is August 2021 to July 2022. Government greenhouse gas emission factors for 2022 have been used.

4. The University generates more than half of its electricity from an on-site gas fuelled CHP with an output of 1.4 MW and also a 1.45 MW solar farm (with 0.9 MW solar farm just installed) and other smaller roof mounted PV systems. The output of the CHP in 2022/2023 was 6,904,220 kWh consuming 19,174,297 kWh of gas, and the output of the solar installations was 1,385,761 kWh. Note this means the overall consumption of electricity was 21,635,427 kWh.
5. More detailed information on the progress of the University towards reducing its greenhouse gas emissions and other aspects of environmental performance can be found in the annual environmental report on the website www.cranfield.ac.uk.

Meeting the 2030 Carbon Target

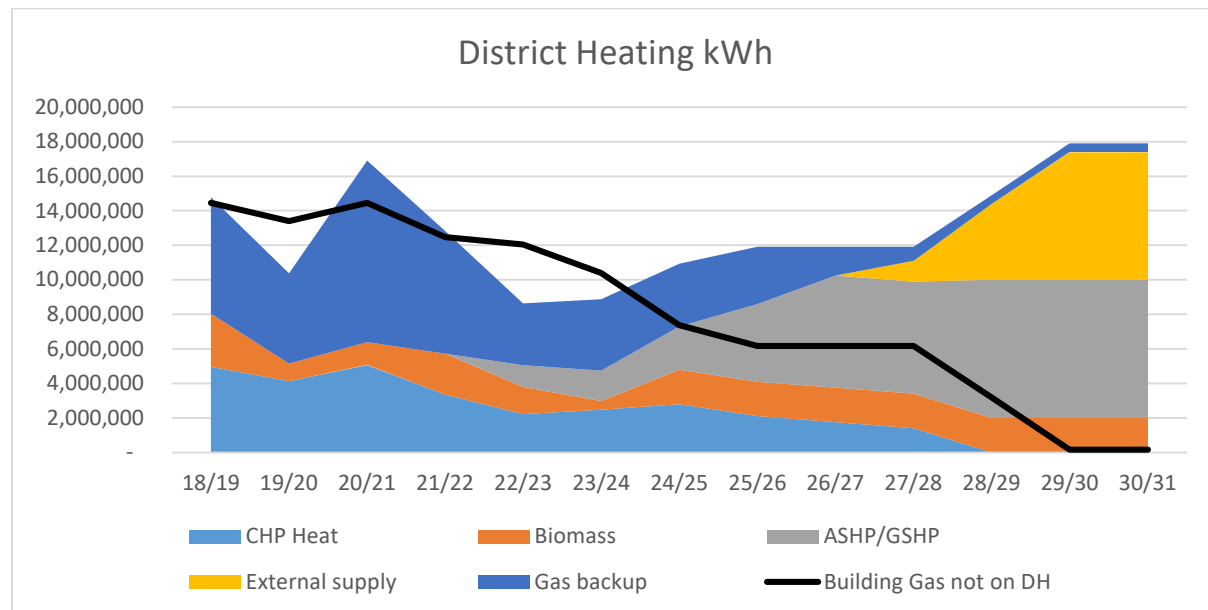
Graph 1: Projection of Scope 1 & 2 emissions



This graph shows the progress over the last 5 years and the current projection to 2030. In 2022/23 carbon emissions from gas consumption on site is clearly still dominant. Over the period 2022 to 2027 the potential impact of the PSDS projects can be seen with overall Scope 1 & 2 CO₂ emissions reducing from 9,500 tCO₂ to 5,500 tCO₂. PSDS projects to date have seen the district heating network updated with air source heat pumps, improved buildings controls, LED lighting, extra solar installations, battery storage (PSDS2), insulation of the two largest buildings onsite (PSDS3a), thermal storage and the expansion of the heat

network to the residential estate (PSDS3b) planned for summer 2024. This reduction in CO₂ is mainly through the reduction in gas usage switching from gas for heating to heat pumps. The consequent increase in consumption of electricity is compensated for by increased electricity from solar and a steadily decreasing carbon factor for electricity imported from the grid.

Graph 2: Projection of fuel mix for district heating

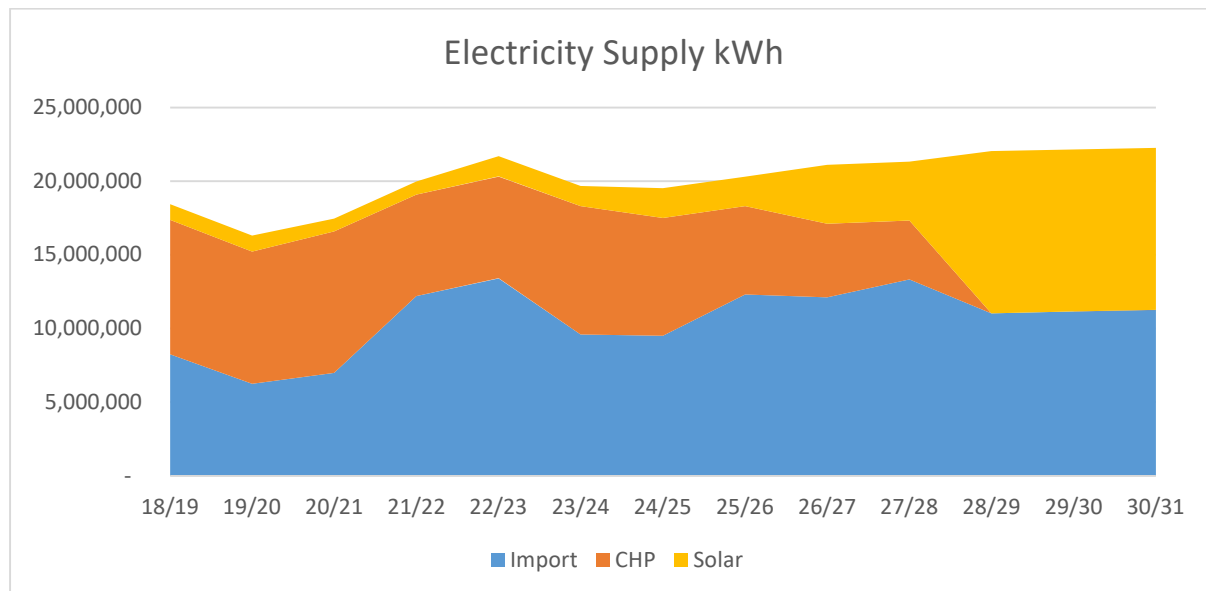


The projection from 2027 to 2030 assumes the University district heating system is connected to a local low carbon heat network. The remaining buildings still reliant on gas boilers for heating (mainly on the residential campus) would also be connected to this network. At the same time the gas fired CHP generator is retired, further solar is added on site and electricity supply from a local solar farm secured providing low cost zero carbon electricity.

Throughout the period it is assumed that energy efficiency measures are sufficient to cap overall demand for heat and power against a continuing increase in floor area and activity.

It is evident that the projection does not achieve zero carbon emissions. This is because there are still emissions associated with electricity import and other emissions. The “other” emissions in the graph are largely from the use of vehicles on site. There are also some emissions associated with the low carbon heat network. To achieve net zero emissions further action must be taken to address vehicle emissions, reduce electricity import and offset any remaining emissions.

Graph 2: Projection of electricity supply



To facilitate more renewable electricity the University high voltage electricity network needs to be developed to provide more storage and demand management. This would also help counter the current constraints which limit export and import of electricity. The potential for a Smart Local Energy System is currently being discussed which could potentially expand the University's network and allow energy trading with neighbours. A community owned project could help to facilitate this. Other financing options should also be explored.

A wind turbine project would potentially provide cheaper electricity than solar and provide capacity at the right time of year for heat pump operation. Obviously, the constraints of the airport make this difficult on site. But potential sites in the neighbourhood could be investigated provided the connecting cable is not too long. With the current electricity market regime, the direct connection of a generator such as a wind turbine or solar farm "behind the meter" is key to finding an affordable solution.

The migration of the onsite vehicle fleet from largely diesel with some petrol vans and cars to electric vehicles needs to be planned. Although this may be more difficult for the University research aircraft in time available.

Ideally sufficient renewable energy projects will be realised which can offset any residual emissions to achieve net zero. The other option would be to plant trees on the University estate to achieve this.

Scope 3 Carbon

Scope 3 emissions are notoriously difficult to quantify as they represent the indirect carbon emissions incurred by third parties providing materials and services to the University. In most cases it is not possible to acquire the precise data but it is possible to use industry norms and factors for these emission based on spend. The University is a member of SUPC (Southern Universities Buying Consortium) which has undertaken an analysis of Cranfield Universities spend and the associated scope 3 emission based on industry averages.

Emissions						
	Tonnes CO2e 22/23	Tonnes CO2e 21/22	Tonnes CO2e 20/21	Tonnes CO2e* 19/20	Change CO2e from previous year	Change % from previous year
Business services	14,443	10,130	5,959	12,113	4,313	42.6%
Paper products	72	117	173	496	- 45	-38.5%
Other manufactured products	920	2,381	554	942	- 1,461	-61.4%
Manufactured fuels, chemicals and glasses	111	765	90	2,424	- 654	-85.5%
Food and catering	726	334	168	1,225	392	117.4%
Construction	540	2,004	11,934	40,142	- 1,464	-73.1%
Information and communication technologies	7,677	8,506	8,194	1,256	- 829	-9.7%
Waste and water	189	445	214	416	- 256	-57.5%
Medical and precision instruments	2,541	5,300	11,182	87	- 2,759	-52.1%
Other procurement	1,149	1,349	462	7,131	- 200	-14.8%
Unclassified	524	775	4,599	286	- 251	-32.4%
Total	29,892	32,105	43,529	66,518	- 2,213	-6.9%
* Uncoded spend data was not included prior to 20/21						

This table does not include Business Travel which this year SUPC calculate would be an additional 14,980 tCO₂ compared with 16,200 tCO₂ the previous year. Commuter travel emissions are not included.

Further work is required to verify this analysis and add to it. The figures highlight the importance of addressing Scope 3 emissions. The scale dwarfs current Scope 1 and 2 emissions. Further work is required to ensure the accuracy of the data. A detailed plan

needs to be developed to work with the supply chain to reduce emissions and also to develop a strategy for carbon offsets where this is not possible in the time frames required.

Action Plan

The following actions are proposed to progress the Carbon Management Plan in the near term.

Task	Description	Who	When
Deliver PSDS3b project	District heating extended to residential state	Development team/GE	By March 2025
Deliver PSDS3c project	Install 3 MW Ground Source Heat Pump and further extend district heating	Development team/GE	By March 2026
Negotiate contract with local heat network	Work with developers of new heat network to ensure cost effective low carbon heat supply	GE/ Developer/ Contracts	Ongoing
Negotiate contract with local solar farm developer	Work with developers of new solar farm to ensure cost effective zero carbon electricity	GE/ Developer/ Contracts	Ongoing
Explore feasibility of further renewable energy projects	Work with others to explore technical and financial options for further renewable energy capacity, including storage and SLES	GE/ Consultant/ Partners	March 2025
Review options for EVs	Look at University vehicle fleet and explore potential to convert to EVs	GE	March 2025
Develop options for tree planting	Explore opportunities for tree planting	GE/Forest of Marston vale	Ongoing
Develop Scope 3 reporting and planning	Set up working group to gather data for Scope 3 reporting and develop strategy for reducing emissions	GE/GF	Ongoing
Develop a Carbon Offset Strategy	Draft a Carbon Offset Strategy for consultation	GE/GF	March 2026

Conclusions and Recommendations

Progress towards the University's 2030 target has seemingly stalled over the last few years. However, the impact of Covid and major construction works on the district heating and key buildings has masked big improvements in heating efficiency which will translate to carbon savings as normal operation returns. There are further works planned this year to extend the district heating to the residential estate and funding has been secured for a large-scale ground source heat pump. This along with current negotiations to access low carbon heat and zero carbon electricity from local suppliers takes the University close to its target but there is still a gap. Further work needs to be carried out to close gap through greater energy efficiency and identifying further renewable energy potential on or near to site.

There are still significant opportunities for further energy efficiency improvements and renewable energy developments. Continued investment in these measures will contribute to the target being achieved.

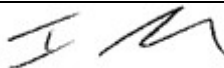
Scope 3 emissions are very significant and larger than Scope 1 and 2 emissions combined. The data needs further scrutiny and more analysis to understand fully the challenges and opportunities. Further engagement with the supply chain is needed to see where emissions can be reduced, and a Carbon offsetting strategy developed.

Recommendation to prioritise the following objectives:

1. Continue to improve the energy efficiency of operations on site.
2. Reduce gas usage on site by seeking alternatives to gas boilers and CHP.
3. Continue to develop and improve the district heating network.
4. Continue to develop and improve the campus high voltage electricity system, including options for a SLES.
5. Explore the feasibility of more on and off-site generation including renewable energy options and identify funding opportunities for this.
6. Develop a strategy for electrifying the University vehicle fleet.
7. Develop a system for verifying and reporting reliable Scope 3 data, along with a plan for reducing emissions where possible.
8. Develop a Carbon Offset Strategy.



Document Control

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Date of next review	March 2025
Standards reference	ISO50001:2018
Signature	
Name	Ian Sibbald
Title	University Director of Finance

Document Review			
Version	Amendment	By	Date
1.1 – 2.1	Draft Versions of original Carbon Management Plan	John Street William Stephens	Dec2008
2.2	First Approved Issue of original Carbon Management Plan	John Street William Stephens	Feb 2009
2.2	Updated Version of original Carbon Management Plan	John Street William Stephens	Jul 2014
2017/18	New format for ISO 50001	Gareth Ellis	Apr 2018
2017/18v2	Verification of Tasks added to Action Plan	Gareth Ellis	Jun 2018
2018/19	Annual Update	Gareth Ellis	Mar 2019
2019/20	Annual Update	Gareth Ellis	Mar 2020
2020/21	Annual Update	Gareth Ellis	Jan 2021
2021/22	Annual Update	Gareth Ellis	Apr 2022
2022/23	Annual Update	Gareth Ellis	Mar 2023

Policy

Title: Cranfield University Travel Plan

Description:

Cranfield University Travel Plan. This Travel Plan aims to increase the travel choice for students, staff, visitors and associated business travel to and from the Cranfield campus, whilst reducing carbon emissions.

Date: 17/10/2024

Language: British English

Sharing Rights: Public

Scope: Travel by staff, students and visitors to and from Cranfield Campus

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Policy

Title: Sustainable Travel Policy

Description: This policy statement indicates our intent to introduce a culture of sustainable travel to help us achieve our net zero goal. It includes business travel, commuting, and international student travel.

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Cranfield University Travel Plan

2018 to 2023

Department: Facilities

Date: November 2018





Cranfield University Travel Plan

2018 to 2023

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Introduction

Scope

This Travel Plan aims to increase the travel choice for students, staff, visitors and associated business travel to and from the Cranfield campus, whilst reducing carbon emissions. The interactions with Cranfield University operations at Shrivenham Campus in particular the commute between the two campuses is considered. However the local commute to Shrivenham Campus is not.

The Travel Plan builds on the previous plan developed in 2012 and the work of the Travel Plan Working Group. The Travel Plan Working Group included Staff and Students with representation from across the University. The plan has also been developed with engagement with students and staff needing to travel daily to and from the campus (via stakeholder workshops and a campus wide travel survey). Aspects of business travel area also included: to and from the campus for research, teaching, conferencing and meetings. The Travel Plan is intended to have a five year lifespan, during which time regular monitoring will be undertaken.

Policy context

Planning policy NPPF

The National Planning Policy Framework (NPPF) emphasises the importance of sustainable transport as part of the planning system. Travel Plans are a requirement for all developments which generate significant amounts of movement.

<https://www.gov.uk/guidance/travel-plans-transport-assessments-and-statements>

CBC Local Transport Plan 3 (LTP3)

The local authority Central Bedfordshire Council has a Local Transport Plan (see <http://www.centralbedfordshire.gov.uk/transport/strategy/overview.aspx>) launched in 2011 and covering the period up to 2026.

Guidance for Travel Plans and Transport Assessments (2012)

This guidance document sets out Central Bedfordshire Council's requirements for Travel Plans and identifies when they are required in support of a planning application.

Other- Best practise

BREEAM

The University has a policy to develop new buildings to the Building Research Establishment Environmental Assessment Method (BREEAM) Excellent standard. This includes requirements for certain levels of sustainable transport provision in particular relating to:

- Number/frequency of bus services
- Proximity to amenities
- Cycling Facilities
- Car parking capacity (maximum)
- Having a Travel Plan

EAUC

The Environmental Association for Universities and Colleges offer guidance and support on a range of environmental issues including sustainable travel.

Objectives

The overarching aim of the Cranfield University Travel Plan is to improve the travel options for students, staff and visitors to and from the Cranfield campus, whilst reducing environmental impacts.

Objectives

The objectives of this Travel Plan are to:

- Reduce single occupancy car commuting from 59% to 53% over the next 5 years

This to be achieved by:

- Increasing car sharing
- Increasing public transport use
- Increasing cycling to and from campus
- Increasing walking to and from campus
- Reduce travel emissions and greenhouse gas emissions from University associated transport
- Make the Cranfield campus a more attractive environment to encourage student intake and improve staff working environment
- Support future planning applications associated with the University
- To improve travel links with MKU

Key issues

Staff commute

The Cranfield University Campus is located in a rural area. Most staff live within a 20 mile radius (as the crow flies) of the campus but are well spread out. This presents challenges for sustainable transport options such as car share, buses, cycling and walking. The surrounding roads are narrow, often used for “rat-running” and junctions have limited capacity. This can create traffic congestion at certain times.

Student Experience

The rural location presents challenges for students who wish to access more shopping choice and social activities offered by urban areas. It also provides opportunities to access nature.

Increased size of campus

The Cranfield campus is growing in size. The development of the campus with the new MUEAVI road connecting Martell House, its increased activity, and the new buildings along the road have effectively doubled distances for many working and studying on campus.

Links to Shrivenham and COTEC

Cranfield University has operations based at the MOD campus at Shrivenham and at an outstation on Salisbury plain where the Cranfield Ordnance Test and Evaluation Centre (COTEC) is based.

Greenhouse Gas Reduction

The University is currently targeting reductions in scope 1 and 2 greenhouse gas emissions. Travel emissions are scope 3. These will need to be investigated.

Site Description

Site location

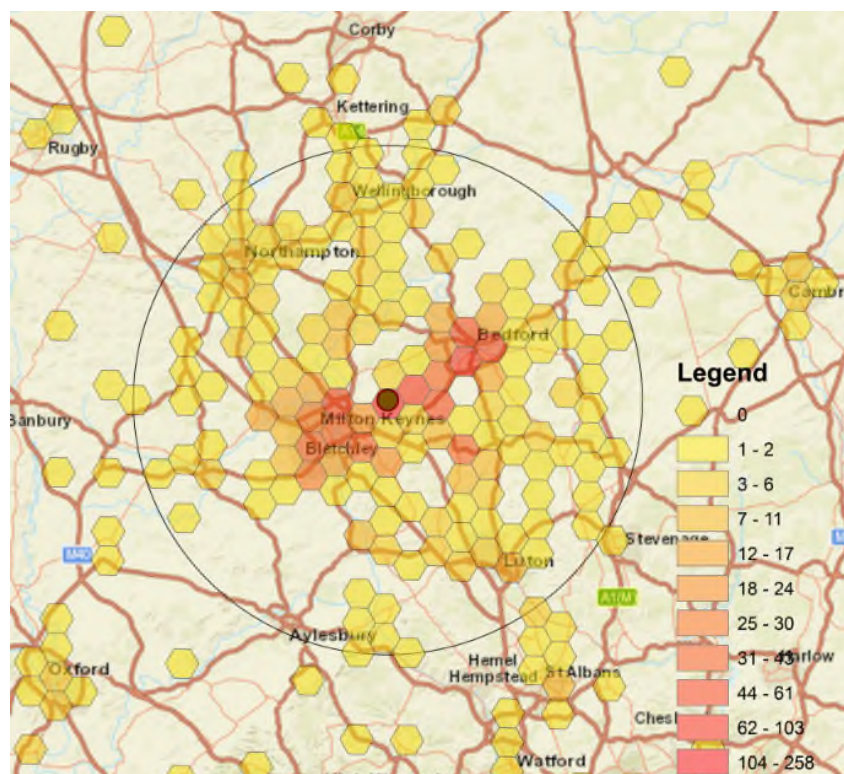
Cranfield campus is situated to the west of Cranfield, Central Bedfordshire, approximately one mile from Cranfield Village centre, and is bordered by the Cranfield Technology Park to the south and Cranfield Airport to the east (see Figure 1). The campus is located approximately 6 miles east of Milton Keynes and 8 miles south west of Bedford. Junctions 13 and 14 of the M1 are nearby and the A421/A428 dual carriageway provides a fast link to the A1. The University also has a second campus at Shrivenham, which although not directly covered by this Travel Plan, is intended to benefit from some of the wider Travel Plan measures affecting University Policy.

Organisation

Cranfield University is a renowned Postgraduate Institution specialising in Aerospace, Automotive, Energy, Environment, Management, Manufacturing, Security and Defence. It is also a major local employer with around 1,800 staff on the Cranfield campus and a student population that comprises over 3,000 Masters' and Doctoral students (full time and part time). In addition, continuing professional development delegates also attend the University for Courses throughout the academic year.

Catchment area

Most staff live within a 20 mile radius of the University. They are spread out but there is a concentration in Cranfield Village and along the corridor between Milton Keynes and Bedford. Equally students living off campus tend to be located in the same corridor. The location of staff is shown on the map below.



Above: Map of Cranfield University showing staff density data with a 20 mile buffer. The higher staff densities are located in Cranfield Village, Bedford and Milton Keynes.

Issues and Problems

Existing travel links

Road

Traffic flows

As part of the Masterplan a Transport assessment was carried out in 2017. The flow of vehicles coming onto the campus and technology park was measured.

Access	AM peak			PM peak		
	Arrivals	Departures	Total	Arrivals	Departures	Total
University Way	531	69	600	74	450	523
College Road	524	43	566	59	383	442
Folly Lane	101	14	114	27	99	126
Total	1156	125	1281	160	932	1091

Above: Traffic flows of vehicles coming onto the campus and technology park

Based on the expected increase in floor areas according to the Masterplan then the Transport assessment predicted an increase in traffic trips.

	Number of Trips (77,0000 sq.m)	
	AM peak	PM peak
Vehicles	514	438

Above: Predicted traffic flows onto/off campus (Source: Ref: cranfield-transport-assessment_tcm3-27112 tables 4.7 and 5.1)

Parking

The Transport Assessment also looked at parking. A survey in 2016 noted 2720 car parking spaces (81 of which were disabled) with a peak of 2,247 cars parked. The assessment suggests that the parking provision allowed for within the Masterplan would be a 40% uplift (3,146 vehicles) and that this is more than enough to satisfy the demand created by the Masterplan.

Rail

For the majority of University Students and Staff, the Milton Keynes Central Railway Station offers the greatest attraction in terms of rail travel, with an average of 8 services to/from central London (Euston Station) each hour. Milton Keynes to London fast train takes 35 minutes, slower trains are 58 minutes. Birmingham can be reached in 52 minutes and Manchester in 1 hour 38 minutes. This railway station is a 9 miles journey to the West by the shortest road route and is served by a regular bus service from the University.

Bedford and Flitwick rail stations to the North East and South East at 10 miles are a similar distance from the University. They also provide a service to London going to St Pancras rail station with rapid links to Europe via Eurostar. This line also links to Luton Airport Parkway in 15 minutes to 27 minutes. The fastest train from Bedford to London takes 38 minutes, slower trains are typically one hour.

The closest rail station is Ridgmont. A 5 miles journey to the South. This is currently only providing local journeys into Bedford and Milton Keynes. However there are plans to link this station with a new Oxford to Bedford service, which will eventually also link through from

Bedford to Cambridge. The Ridgmont to Oxford service is projected to open sometime between 2022 and 2024 and will provide one train an hour to Oxford with a journey time of less than one hour.

Bus

The two bus operators serving Cranfield Campus are Uno and Stagecoach. Details of their service are listed in the table below.

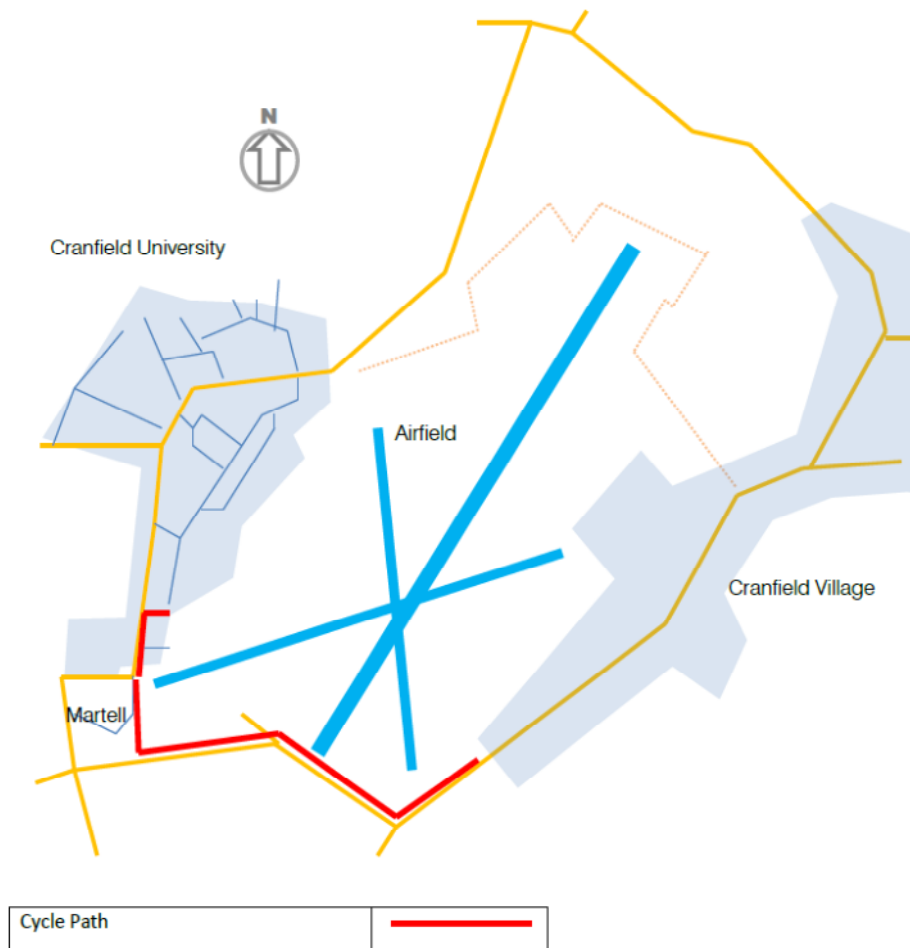
Operator	Bus	Route	Monday to Friday			Saturday	Sunday
			First bus	Last bus	Frequency	Service	Service
Uno	C1- Milton Keynes	Via Kingston	5.40	23.19	Every half hour	11	4
	C10- Milton Keynes	Via Newport Pagnell,	06.07	21.36	Every hour		
	C11 – Milton Keynes	Via Kingston				6	4
	C1- Bedford	Via Wooton	05.41	23.45	Every hour	9	4
	C10- Bedford	Via Marston Moretaine	06.54	21.09	Every hour		
	C11 - Bedford	Via Marston Moretaine				6	4
Stagecoach	53 - Bedford	Via Marston Moretaine	06.20	19.23	Every hour	12	8

Above: Bus services which serve campus including UNO bus and Stagecoach

Milton Keynes Coachway, a 4 mile journey west of the University, provides regular buses to London Luton Airport (40mins) and London Stansted (2 hours 15 mins) and changing at Luton to London Heathrow (1 hour 50 mins). There are also links to Cambridge (1 hour 49mins) and Oxford (1 hour 53 mins).

Cycle

A new cycle path was installed in partnership with Central Beds Council in 2014. This links the southern part of Campus with the south of Cranfield Village. The path is a shared cycle and footpath which for the majority of its route is alongside the main road.



Above: Map showing route of cycle path from campus to Cranfield Village

Foot

The cycle path from the south of Cranfield Campus to Cranfield village provide and safe walking route adjacent to but off the road. Otherwise, there are no footpaths along other road routes to the village or other nearby settlements. This is an issue for staff and students walking to campus from the north end of Cranfield or from Bourne End or North Crawley. There is a footpath from the north of Cranfield across the fields and around the runway to the north end of campus. However, this is not always easy walking depending on weather conditions.

Nearby facilities

Many facilities are available on the Campus itself. These include a bank, shop, post office, dentist, barbers, petrol station, restaurants, cafes, library, mosque, chapel, pre-school, laundrettes, nursery, sports centre with gym, Social Club, CSA (Cranfield Student Association), Amazon lockers, hotel, observatory, airport. The nearest doctor's surgery and chemist is in the village about 2 miles distant. There are also supermarkets, pubs, hairdressers, car servicing, car sales in the village.

For greater shopping choice the Kingston Shopping Centre in Milton Keynes is 6 miles distant and accessible by bus. There is a larger shopping centre in Central Milton Keynes 8 miles away and Bedford town centre is 12 miles.

Travel to and from Shrivenham

Changes to the work at Shrivenham will likely increase travel to and from Cranfield Campus. As this becomes clearer the sustainable options for this should be reviewed.

Travel to and from MKU

The new MKU University in Milton Keynes is beginning to take shape and as plans develop a travel plan for this new site will be developed. In the meantime, the following observations are made:

National cycle route NCN51 (aka Varsity Way) passes by the proposed site for MKU and runs through Cranfield joining with the cycle path to the University. However, for a proportion of its length it uses main roads which are unsuitable for safe cycling. This is the part of the route between the Milton Keynes redway network and Cranfield. A new off-road safe cycling route would provide a useful link between Cranfield University and MKU but would also link with the Open University and enhance this part of the NCN51 cycle route which also stretches to Oxford and Cambridge. It would also enhance the commuting opportunities for staff and students living in Milton Keynes travelling to Cranfield. There are rights of way running south west from the University towards Broughton in Milton Keynes with access over the motorway, which could potentially form the basis for such a route if they were surfaced.

The Uno bus service already operates a fast and regular service to Milton Keynes rail station from Cranfield campus. This could easily be modified to include MKU.

Campus layout and Masterplan

The campus is growing with a new road and new buildings being added to the south of the campus.



Above: Map of campus showing sites for new development (Ref: cranfield-masterplan-03_tcm3-27044)



Campus circulation

- Pedestrian (primary/secondary)
- Cycles (primary/secondary)
- Cars
- - - - Buses

Above: Map showing access routes to campus including bus, cars, buses and pedestrian routes. Source: (Ref: cranfield-masterplan-03_tcm3-27044)

Existing infrastructure

Car parking

Historically car parking has been distributed across the campus in small car parks and with car bays along the main roads on campus. This is now changing with new larger car parks on the

periphery of the campus some of the spaces in the centre of campus are being removed. The disability car parking is distributed and close to buildings. Some of the smaller car parks are being designated for visitors. Car sharing priority spaces are also distributed close to buildings. Parking is now closely policed with a permit system.

Motorcycle parking

Motorcycle parking on site is limited. This results in motorbikes taking up car spaces or being parked in cycle parking facilities. There are ten space dedicated to Motorcycles. None of these are covered.

Cycling facilities

A survey of bikes parked on campus counted over 200 in 2017. The vast majority of these would be used for cycling around campus and in particular from the residential side of campus to the main technical site.

Cycle parking

In June 2018 there were 474 parking spaces for bikes with 358 of these under cover. This is greater than the total number of bikes on site. However, there are key locations particularly in the centre of campus but also in residential areas where bike parking is clearly not adequate. This is apparent by the number of bikes parked in inappropriate locations.

Location	Cycle spaces	Location	Cycle spaces
B62	4	Fedden	6
B30	6	Martell House	20
Sports hall (Outside entrance)	12	Conway house	8
Sports hall (by bins)	6	Medway court Unit 2	8
Lanchester (12, 15)	10	Medway court Unit 1	8
Lanchester (7, 16)	11	Medway court Unit 5	8
Lanchester (Block 14, 4, 5)	10	Medway court Unit 4	8
Chilver1	18	B50	6
Chilver 2	16	B52 East Side	10
B29	0	B52 West side	8
B57	4	CSA in front	20
B32/41	10	CSA by entrance	8
B39	16	Library	40
B33	16	C4D	8
B111	12	B83	10
B111	5	Outside 243	0
B122	4	13PPA	0
Mitchell Hall a	10	C320 AIRC	48
Mitchell Hall b	40	Sports Hall new car park	24

Above: Location and quantities of cycle spaces on campus

Showers/lockers/drying facilities

There are some 87 showers on campus. However, the vast majority of these are not available or suitable for cyclists to use.

There are 16 showers in the Sport Centre (12 male, 4 female). These have a suitable changing area with lockers. There are also 5 showers in B320 AIRC, two in IMEC and three in C146.

These all have changing areas but no lockers or if there are lockers, they are not easily accessible for cyclists.

Building	Number of showers
B19	16
B52	2
B95/96,	1
B146	3
B300	2
IMEC	2
B320, AIRC	5
B316 (Conway)	1

Above: number of showers with location

Disabled Access

The campus reviewed and implemented many improvements to disabled car parking and access to buildings in 2006 to 2009. Car parking in general is well distributed across the campus and there is disabled car parking close to most buildings. Kerbs were modified where possible to give easier access routes for wheelchairs. There are 67 disabled car parking spaces distributed across campus.

The University has a Disability Code of Practice (2009) which states that new buildings are designed and built to meet the latest standards of provision and that where practical and when reasonable adjustment is possible to upgrade existing buildings to accommodate disabled employees and students.

Existing measures

Car share

Car sharing is actively encouraged through the allocation of priority parking spaces and by subscribing the University to "liftshare.com" giving all staff and students access to a web based database of possible car share partners. This is promoted through the intranet and promotional events throughout the year. An emergency get you home scheme has also been introduced.

Uno bus service

The University tendered for a public bus service connecting the Campus with nearby villages, Milton Keynes and Bedford in 2013. This service is now well established and provides staff and students with a service with reduced fares, which is frequent and operates weekdays and weekends.

Intranet Travel Portal

Sustainable travel options are promoted on the University intranet with regular updates and links via social media are provided.

Cycle registration

A bike registration scheme was introduced in 2016. The scheme is linked to road safety with hi-viz vests given out free to those who register. However, its main purpose is to be able to identify owners of bikes, which have become a nuisance.

Bike repair and recycling

Bikes, which have been left by departing students, are collected at the end of the academic year. These are passed on to a local non-profit bike repairer who repairs and upgrades them for sale to new students to use. The same repairer is also funded to provide bike repair sessions for students.

Staff & Student Travel surveys/counts

Review of progress 2012 to 2018

Surveys

A survey of staff and students has been carried out every two years since 2012. These surveys have captured information on how people travel but also on their motivations and issues.

	Staff			
	2012	2014	2016	2018
Car single occupancy	76.6%	72.8%	69.3%	74.4%
Car share	13.7%	11.4%	13.7%	9.7%
Taxi	0.5%	0.8%	1.1%	0.4%
Bus	3.1%	7.3%	6.5%	8.2%
Motorcycle	1.2%	1.2%	1.5%	2.2%
Bicycle	4.2%	5.0%	4.7%	3.0%
Walking	0.8%	1.5%	3.0%	1.5%
Other	0.0%	0.0%	0.2%	0.6%
	100.0%	100.0%	100.0%	100.0%

Above: Year on year percentage of staff using different methods of transport to campus

	Students			
	2012	2014	2016	2018
Car single occupancy	29.7%	13.3%	14.0%	12.7%
Car share	9.7%	6.4%	4.8%	8.6%
Taxi	2.0%	2.7%	1.5%	0.8%
Bus	18.9%	25.9%	17.4%	34.0%
Motorcycle	0.3%	0.1%	0.3%	0.2%
Bicycle	10.7%	8.8%	10.2%	14.0%
Walking	27.9%	42.9%	51.5%	28.5%
Other	0.8%	0.0%	0.2%	1.1%
	100.0%	100.0%	100.0%	100.0%

Above: Year on year percentage of students using different methods of transport to campus

	Staff & Students			
	2012	2014	2016	2018
Car single occupancy	65.0%	43.3%	44.8%	52.3%
Car share	12.7%	8.9%	9.6%	9.4%
Taxi	0.9%	1.7%	1.3%	0.7%
Bus	7.0%	16.6%	11.4%	17.6%
Motorcycle	1.0%	0.6%	1.1%	1.4%
Bicycle	5.8%	6.9%	7.1%	6.8%
Walking	7.5%	22.1%	24.5%	11.1%
Other	0.2%	0.0%	0.3%	0.8%
	100.0%	100.0%	100.0%	100.0%

Above: Year on year percentage of total staff and students using different methods of transport to campus

	Commuters*			
	2012	2014	2016	2018
Car single occupancy	69.6%	57.8%	58.7%	59.0%
Car share	13.4%	11.1%	12.7%	10.5%
Bus	7.1%	18.6%	12.7%	18.0%
Motorcycle	1.0%	0.9%	1.3%	1.5%
Bicycle	6.0%	7.6%	8.0%	6.9%
Walking	1.8%	2.7%	5.0%	3.0%
Other (taxi, train, etc)	1.2%	1.3%	1.6%	1.3%
	100.0%	100.0%	100.0%	100.0%

Above: Year on year percentage of total staff and student commuters (*Commuters are staff, students and other who live off site). Bus usage has increased significantly.

Counts

Traffic counts have also been carried out periodically. These have distinguished between journeys to the campus as a whole and journeys specifically to the Technical Site part of campus. The latter essentially captures the movement of students from Residential part of campus to the Technical part where lecture theatres, laboratories and other facilities are located.

Count onto Campus	Apr 2013 Count (onto campus)	Nov 2013 Count (onto campus)	Feb 2016 Count (onto campus)	May 2017 Count (onto campus)	Oct 2017 Count (onto campus)
Cars (single occ.)	82%	75%	74%	82%	68%
Car Sharers	6%	7%	11%	6%	10%
Motorbike	0%	0%	0%	0%	1%
Bus	6%	11%	11%	7%	13%
Cycling	3%	4%	3%	3%	6%
Walking	1%	2%	1%	1%	1%
Other	1%	1%	0%	1%	1%
Total	100%	100%	100%	100%	100%

Above: Results of manual traffic counts onto campus

Count onto Tech Site (including from Residences)	Apr 2013 Count	Nov 2013 Count	Feb 2016 Count	May 2017 Count	Oct 2017 Count
Cars (single occ.)	38%	32%	31%	38%	50%
Car Sharers	3%	3%	5%	3%	7%
Motorbike	0%	0%	0%	0%	1%
Bus	3%	5%	5%	3%	9%
Cycling	1%	2%	1%	1%	4%
Walking	55%	58%	58%	53%	28%
Other	0%	0%	0%	1%	0%
Total	100%	100%	100%	100%	100%

Above: Results from Traffic count onto campus (including students living in campus accommodation)

Problems or improvements identified in surveys

The 2018 travel survey asked questions as to why people use the particular mode of travel they do and what might encourage them to switch to more sustainable options. The responses to these questions are summarised below.

2018 Survey responses

Why people use cars to commute to campus

The main reasons given were time saving, reliability and lack of alternatives. However there were a significant number of responses relating to comfort and ease, cost, personal safety and needing a car for business travel. These could potentially be addressed to encourage people to try more sustainable options.

Traffic problems on commute

A number of people experienced congestion on their commute to campus, including queueing at the Crawley Road junction and at Salford. Less than half experienced problems at least once a week.

Type of car used for commuting

The majority commute with a petrol car (59%) followed by diesel (37%) and hybrid/electric (4%). It is interesting to note that 24% are considering an electric or plug-in hybrid car, with two thirds wanting an option to charge their vehicle on campus.

Travel around campus

Most people were interested in safe walking routes (68%) with 60% interested in a driverless shuttle service, 41% in a pool bike system and 31% interested in a frequent Uno bus service through campus.

Car share

Whilst most people are aware that the University is part of the national Liftshare scheme a significant proportion (31%) are not. For those wanting to car share the biggest barrier is the lack of help in finding a partner (or lack of awareness of the help available) followed by a lack of flexible working, lack of incentive and lack of an emergency lift home scheme (there is one, but clearly this needs better promotion).

Bus

The biggest reason for not using a bus service is the lack of availability where people live. For those who can access a bus service the reasons for not using are the need for a more frequent, direct and reliable service with more convenient pick up points.

Cycling

The main reason for not cycling to campus is the distance. Otherwise the key issue are safety, and a lack showers and changing facilities on campus

Motorcycle

Motorcyclists would like to see more covered and secure parking areas on campus.

Walking

For most people walking is not an option as it would be too far. For those who have the option the main request is for improved footpaths with lighting.

Switching from single occupancy car use

The most likely switch is from single occupancy car commuting to car sharing, followed closely by public transport (train/bus) and then cycling.

Main reasons for not using a car to get to campus

The main one was lack of car followed by costs saving, environmental concerns, enjoying using the alternative and health and fitness.

What would encourage the use of alternative modes of transport when travelling for work?

Better links with other public transport services, more frequent bus service, a car share database for business travel, and better provision of video conferencing on campus.

Additional Comments on other issues raised

Lighting on cycle path to village

This has been discussed with CBC Highways who have insisted that the path itself cannot be lit without also lighting the road. This will require streetlights which are not possible given the proximity of the airport runway. The alternatives of bollards or low level lighting are also not feasible.

Lockers for cyclists

New buildings are incorporating cycle facilities as part of their specification. There are also lockers at the Sports Centre which are available for cyclists. However there is a need to improve the provision of lockers in existing buildings or at least at strategic locations within the campus.

More secure cycle parking

A number of covered cycle shelters have been installed in recent years. These have been sited within view of security cameras. However older shelters particularly in the residential areas are not well served by security cameras.

Safety issues on local roads

The cycle path linking to the south of Cranfield village has been a huge benefit. Further improvements like this will be sought as opportunities arise. In the meantime when cycling on the narrow and busy roads which serve the campus cyclists should make sure they are visible to other road users.

Access to repair facilities

This is something which would help a number of students who have limited access to the right tools or necessary experience. Repair workshops have been organised in the past and more are planned for the future. The feasibility of providing access to tools and an area for repairs will be investigated.

Lack of a bike rental scheme

Much effort has gone into investigating this. The overhead of managing such a scheme is an issue. However further research should be undertaken.

Reliability of bus service

The bus contract is being renewed providing newer buses. The provision of maintenance facilities on campus for the buses should also help with the turn round of buses which have broken down.

Lack of real time information for buses

New ticketing machines on the buses will allow real time information to be provided. More work is required to enable this.

Car share spaces not policed enough

The new car parking regime provides a more robust means of checking and also penalising cars parked in the wrong place.

Dedicated cycle paths on campus

This is something which needs to be looked at along with better walking routes.

Not enough cycle racks

There are over 400 cycle parking spaces on site. This should be more than enough for the number cycles currently used. However these hoops are not all in the right locations. Also as the use of bikes for getting around campus increases then more hoops outside all buildings will be required.

More cycle paths off campus

The new Air Park provides an opportunity to gain a cycle path to the North of the Cranfield village. Further opportunities to develop cycle paths linking further afield need to be explored with local councils and Sustrans.

Sheltered walking routes

Some of the new buildings provide cover which could be useful for certain walking routes. To provide covered walkways for other routes is likely to be expensive but if opportunities arise then these should be considered.

Safer crossing points over College Road

There have been discussions with Central Bedfordshire Council to look at safer crossings for College Road.

More dedicated parking for motorcycles required

More motorcycle parking has been provided next to Building 41 in the centre of campus.

Identifying new measures and improvements to existing

Walking measures

Improved footpath north of airfield to Cranfield Village

The existing footpath is a grass path across fields. The proposed Air Park development has allowed for this to be upgraded to a bridleway and paved footpath/cycleway. Timing will depend on the development of the Air Park but could happen within 5 years.

Car movements within campus reduced

The removal of car parking spaces from the centre of campus and relocation to the periphery is helping to reduce the car movements within the centre of campus. It is also by default increasing the amount of walking on campus. This shift in modes needs to be encouraged and monitored. The enforcement of car parking permit restrictions in the centre of campus would also ensure that cars parked on the residential part of campus are not moved and parked on the technical part of campus.

Improved key walking routes on campus

Safer, more convenient walking routes need to be defined and improved. Wayfinding, safer crossing points, pleasant and interesting surroundings would all enhance and encourage walking across campus. Pedestrian routes should be given priority within the campus.

Walking maps

Routes in and around the campus including out into the neighbouring countryside would help encourage more walking for health and well-being.

Disabled Access

The provision of dropped kerbs and the strategic placing of car parking spaces for disabled should be reviewed.

Cycling measures

Improved routes

Cycling around campus can be confusing with a number of cyclist resorting to cycling on footpaths. Clearer cycling priorities need to be worked out and cycling on footpaths discouraged unless those paths are specifically designated as for cycling and pedestrians.

Better facilities for commuters

The number of showers in key locations needs review. In most cases there are no or insufficient lockers and not enough drying or changing space. Funding needs to be sought to invest in better cycling facilities.

More hoops distributed around campus

For movement from one building to another there is a need for hoops at each building. This is in addition to larger covered cycle storage for longer distance cycle journeys.

Clearer guidance and training

A cycling policy for the campus needs to be developed to ensure improved security for bikes, safer cycling behaviour and improved support and facilities.

Better security measures

Cycle shelter security needs reviewing particularly in the residential area. The Bike Registration scheme needs developing further to deal with lost bikes.

Cycle loan scheme

The option for students and staff to hire bikes or access bikes on a long term loan scheme need to be further investigated.

Provision of pool bikes

Staff required to travel across campus on a regular basis should have access to a bike they can use. The feasibility for a scheme to encourage this needs developing.

Cycle maintenance

Cycle maintenance support for students in particular needs to be developed. Currently maintenance workshops are held every 2 months.

Government “Cycle to Work Scheme”

This not currently supported because of the administrative overhead. However this should be reviewed periodically to see whether the benefits now make it worthwhile.

Motorbike measures

Parking

Parking spaces have recently been added in the centre of campus. However there do not currently provide secure hitching points nor do they provide cover. This needs to be further developed.

Lockers

Lockers and drying area for wet weather gear need to be provided.

Incentives

People using a motorbike to travel to campus will reduce congestion on the roads. They will also help reduce carbon emission as motorbikes are usually much more efficient than cars. Centralised motorbike parking will help to incentivise the use of motorbikes.

Public Transport measures

Bus shelters

Central Bedfordshire Council have installed two new bus shelters at the main bus stop. The University installed one on the University Way bus stop. However a further bus shelter is required at the Innovation Centre bus stop.

Priority lane at main bus stop

Central Bedfordshire Council Highways have agreed to look at making the short road where the main bus stop is located a bus only route.

Taxis

Rapid electric chargers have been installed with taxi use in mind. Further opportunities to make taxi facilities available and easier to use should be investigated.

Real time displays

Central Bedfordshire Council have agreed to install real time displays on the main bus stop and another location on site.

Demand Responsive Transport

Uno are developing a Demand Responsive Transport (DRT) option.

Partnerships and Subsidy

Uno operate a bus service for Cranfield University with funding to ensure low staff and student bus fares. The contract for this service has just been extended. The relationship between Uno and the University is a close one with Uno based on site. A facility to provide basic maintenance space on site is being developed. Further collaboration and partnership working should be developed.

New services and routes

The opportunity to develop new routes and services should be continually reviewed.

Sustainable car use measures

Encourage electric cars

There are currently two rapid charging point on campus. The feasibility of more charging points for staff is also being developed.

Increase car sharing

The reorganisation of car parking on site provides the opportunity to incentivise car share. This will be through allocating car share only car parking in convenient locations nearer to where people work. Further work is also required to promote car sharing.

The use of video conferencing

Video conferencing facilities are provided both in meeting rooms and direct from the desktop. All staff on the Cranfield Campus have Skype for Business installed with cameras and audio devices available for purchase at low cost. Use of conferencing facilities should be encouraged to reduce both business travel and traffic between the Cranfield Campus and Shrivenham, where staff also have access to conferencing facilities within meeting rooms and can request Skype for Business installation on university owned equipment.

Promotion and Management Measures

Communications strategy

A communications strategy needs to be developed. This should highlight existing and proposed measures.

Travel Plan Coordinator

The Travel Plan Coordinator role rests with the Energy & Environment Manager.

Ensure Travel Plan is approved by the Board for Energy & Environment

The Travel Plan was presented and approved by the Board for Energy & Environment in 2018. It will be reviewed on an annual basis.

Register Travel Plan with Central Bedfordshire Council

The Travel Plan will be registered via iOn Travel.

Maintain and improve travel portal

The existing travel portal on the intranet needs to be reviewed and updated. More information needs to be made available on the web site.

Targets

As for the previous plan the overarching target for Sustainable Travel has to be the reduction in single occupancy car use or commuting. Single occupancy car use causes congestion and increases both local and global emissions. For the previous plan the target was set for staff commuting to the Cranfield Campus. This was partly because the 2012 travel survey did not get a very good response from students. For this five year plan the target is set in terms of overall commute to the Cranfield Campus. This includes students and tenants living off site as well as staff.

The target is set for 53% single occupancy car commuting and significant reduction on the current level which has been relatively constant for 4 years. There was step change between 2012 and 2014 with the introduction of the Uno bus service and the new cycle lane to the village boosting bus use, cycling and walking. Since then single occupancy car use has not reduced. So to further reduce it over the next 5 years will be challenging. However small increases in car sharing, bus use and cycling should make it achievable.

Objective	2012	2018	Target 2023
Singe occupant car commuting	70%	59%	53%
Car share	13%	11%	14%
Motorbike	1%	1%	1%
Public Bus/Demand Responsive Transport (DRT)	7%	18%	20%
Cycling	6%	7%	8%
Walking	2%	3%	3%
Other	1%	1%	1%
Total	100%	100%	100%

Above: Outcome targets for model shift in transport measures by 2023

Implementation & timescales

Travel Plan Target	Measure	Responsibility	Date
Travel Plan Management and Promotion	Appoint Travel Plan Coordinator	Board for Energy & Environment	September 2018
	Develop Communication Strategy	Energy & Environment Manager	November 2018
	Improve Travel Portal	Environmental Coordinator	Ongoing
	Automatic vehicle, cycle and pedestrian counting	Energy & Environment Manager	August 2020
Increase walking	Car movements within campus reduced	Facilities	March 2019
	Disabled access review	Facilities	Ongoing
	Improved foot/cycle path north of airfield to Cranfield Village	Air Park Development	March 2022
	Improved key walking routes on campus	Facilities	November 2018
	Walking maps	Environmental Coordinator	December 2018
Increase cycling	Better facilities for commuters	Facilities	Ongoing
	Better security measures	Facilities	September 2019
	Clearer guidance and training	Environmental Coordinator	November 2018
	Government "Cycle to Work Scheme"	Finance	March 2019
	Improved routes	Facilities	March 2019
	More hoops distributed around campus	Facilities	September 2019
	Provision of pool bikes	Energy & Environment Manager	September 2019

Motorbike measures	Incentives	Energy & Environment Manager	March 2019
	Lockers	Facilities	September 2019
	Parking	Facilities	March 2019
Increase use of Public Transport	Bus shelters	CBC	September 2019
	Demand Responsive Transport	Energy & Environment Manager	September 2019
	New services and routes	Energy & Environment Manager	March 2020
	Partnerships and Subsidy	Finance	March 2022
	Priority lane at main bus stop	CBC	December 2018
	Real time displays	CBC	November 2018
	Taxis	Energy & Environment Manager	March 2019
Sustainable car use	Review options to improve car share and encourage electric cars	Energy & Environment Manager	March 2019

Above: Implementation and timescale with action measures and responsibility

Monitoring & Review


Surveys

The University is committed to having a staff and student survey travel survey every two years. This is supplemented with manual traffic counts at least twice a year. The latter should be supplemented or replaced with automatic traffic logging as soon as practical.

Review progress

The progress of the Travel Plan is to be reviewed by BEE annually. Also a report is to be submitted to Central Bedfordshire Council as required via iOnTravel.

Document Control

Document Title	Travel Plan
Document no	CU-ENV-PLAN_01
Version no	2.1
Originator name/document owner	Gareth Ellis, Energy & Environment Manager
Professional Service Unit/Department	Energy & Environment Team, Facilities
Implementation/effective date	November 2018
Date of last review and version number	June 2021 (v.2.1)
Date of next review	June 2022
Standards Reference	ISO14001
Signature	
Name	Professor Phil Hart
Title	Chair of Board for Energy & Environment

Document Review

Version	Amendment	By	Date
2.1	Added 'MKU: Improve travel links to MKU (Milton Keynes University campus)	Gareth Ellis	28.06.21



Sustainable Travel Policy

Policy Statement

The University is committed to taking action to achieve net zero by 2030 whilst undertaking research to reduce emissions across all its Themes. Our research and teaching on transport including aviation requires us to engage and support these sectors in achieving net zero.

This policy statement indicates our intent to introduce a culture of sustainable travel to help us achieve our net zero goal. It includes business travel, commuting, and international student travel.

Travel is a difficult area to address as a global university that engages with organisations worldwide through research, field trips, conferences and collaborations and that has its own global research airport. In this context we recognise that some travel is necessary to carry out research and our wider institutional work.

In line with our vision to become a globally valued university for sustainability, our Ambition 2027 goals, and our environmental strategy, we want people to look for every opportunity to do things differently, so that travel only happens when it is essential, and it has the lowest possible carbon impact. We also recognise that our research is aimed at finding sustainable solutions to achieve net zero.

Context

In 2022, Cranfield signed the Sustainable Development Goals Accord, which committed us to combating poverty, inequality, climate change, environmental degradation, and promoting peace and justice. We also created a new Vision statement, to become a globally valued university for sustainability through our education, research and operations; and launched a new Corporate Plan, Vision 2027, creating impact together [Introducing Ambition 2027 - Ambition 2027 - Cranfield University's Corporate Plan \(foleon.com\)](#) with sustainability at its heart. Reducing scope 1, 2 & 3 emissions is therefore a priority for Cranfield as well as for key industries we partner with and applies to all our Themes.

This Sustainable Travel Policy statement will apply to all travel on University business, commuting and international student travel from 15 July 2024 and should be read in conjunction with:

- Business Travel guidance on booking travel - [Business travel \(cranfield.ac.uk\)](#);
- Overseas Travel procedure

Approach

The University is committed to providing adequate resources to meet the objectives set out in Cranfield's Sustainable Business Travel Plan and our Campus Travel Plan addressing commuting - [Sustainable travel and transport \(cranfield.ac.uk\)](#).

To be successful the University needs everyone who works, studies or lives on campus to help achieve this policy, in particular by:

- considering whether they need to travel or whether virtual alternatives could be used;
- choosing the most sustainable travel option;
- considering the carbon footprint of their travel; and
- sharing suggestions for reducing the carbon impact of travelling

The Energy and Environment Committee (EEC) oversees the University's Travel Plans and holds regular reviews to ensure that adequate progress is being made against these main targets, taking remedial action if not.

The Energy & Environment Team in Facilities coordinates and delivers travel reduction management (including carbon offsetting measures), with support from relevant working groups, reporting progress to EEC.

This policy is communicated within the University and available to the general public, students and all persons working for, in or on behalf of the University.

Where to go for help

If you require any help or advice on any aspect of this policy, please contact the Energy and Environment team green@cranfield.ac.uk. Information can be requested in an alternative format using this e-mail address if required.

Approved:


Date:

9 July 2024



Professor Karen Holford
Chief Executive and Vice-Chancellor

Document control

Document title	Travel Policy CU-ENV-POL-05
Originator name/document owner	Gareth Ellis
Professional Service Unit/Department	Facilities Energy and Environment Team
Implementation/effective date	9 July 2024
Approval by and date	University Executive, 18 June 2024
Date of last review and version number	New policy
Date of next review	01 July 2025
Signature	
Name	Karen Holford
Title	Chief Executive and Vice-Chancellor
Information categorisation	Open
Where is this policy/procedure published?	Externally (on the University website)

Policy

Title: Sustainable Travel and Transport Webpage

Description: Sustainable Travel and Transport Webpage

Date: 17/10/2024

Language: British English

Sharing Rights: Public

Scope: All travel by staff and students

Number Of Pages: 1

Publisher: Cranfield University Energy and Environment Team

Enforcement Date: 31/12/2023

Revision Date: 31/12/2024

Media: Webpage

URL:

• <https://www.cranfield.ac.uk/our-sustainable-university/sustainable-travel-and-transport>

Public Media

Title: Student Charter

Description: Student Charter

Date: 21/10/2024

Language: British English

Sharing Rights: Public

Author: Cranfield University

Degree Of Recognition: Local

Media Name: Cranfield University Website

Media Type: Webpage

Duration: 1 page

Published Date: 01/07/2020

URL:

• <https://www.cranfield.ac.uk/study/student-charter>

Public Media

Title: Our Values Webpage

Description: Webpage about Cranfield University's Values

Date: 21/10/2024

Language: British English

Sharing Rights: Public

Author: Cranfield
University

Degree Of Recognition: Local

Media Name: Cranfield
University Website

Media Type: Webpage

Duration: 1 page

Published Date: 31/12/20
23

URL:
• [https://www.cranfield.ac.uk/
about/values](https://www.cranfield.ac.uk/about/values)

Public Media

Title: Ethical Principles

Description: Webpage detailing the Ethical Principles guiding
Cranfield University policies

Date: 21/10/2024

Language: British English

Sharing Rights: Public

Author: Cranfield
University

Degree Of Recognition: Local

Media Name: Cranfield
University Website

Media Type: Webpage

Duration: 1 page

Published Date: 01/03/20
23

URL:
• [https://www.cranfield.ac.uk/
governance-and-policies/
policies-and-regulations/
ethical-principles](https://www.cranfield.ac.uk/governance-and-policies/policies-and-regulations/ethical-principles)

Public Media

Title: Waste Management

Description: Webpage detailing Waste Management measures being taken on Cranfield University campus

Date: 21/10/2024

Language: British English

Sharing Rights: Public

Author: Cranfield University

Degree Of Recognition: Local

Media Name: Cranfield University Website

Media Type: Webpage

Duration: 1 page

Published Date: 31/12/2023

URL:
• <https://www.cranfield.ac.uk/our-sustainable-university/waste-and-recycling>

Public Media

Title: Biodiversity and Grounds

Description: Webpage detailing plans to increase the biodiversity on Cranfield University campus

Date: 21/10/2024

Language: British English

Sharing Rights: Public

Author: Cranfield University

Degree Of Recognition: Local

Media Name: Cranfield University Website

Media Type: Webpage

Duration: 1 page

Published Date: 31/12/2023

URL:
• <https://www.cranfield.ac.uk/our-sustainable-university/biodiversity-and-grounds>

Policy

Title: Environmental Policy Statement

Description: Environmental Policy Statement

Date: 21/10/2024

Language: British English

Sharing Rights: Public

Scope: Environmental Strategy

Enforcement Date: 01/10/2022

Revision Date: 01/10/2023

Number Of Pages: 2

Publisher: Cranfield University

Media: Document

Policy

Title: Climate Change Adaptation Statement

Description:

This document sets out recommendation for Climate Change Adaptation planning and actions for Cranfield University up until 2030.

Date: 21/10/2024

Language: British English

Sharing Rights: Public

Scope: Climate Change Adaptation

Enforcement Date: 07/11/2023

Revision Date: 14/03/2024

Number Of Pages: 2

Publisher: Cranfield University

Media: Document



Environmental Policy Statement

CU-ENV-POL-01
Version 6.0
Approval date: Jan 2024

Context

Cranfield University's mission is to work in partnership with business, academia, governments and other organisations to develop and deliver applied research and innovative education in science, technology, engineering, and management. It is essential that we reflect this expertise by managing, in a sustainable manner, the environmental risks, impacts and opportunities associated with our work and study. The University's Environmental Management System is certified to the internationally recognised ISO 14001:2015 standard.

Direction

Cranfield University is committed to protecting the environment and preventing pollution through our research and learning provision, and through the management of our facilities and estate. Our aim is to provide a sustainable environment in which to live, work and study, both at the University and other areas affected or influenced by our activities.

Approach

We will take all reasonably practical measures to fully integrate environmental considerations within our decision making and everyday behaviour.

We will achieve this by:

- Using a lifecycle approach to identify issues that are environmentally significant, and establishing meaningful objectives, targets and programmes to address them
- Working together to put practical environmental management arrangements in place
- Mainstreaming environmental excellence into everything we do, including business planning and decision-making processes
- Fulfilling the University's compliance obligations, including compliance with all applicable environmental legislation and other requirements to which the University subscribes, and which relate to the University's environmental aspects
- Building the right capabilities to support our environmental aims
- Using a 'living lab' approach to create the mutual benefits of student learning, stakeholder engagement, and improved environmental performance on the University's estate
- Continually improving our environmental management system to enhance environmental performance
- Having robust contingency plans in place to minimise the impact of foreseeable environmental incidents.

We will provide the appropriate leadership, management and resources to enable this to happen, with everyone who works, studies and lives with us playing an essential part to help achieve this policy, in particular by:

- Minimising resource use and ensuring that any unavoidable waste is correctly handled, stored and disposed of
- Promptly reporting all accidents or incidents which could lead to pollution
- Sharing cost-effective suggestions for pollution prevention, waste reduction or energy conservation

This policy is communicated within the University and available to the general public, students and all persons working for, in or on behalf of the University.

Approved:

A handwritten signature in blue ink, appearing to read 'K. Holford'.

Professor Karen Holford
Chief Executive and Vice-Chancellor


Date:

18 March 2024



Environmental Policy Statement

CU-ENV-POL-01
Version 6.0
Approval date: Jan 2024

Document title	Environmental Policy Statement
Document number	CU-ENV-POL-1.00
Version number	V5.0
Originator name/document owner	Ginny Ford
Professional Service Unit/Department	Facilities Energy and Environment Team
Implementation/effective date	January 2024
Date of last review and version number	October 2022 V5
Date of this version	October 2023
Date of next review	October 2024
Standards reference	BS (EN) ISO 14001:2015
Signature	
Name	Professor Chris Fogwill
Title	PVC SWEE



Cranfield University Climate Change Adaptation Strategy

This document sets out recommendation for Climate Change Adaptation planning and actions for Cranfield University up until 2030.

UN SDG (United Nation Sustainable Development Goal) 13 sets out the need to “strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries”. The UK Department for Education set out a strategy in 2022 that by 2025 “all education settings will have nominated a sustainability lead and put in place a climate action plan” which includes climate adaptation.

Background

According to the met office, climate change is already having adverse effects on buildings and infrastructure in the UK, particularly in the South East. By 2080, it is predicted that the UK temperature would have risen by 3.3 degrees, the average summer rainfall level will decrease by - 50%, and winter rainfall levels would have increased by 10-30%. As well as high temperatures, it is predicted that the Gulf Stream, which brings warm weather to the UK is likely to slow down. This could mean winter storms and cold snaps may increase in the UK.

The UK is therefore expected to experience a complex change in temperature, increase in extreme precipitation, very dry summers, change in wind patterns, loss of biodiversity, increase in humidity and an increase in winter cold snaps. According to the UK Committee on Climate Change report 2017, climate change impacts are likely to increase on a temporal scale; flood damage to businesses is expected to increase to £1 billion by 2050s, higher temperature are expected to cause business losses of £400-500 million, and it is predicted that water demand by 2050 is likely to outstrip supply by 50% in many places in the UK.

Cranfield University has experienced what was very likely a climate change impact event in 2016, when an intense rain event created a flash flood causing widespread flooding of the campus with significant damage and costs. Subsequent work to investigate this and other possible risks included two student research projects which undertook extensive research on climate change adaptation, risks and management for infrastructure and buildings on campus at Cranfield University. The studies involved conducting interviews and focus group with relevant staff and student stakeholders.

It was determined that the main threats of climate change to the University were: overheating of research equipment and failure of experiments, power outages from equipment damage, extreme cold, spread of pollutants from the sewage treatment works and overheating of building spaces which were rated as extreme high risks. Medium risks included flooding events, drought/water shortages and increase of pest species on campus. All of which pose threats to buildings, infrastructure and occupants physical and mental health, causing delays in operations, high costs and loss of business altogether.

Aim

The overarching aim of the climate change adaptation strategy is to ensure Cranfield University can build resilience against the threats of extreme weather caused by a changing climate within its existing and future planning. This will be achieved by:

- Identifying measures to mitigate flood risk and to protect against storm damage.
- Considering options for cooling overheated spaces and equipment (including with blue/green methods).
- Water conservation efforts and drought protection
- Incorporating design to provide protection against extreme low temperatures.
- Controlling the increasing number of pest species and spread of disease in an environmentally sustainable manner.
- Considering the impacts of climate change when planning off campus activities (UK and Abroad)
- Capitalising on opportunities, for example by embedding climate change adaptation/mitigation into research and teaching.

Recommendations

Action taken towards climate change adaption should complement the 'Net Zero' target for carbon dioxide by 2030 and have minimal adverse impacts on the environment. Options which help improve environmental performance will be favoured.

The key recommendations are:

- Ensure that climate change adaptation is incorporated into University forward planning and review how it is included in the corporate risk register.
- Develop a climate change impacts register and create a 'climate change adaptation plan' with relevant targets in line with SDG 13 and UK Government strategy for climate action.
- Review existing policies, procedures and operational documents such as snow and ice, pest control and construction design guide to ensure they are taking into account climate change
- Monitor off campus activities (UK and Overseas) and the potential disruption which climate change may cause.

This document was approved by EEC (Energy and Environment Committee) and University Executive on the 07.11.2023.

Policy

Title: University Ethical Investment Policy

Description: Policy to ensure that all University investment decisions are made with a full consideration of social, environmental and governance (ESG) matters.

Date: 21/10/2024

Language: British English

Sharing Rights: Public

Scope:
Ethical Investment

Enforcement Date: 31/07/2023

Revision Date: 31/07/2023

Number Of Pages: 2

Publisher: Cranfield University

Media: Document

Policy

Title: Research Ethics Policy

Description: All research must have appropriate ethical approval, as set out in the Research Ethics Policy before data collection commences.

Date: 21/10/2024

Language: British English

Sharing Rights: Public

Scope: Research Ethics

Enforcement Date: 14/09/2016

Revision Date: 29/01/2024

Number Of Pages: 7

Publisher: Cranfield University Research and Innovations Office

Media: Document

Cranfield University

University Ethical Investment Policy

Policy

Our policy is to ensure that all University investment decisions are made with a full consideration of social, environmental and governance (ESG) matters in support of the University's mission to work in partnership with business, academia, governments and other organisations to develop and deliver applied research and innovative education in science, technology, engineering, and management.

Investment criteria

Restrictions:

The University will not invest (directly or indirectly) in companies that:

- manufacture cigarettes or tobacco products;
- manufacture arms or munitions that are illegal under Arms Control Treaties to which the UK is a signatory;
- produce pornographic material;
- are directly involved in the operation of betting or gambling operations.

Fossil Fuels:

The University will continue to invest in businesses involved in the extraction of thermal coal, oil, or gas only where they have active plans in place to meet the Paris Agreement targets.

We will seek to influence and support these businesses to decarbonise and transform through our education, research, and influence as shareholder and as a world-leading University with specialist expertise in Energy and Sustainability.

Implementation

We will ensure our asset investment practices will align with major international accords and relevant laws and legislation. In this way, Cranfield follows the UN Principles of Responsible Investment. All investment decisions will be made with consideration of social, environmental and governance criteria.

As a signatory to the UN Sustainable Development Goals Accord, Cranfield is committed to sustainability and environmental responsibility across all our operations. We take an active approach to our investments and will seek to influence and change the behaviour, where it is needed, of the companies which we invest in.

If the University assesses that a company's current activities or future plans are not aligned with this policy, and we have exhausted all possibilities for influence, we will divest.

Reporting

The University's investment portfolio is managed by the Finance Director according to this policy with the agreement of the Executive, Finance Committee and Council.

The University will ensure that this ethical investment policy and the performance of its investment portfolio are reviewed regularly and that there is a route through Finance Committee to consider representations to change this policy on ESG grounds.

Document title	University Ethical Investment Policy
Originator name/document owner	Director of Finance
Professional Service Unit/Department	Finance
Implementation/effective date	31 July 2023
Approval by and date	Executive 25 th July 2023
Date of last review and version number	July 2023 V1
Date of next review	July 2025



Research Ethics Policy

CU-RIO-POL-2.0 – V12

In achieving its overarching mission it is essential that all staff and students at Cranfield University act in accordance with the principles set out in the [Ethics Code](#).

Within this framework, all research must be undertaken with integrity. 'Research integrity' refers to high quality and robust practice across the full research process i.e. the planning and conduct of research, the recording and reporting of results, and the dissemination, application and exploitation of findings.

To demonstrate its commitment, Cranfield University is a signatory to the [Concordat to Support Research Integrity](#), and upholds its principles including the provision of public information on research integrity. Our research must be carried out in accordance with the University's Research Integrity Policy.

'Research ethics' are a subset of research integrity, focusing on the principles of avoidance of harm, within a statutory and regulatory framework.

ALL research must have appropriate ethical approval, as set out in the following Research Ethics Policy before data collection commences.

Cranfield University does not grant retrospective approval.

Research Ethics Policy

The Cranfield University Research Ethics Policy supports all members of the University in meeting ethical standards for research. This policy applies to all staff and students including visiting researchers of the University, persons holding honorary University appointments and students on placements conducting research within, or on behalf of the University. We expect that, in their research everyone will:

- Maintain professional standards which comply with ethical, legal and professional frameworks;
- Identify the possible sources of harm or discomfort for human participants which could include, psychological, social, legal or economic risk and find ways to minimize these risks.
- Obtain informed consent from human participants involved in your research.
- Properly document results as set out in the [Research Data Management Strategy](#) and the [Management of Research Data Policy](#);
- Critically evaluate results whilst maintaining integrity;
- Attribute honestly the contributions of others as set out in our [Policy on Authorship of Research Outputs](#) and [Authorship Guidance for Technical Staff](#);

- Wherever possible report all results openly, embedding integrity and ethical practice throughout, though bearing in mind the University's commercial considerations, sponsors' needs for confidentiality or other good reasons, guided by our [Open Research Policy](#);
- Ensure **ALL** research studies gain ethical approval through the Cranfield University Research Ethics System (CURES) prior to commencement of data collection; and
- Handle potential instances of research misconduct in an appropriate manner, including reporting to the appropriate person as required in line with the [Process for Implementing and Monitoring Research Integrity Policy](#).

In addition all staff will:

- Educate and develop themselves, colleagues and students to an understanding of good research practice; and
- Secure and store relevant primary data in accordance with the <https://www.gov.uk/data-protection>, the UK's implementation of the [General Data Protection Regulation](#) (GDPR).

Cranfield University Research Ethics and Integrity Committee (CUREIC)

CUREIC is responsible for the development, implementation and review of procedures and guidelines relating to research ethics. The Committee is also responsible for strategic development of the University's research integrity agenda, in compliance with the Concordat to Support Research Integrity. The committee's functions and duties include:

- Upholding the highest standards of rigour and integrity in all aspects of research and research related learning and teaching and to review progress regularly.
- Ensuring that research is conducted according to appropriate ethical, legal and professional frameworks, obligations and standards.
- Supporting an academic environment that is underpinned by a culture of integrity based on good governance, best practice and is conducive to the development of researchers.

The University has a [Safeguarding Policy](#) which staff should read in order to ensure they put in place appropriate measures to protect and safeguard the welfare of all individuals involved in research undertaken on behalf of the University.

Membership of the Committee:

Chair

Karen Stoddart (external member), Director, Regulatory and Quality, aVaxziPen Ltd

Vice-Chair - Darren Ellis, Lecturer in Air Transport Management, Cranfield University

Two representatives from the School of Management

Two representatives from the School of Water, Energy and Power and Environment and Agrifood

Two representatives from Cranfield Defence and Security

Two representatives from the School of Aerospace, Transport Systems and Manufacturing
(includes the Vice-Chair)

Director of Research and Innovation, Research and Innovation Office

Research Governance Manager, Research and Innovation Office

Education Services representative, appointed by the Academic Registrar

Head of Library Education, Research and Skills Services

Technical Representative

Chair of Human Tissue Committee

Research Student representatives from each of Cranfield's four Schools

CUREIC Secretary

Ethics and Integrity Coordinator, Research and Innovation Office

External representation

Two external lay members (minimum and in addition to the Chair). Appointments are made through open recruitment on the University web site.

CUREIC contact - Michelle Carter, Research Governance Manager – m.carter@cranfield.ac.uk

Committee's reporting to CUREC

Human Tissue Committee

The **Human Tissue Committee** reports into CUREIC to consider any issues related to the University's use of tissue in research and professional practice. Cranfield University does not hold a Human Tissue Authority Licence for work with human tissues. Hence, all work, unless fitting into one of the exceptions detailed in [Cranfield's Human Tissue Policy](#), must be done with approval by a recognised ethics authority (Note: CURES approval does not satisfy this criteria).

The University does not hold a Home Office Licence under the [Animals \(Scientific Procedures\) Act 1986 \(ASPA\)](#) so all animal research that is deemed to be invasive or which requires a Home Office Licence needs to be carried out at and in collaboration with another organisation who holds a licence.

CUREIC are updated at each meeting on issues and changes relating to the use of human tissue in research.

Defence Academy Scientific Assessment Committee

Research involving human participants, where the project is funded by the Ministry of Defence and/or involves MoD-employed staff or participants may require approval through the MoD Research Ethics Committee (MODREC). The Defence Academy Scientific Assessment Committee (Def Ac SAC) are responsible for reviewing applications to determine if full MODREC approval is required. CUREIC are updated on changes to MoD policy which may affect Cranfield ethics processes at each meeting. Further information is available on [the intranet](#).

Gaining Ethical Approval

Information for Cranfield staff and students on how to apply for ethical approval through our on-line CURES system can be found on [our Intranet](#). This includes relevant training programmes and access to a support team.

Some research projects may require approval from research ethics committees external to Cranfield. This includes the [Ministry of Defence Research Ethics Committee](#) (MODREC) and the [Health Research Authority \(HRA\)](#). H.

To determine whether your research requires external approval, and to find out more about the process for each committee, Cranfield staff and students should refer to the [intranet pages](#).

Research reviewed by external committees must also be submitted to CURES. This is of particular importance for students, who will require a CURES letter of approval for thesis submission. If external ethics approval is required, this should be sought prior to submitting a CURES application.

Where a researcher has moved to Cranfield University but has **undertaken data collection at their previous institution**, they must still submit a CURES application which includes evidence of the ethical approval granted by the previous institution.

Research involving the use of **secondary data (data collected by someone else)** still requires CURES approval. [Further guidance including examples of secondary data is available on the intranet](#).

Some research projects may require approval over more than one CURES application, for example where there are significant changes to a project requiring updated review. Researchers should review their ethics application throughout the lifecycle of the research project to ensure their ethical approval accurately reflects their research.

Literature review exemption

Where research is based solely on openly available published literature which is in the public domain (e.g. published by an 'open', including paywalled, journal), and you are undertaking desk based research (e.g. a systematic literature review, re-analysis of publications, a literature review) not involving any other form of data or information, ethical approval may not be required. However, anyone undertaking research, must still log in to the CURES system and confirm that the research is based solely on openly available published literature. You will be required to complete a declaration after which, you will then be provided with a letter through the CURES system confirming you have declared that you do not require full CURES approval.

Responsible Innovation

Responsible Innovation seeks to promote creativity and opportunities for research and innovation that are socially acceptable and undertaken in the public interest. Innovation often raises questions and the potential impact can sometimes be unpredictable.

All members of the University are expected to conduct their work in an ethical and legal manner. Researchers should reflect on their personal and professional motivations for conducting their research and be able to anticipate, reflect and engage on the wider ethical and societal impacts, implications and value of their work by engaging with the public and other stakeholders where appropriate. Those receiving funding for their work from a third party are also expected to adhere to their requirements for responsible innovation, for example: the Engineering and Physical Sciences Research Council Framework for Responsible Innovation:

<https://epsrc.ukri.org/index.cfm/research/framework/>

Additional Information

Listed are useful sources of additional information about ethics. This list will be updated from time to time. The University is not responsible for the content of these websites.

[Association of Internet Researchers: Ethics guide](#)

[British Psychological Society](#)

[BPS Code of Ethics and Conduct](#)

[BPS Code of Human Research Ethics](#)

[BPS Ethics guidelines for internet-mediated research](#)

[European Network of Research Ethics Committees \(EUREC\)](#)

[Universities UK](#)

[Security-sensitive research - UUK](#)

[Ethics in Practice: Promoting Ethical Conduct in Public Life](#), Committee on Standards in Public Life (July 2014)

[Ethics in Research and Publication](#)

[Institute of Business Ethics](#)

[The Research Ethics Guidebook](#)

[UK Research Integrity Office: Code of Practice for Research](#)

Artificial Intelligence

[Gov UK - Understanding Artificial Intelligence ethics and safety](#)

[The Alan Turing Institute](#)



[The Alan Turing Institute - Understanding artificial intelligence ethics and safety](#)

[The Hitchhiker's Guide to AI Ethics](#)

[Provisional position on Chat GPT and other education AI tools](#)

Funders

[UK Research and Innovation \(UKRI\)](#)

[GDPR for researchers](#)

[Engineering and Physical Sciences Research Council \(EPSRC\) – Research Organisations and research ethics committees](#)

[Economic and Social Research Council \(ESRC\)- Research ethics guidance](#)

Document control

Document title	Research Ethics Policy
Document number	CU-RIO-POL-2.0
Originator name/document owner	Professor Leon Terry
Professional Service Unit/Department	Research and Innovation Office (RIO)
Implementation/effective date	January 2024
Approval by and date	Research Committee, January 2024, Version 12
Date of last review and version number	July 2023, Version 11
Date of next review	January 2025
Name	Professor Leon Terry
Title	Pro-Vice-Chancellor, Research and Innovation

Document Review

Version	Amendment	By	Date
Content (table content)	Updated with new brand.	RIO	14.9.16
V4	Under heading Research and Consultancy, text amended to include research and consultancy. Web links updated.	RIO	1.12.17
V5	Reference to Data Protection Act 1998 updated to reflect introduction of GDPR and Data Protection Act 2018	RIO	25.05.18
V6	Under heading Research and Consultancy, bullet point relating to CURES amended to include prior to commencement of data collection	RIO	17.04.19
V7	Updated policy title to include integrity. New section on Responsible Innovation added.	RIO	30.8.19
V8	Changes throughout to reflect the requirements of the revised UUK Concordat to Support Research Integrity	RIO	18.11.19
V9	Details on CUREC added	RIO	2.2.21

V10	Document control updated with details of new PVC R&I	RIO	27.1.22
<u>V11</u>	Additional information on sub-committee's of CUREC Clarity on process where data is gathered at another institution and secondary data. Link to provision position on use of Chat GPT and other education AI tools	CUREC	24.7.23
V12	Additional text added on: <ul style="list-style-type: none"> - who the policy applies to - possible sources of risk to participants - obtaining informed consent Remit of the extended committee which now includes integrity New membership under CUREIC Literature review exemption added	CUREIC	29.1.24

Public Media

Title: 2030 Environment Targets

Description: Webpage detailing Cranfield University 2030 Environmental Targets

Date: 21/10/2024

Language: British English

Sharing Rights: Public

Author: Cranfield University

Degree Of Recognition: Local

Media Name: Cranfield University Website

Media Type: Webpage

Duration: 1 page

Published Date: 31/12/2023

URL:
• <https://www.cranfield.ac.uk/our-sustainable-university/our-2030-environmental-targets>



Water

Policy

Title: Water Management Policy

Description: Water Management Policy

Date: 14/10/2024

Language: British English

Sharing Rights: Public

Scope: Water Management

Enforcement Date: 01/07/2023

Revision Date: 01/11/2023

Number Of Pages: 2

Publisher: Cranfield University

Media: Document



Water Management Policy Statement

CU-ENV-POL-03
Version 1.0
Approval date: Jul 2023

Policy Statement

Cranfield University is committed to achieving net zero carbon by 2030 along with a 50% reduction in water usage on its estate¹ from a 2010 baseline. We recognise that many aspects of our operations use water. We are therefore committed to reducing water use, promoting water efficiency and considering water re-use measures through education and research, our operations and our ambitions. All staff, students, consultants and contractors are expected to collaborate to deliver water consumption reductions and efficiencies.

Context

The UK could face serious water shortages within the next 25 years as our population grows, and climate change brings hotter, drier summers. Without positive action on increasing supply, demand reduction and a significant reduction in wastage the UK could see future supply deficits across the entire country or focused on specific regions.

Environmental sustainability and climate change are amongst the greatest issues facing societies globally in the twenty first century: Addressing this challenge is a major focus of Cranfield's research and teaching activities and a key responsibility for the staff, students, and governors of the University. In 2022, we signed the Sustainable Development Goals Accord, which committed us to combating poverty, water and food shortages, inequality, climate change, environmental degradation, and promoting peace and justice. We also created a new Vision, to become a globally valued university for sustainability through our education, research and operations; and launched a new [Corporate Plan, Ambition 2027, creating impact together](#) with sustainability running throughout it. We are measuring our sustainability success through participation in the Times Higher Education Impact Ranking which looks at progress against the UN Sustainability Development Goals.

Approach

The University is committed to providing adequate resources to meet the objectives set out in Cranfield's Water Management Plan ([CU-SHE-PLAN-05 Water Management Plan V1.1.pdf \(cranfield.ac.uk\)](#))

To be successful the University needs everyone who works, studies or lives on campus to help achieve this policy, in particular by:

- being aware of how much water they are responsible for using
- preventing waste by turning off taps and all other equipment when not needed
- sharing suggestions for cost-effective improvements in water management
- ensuring we deliver our water management plan
- reviewing our water management plan annually
- communicating our progress
- educating and informing our communities [staff, students, contractors, visitors] of water resources as being one of our highest priorities

¹ Includes COTEC but Shrivenham estate is excluded.



Water Management Policy Statement

CU-ENV-POL-03
Version 1.0
Approval date: Jul 2023

The Energy and Environment Committee EEC oversees the management of water use across the University estate and holds regular reviews to ensure that adequate progress is being made against these main targets, taking remedial action if not.


The Energy & Environment Team in Facilities coordinates and delivers water management, with support from relevant working groups, reporting progress to EEC.

This policy is communicated within the University and available to the general public, students and all persons working for, in or on behalf of the University.

Where to go for help

If you require any help or advice on any aspect of this policy, please contact Ceri Dawson

Document Control

Document title	Water Policy Statement
Document number	CU-ENV-POL-03
Version number	1.0
Originator name/document owner	Ceri Dawson
Professional Service Unit/Department	Facilities Energy and Environment Team
Implementation/effective date	July 2023
Date of last review and version number	N/A
Date of this version	July 2023
Date of next review	November 2023
Standards reference	N/A
Information categorisation	Open
Where is this policy/procedure published?	Externally (on the University website)
Signature	
Name	Professor Christopher Fogwill
Title	Chair of the Energy and Environment Committee

Document Review

Version	Amendment	By	Date
1.00	First published version (no amendments).	Chris Thompson	

Policy

Title: Water Management Webpage

Description: Water Management Webpage

Date: 14/10/2024

Language: British English

Sharing Rights: Public

Scope: Water
Management

Number Of Pages: 1

Publisher: Cranfield
University

Media: Website

Enforcement Date: 01/07/
2023

Revision Date: 01/07/202
4

URL:

• [https://www.cranfield.ac.uk/
our-sustainable-university/
water-management](https://www.cranfield.ac.uk/our-sustainable-university/water-management)

2. In which areas does the PRME Signatory Member or its governing parent institution set aspiration targets? Mark all that apply.

☒

 Greenhouse gas emissions

Statement

Title: Annual Environmental Report 2022/2023

Description: Annual Environmental Report 2022/2023

Date: 21/10/2024

Language: British English

Sharing Rights: Public

Relevant Stakeholders: Cranfield University

Purpose: University

Statement

Title: Streamlined Energy and Carbon Report

Description: Streamlined Energy and Carbon Report

Date: 21/10/2024

Language: British English

Sharing Rights: Public

Relevant Stakeholders: Cranfield University

Purpose: University

☒

 Internal transportation



Annual Environmental Report 2022 / 2023

Energy and Environment Committee



Cover picture of group of volunteers who helped to plant Miyawaki Forest (see page 20)
Photo by Earthwatch UK

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Statement

Professor Chris Fogwill, Chair Energy and Environment Committee



Our vision is to be valued globally for tackling the real-world issues of today to deliver a sustainable future. We work in partnership with business, academia, governments, and other organisations to develop and deliver applied research and innovative science, technology, engineering and management.

Here, the Energy and Environment Committee (EEC) reports progress on our environmental targets. This is largely focused on the performance of our estate and facilities. Our academic contribution to sustainability is featured on the University website. Given the University undertakes world leading research and learning on sustainability and the environment it is important that we are reflecting this in our operations. Key performance indicators highlighted below and through the report are correlated with the Times Higher Education Impact Awards criteria giving an indication of the contribution to the UN Sustainable Development Goals (SDGs).

We remain indebted to our staff and students who contribute to our on-going improvements and to our Energy and Environment Team, Energy and Environment Committee and working group members who lead and coordinate our combined efforts. We are grateful for the on-going support of our contractors who help with the efficient running of the estate.

Key performance indicators

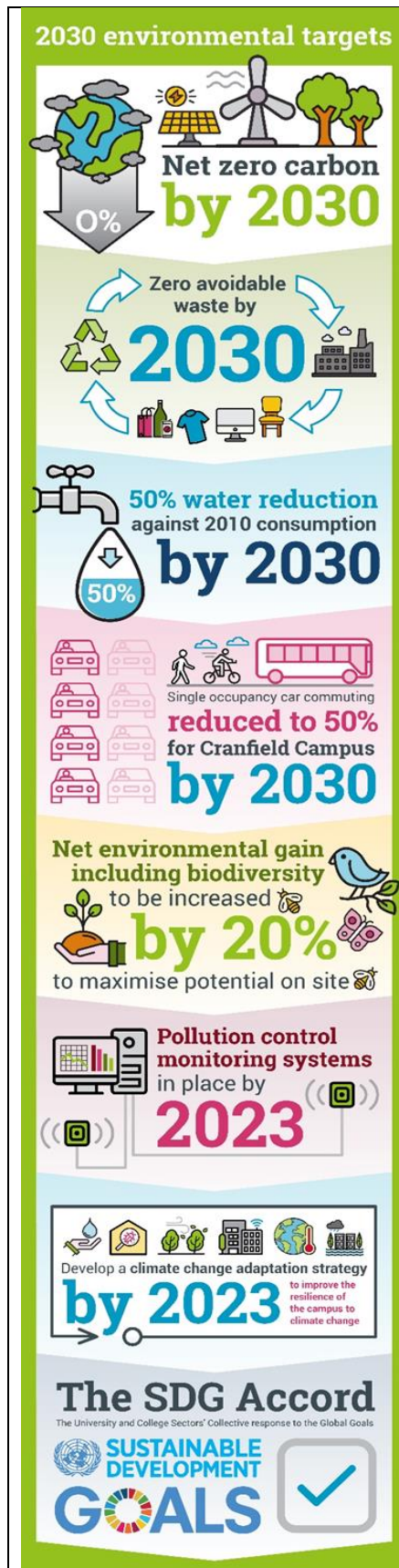
Issue	Description	Latest	Previous	SDG Contribution	Status	Comments
Carbon	Scope 1&2 emissions tCO2	9,532	9,612	THE – SDG* 13.4.1	A	1% reduction year on year
Carbon	Energy efficiency GJ/m2	0.82	0.90	THE - SDG 7.3	G	More efficient use of energy
Carbon	Renewable energy GWh	3,023	3,298	THE - SDG 13.2.3	A	Reduction in biomass output
Waste	Avoidable waste %	18%	18%	THE - SDG 12.2.4	A	Waste which could have been reduced, re-used or recycled
Waste	Total waste tonnes	988	1052	THE - SDG 12.3.2	G	Decrease despite including Conference Hotel for first time
Travel	Commuting alone by car %	38%	35%	THE - SDG 11.4.1	G	Continuing impact of working from home
Water	Water consumption m3/head	34.4	34.4	THE - SDG 6.2.2	R	No progress
Biodiversity	Biodiversity Action Areas ha	9.0	8.6	THE – SDG 15.2.3	G	In addition, 320 trees planted and additional hedging

Above: table shows key performance indicators for our environmental targets and progress, including SDG (Sustainable Development goal) contribution and comments.

* THE-SDG refers to the Times Higher Education Impact Awards Sustainable Development Goals categories.

Note: There are more indicators and objectives highlighted under each section in the report.

Environmental Targets



In 2020 the University Council committed to a new set of environmental targets. The strategy for delivering these targets can be found at:

<https://www.cranfield.ac.uk/about/our-sustainable-university/our-2030-environmental-targets>

The targets are to be achieved by academic year 2030/31. They include All Cranfield University activities including the activities of any subsidiaries including MK:U.

The aim of the Net Zero Carbon target is to reduce Scope 1 and 2 carbon emissions as quickly as possible through energy saving and renewable energy. Any remaining emissions will require other measures. The strategy for Scope 3 emissions is still being developed and these emissions will be included as deemed appropriate for the sector.

The Zero Avoidable Waste target aims to minimise waste ending up in landfill or going for incineration and embraces the application of circular economy principles.

The water reduction target aims to be consistent with best practice and future supply pressures in this part of the UK.

The sustainable commuting target continues to focus on promoting alternatives to the car. Walking, cycling and bus are the main options.

Biodiversity will benefit from the new target ensuring any development on site results in a net environmental gain. The masterplan for the University sets out areas for new buildings and also a wildlife corridor where new habitats can be established.

The application of sensors on campus through the Urban Observatory is helping with the monitoring of air, water and soil. This will be developed in the short term to set out new pollution control monitoring and targets.

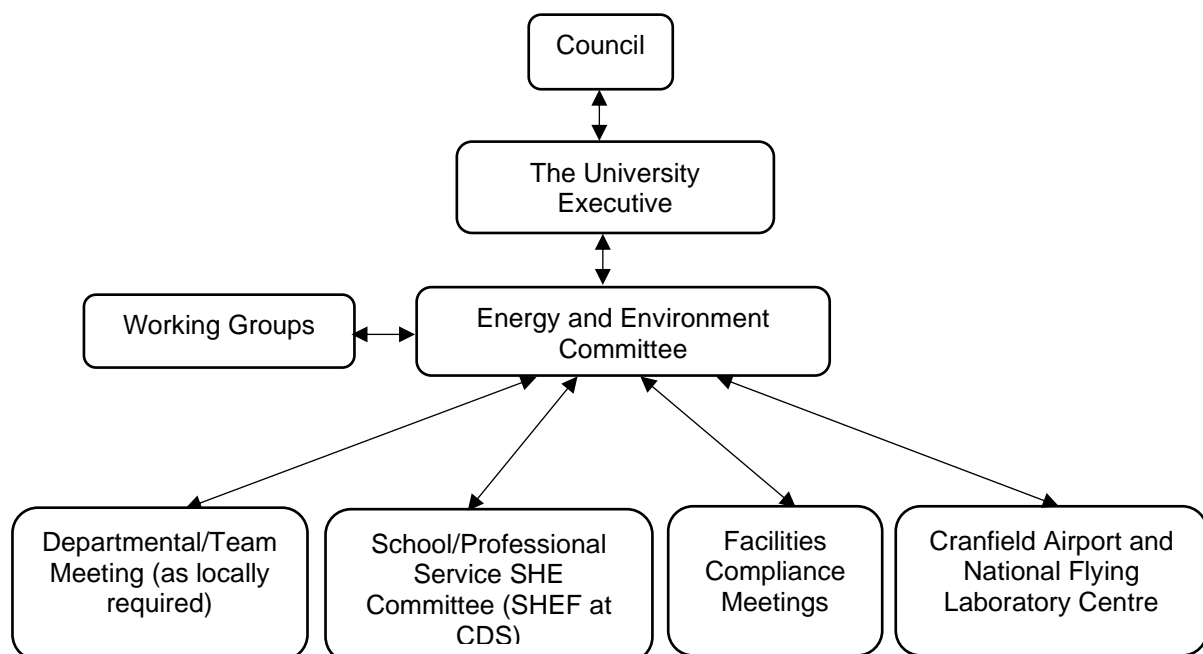
The risks of climate change impacts on the University are being investigated. This will be developed into a climate change strategy.

The University has signed the SDG Accord. This has led to more focus on the SDGs and how the university's contribution can be better communicated and developed.

Quality assurance

Governance

The Energy and Environment Committee (EEC) reports to the Cranfield Executive and Council on energy and environmental management issues. The priority of the Committee is to ensure Cranfield University demonstrates a leading capability in environmental performance by providing oversight and direction. The Committee is a sub-committee of the Executive and consists of senior managers from across the University along with student representation and members of the Energy and Environment Team. The Committee has working groups, with members drawn from operational and academic staff and students, to progress key environmental objectives. A dedicated Energy and Environment team facilitates delivery of the objectives and reports progress towards target to the Committee on a regular basis. The Committee aims to ensure a close relationship between EEC's environmental activities across the University and the teaching, learning and research taking place within the Themes on environmental best practice. The Governance structure is outlined below.



Above: Diagram shows governance structure for the Energy and Environment Committee

ISO 14001:2015

Cranfield University operates a university wide environmental management system. The system provides a framework for managing our environmental impacts, risks, and opportunities, for setting environmental objectives and establishing programmes to achieve them. The scope of the certification covers all University operations including Cranfield Defence and Security at the Shrivenham and COTEC sites.

A successful re-certification audit was carried out by BSI in May 2023. In a climate of continuous improvement, the reporting of all environmental incidents and near misses is encouraged.

ISO 50001:2018

Cranfield University operates a university wide Energy Management System, which provides a framework for managing our energy use. The scope of the certification covers all University operations on the Cranfield campus, Cranfield Defence and Security at the COTEC site and MK:U at Bouverie House. Recertification was achieved in July 2021, with surveillance audits taking place in July 2022 and July 2023.

Scope of reporting

The environmental targets on page 4 encompass activities taking place on the Cranfield Campus, including subsidiary companies and tenants on site (*see Notes section near end of document*). The University's operation at the Cranfield Ordnance Test & Evaluation Centre (COTEC) is included. The University is not directly involved in the management of Shrivenham Campus, so the University activities there do not contribute to the key performance indicators such as carbon emission in this report (*see Notes section near end of document*).

Other reporting

In line with the Higher Education Statistics Association (HESA) requirements, the University submits environmental data as part of the annual estate management reporting statistics. This data attempts to exclude tenant data and differs slightly from the data that appears in this report. Under the new Streamlined Energy and Carbon Reporting (SECR) rules, which replaced the Carbon Reduction Commitment (CRC) Energy Efficiency scheme in 2020, the University reports its annual carbon emissions in the University's annual Finance report. That data includes all primary energy use by the University Group, all imported electricity use and all fuel put into University owned vehicles or private or hire vehicles used for Business Travel.

Data submitted to HESA is also used by the '*People and planet University League*' (a student-led, People and Planet voluntary league table of University environmental performance). In People and Planet's University League, comparisons are made per student or per m² total floor area. Cranfield is a wholly Postgraduate University undertaking industrial scale research. This makes environmental impacts per student or per m² appear high. This annual report focuses on how the environmental performance of the University is improving over time. The University is also participating in the THE (Times Higher Education) Impact Awards. The contribution of the environmental management of the university estate to the SDGs in line with the THE criteria is highlighted in this report.

Base year recalculation policy

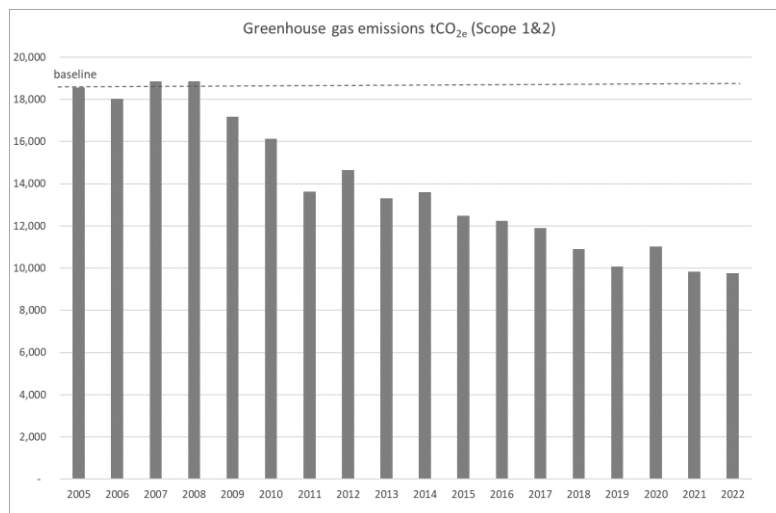
Our base year figures for reporting are reviewed from time to time to ensure like for like reporting. (*see Notes section near end of document*).

Carbon and Energy



Progress

Current Scope 1 and 2 emissions are 9,532 tonnes CO₂. A small reduction compared with the previous year at 9,612 tonnes. Recent investments in renewable energy and energy efficiency infrastructure have yet to take effect. These potentially add up to emissions savings of over 3,000 tonnes of CO₂ and will become apparent over the next two years as the new systems bed in and are optimised. The measures include replacing gas boilers with air source heat pumps, adding buildings to the campus district heating system, improved heating and ventilation controls, insulation, LED lighting, solar photovoltaic installations, and a large battery.



Above: Graph showing the amount of greenhouse gas emissions in tonnes of carbon dioxide equivalent scope 1 and 2, from 2005 to 2022. Graph shows a downwards decrease in emissions with time.

Note: Year 2005 runs from August 2005 to July 2006, etc.

Energy trends and efficiency

Total energy used has decreased for a second year, although the longer-term trend is slightly up. Nevertheless, the overall energy efficiency continues to improve with less energy used per building floor area. Renewable energy generation remains high with the enlargement of the solar farm and increased operation of the biomass boiler. The University does not currently purchase “green” electricity as typically green electricity offered on the UK market does not provide additionality. The University is however exploring Power Purchase Agreements for new renewable energy electricity which does provide new capacity.

	2019/20	2020/21	2021/22	2022/23
Total energy used (kWh)	44,841,986	50,176,963	48,022,909	44,050,024
Renewable energy generated/used (kWh)	2,138,441	2,236,208	3,297,839	3,022,661

Above: table shows total energy used in kWh and renewable energy generated/used in kWh, year on year, from 2019/20 to 2022/23. Renewable energy generated has increased with time.

	2019/20	2020/21	2021/22	2022/23
Total energy used (GJ)	161,431	180,637	172,882	158,580
Floor area (m2)	169,005	185,856	192,495	193,201
Energy efficiency (GJ/m2)	0.96	0.97	0.90	0.82

Above: table shows total energy used in GJ, total floor area in m², and energy efficiency per floor area in m² from 2019/20 to 2022/23 showing an increase in energy efficiency per m² with time.

Scope 3 emissions

The measurement of Scope 3 emissions relies largely on third party data based on spend and there is a lag in obtaining and verifying realistic information. As soon as figures are available this report will be updated.

The University has established a Scope 3 working group to develop our reporting, guided by the Standardised Carbon Emissions Framework (SCEF) established in December 2022 by the Environmental Association for Universities and Colleges (EAUC) the environmental and sustainability champion within Further and Higher Education in the UK and Ireland.

Infrastructure

In early 2022 an £11 Million bid to Public Sector Decarbonisation Scheme secured funding for the insulation of the two large aircraft hangars, further improvements to the district heating with an additional air source heat pump and an additional solar PV array. This has now been largely delivered and complements the district heating project undertaken in 2021/22. The two projects combined are projected to save 3,000 tCO₂.

A further £4 Million bid to Public Sector Decarbonisation Scheme has secured funding for further improvements to the district heating adding a large heat store and extending the network to the residential estate. Detailed planning for this project is underway and installation will proceed in 2024.



Above: photos of hangar 2 (building 84) insulation including cladding and improved hangar doors.



Above: photo of new solar farm installed on disused car park early 2023

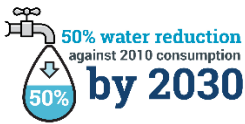
Table of SDG KPIs relating to Carbon & Energy

The SDG indicators below are taken for the Times Higher Education (THE) Awards criteria. The measures are what the university is doing to meet that indicator.

THE reference	Indicator	Measures	Comments
7.2.1	Energy and Efficient Renovation and Building	New buildings are assessed to the BREEAM standard	Key measures are being incorporated into University design guide / standards to address refurbishments / renovations
7.2.2	Plans to upgrade energy efficiency of buildings	These are set out in the annual Energy & Carbon Plan	See on website: https://www.cranfield.ac.uk/about/our-sustainable-university/carbon-and-energy-management
7.2.3	Carbon management and emission reduction process	This is set out in the annual Energy & Carbon Plan	See above
7.2.4	Plan to reduce energy consumption	This is set out in the annual Energy & Carbon Plan	See above
7.2.5	Energy wastage identification	This is set out in the annual Energy & Carbon Plan	See above
7.3.1	Energy use density- Total energy used per floor space	Ratio 0.82GJ/m ²	Energy used 158,580 GJ Floor space 193,201 m ²
13.2.1	Low carbon energy tracking	Solar 1.38 GWh Biomass 1.64 GWh	Renewable energy generated and used on site.
11.4.8	New build standards	New buildings are assessed to the BREEAM standard	
11.4.9	Building on brownfield sites	The University is using brownfield for new buildings	This is set out in the campus Masterplan
13.2.2	Total energy used	42,451,366 kWh	
13.2.3	Total energy used from low carbon sources	3,297,839 kWh	Note "Green Electricity" is not purchased as typically this does not provide additionality
13.3.2	Climate Action Plan	Energy & Carbon Plan on website	Climate adaptation strategy being developed
13.4.1	Commitment to carbon neutral university	Net zero carbon by 2030 target	Includes scope 3, but exact definition being developed
13.4.2	Carbon neutrality date	2030	

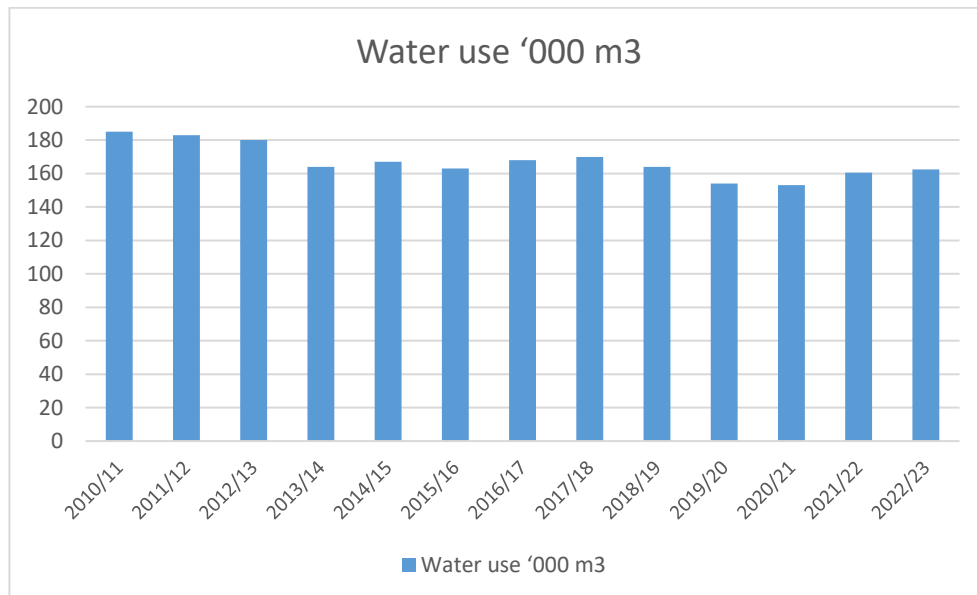
Above: Table of SDG KPIs (key performance indicators) relating to Carbon & Energy reduction

Water



Work has continued to improve water metering and monitoring on the main Cranfield Campus and to encourage the reporting of leaks, so they can be dealt with promptly. Several large leaks were identified on both the technical and residential sides over the last year. Some were linked to frost damage over the Christmas period and others were due to mechanical failures.

A number of urinals were also found to be flushing excessively and timers have been adjusted to reduce the amount of water used. A dedicated section on water saving is included in the Canvas Environmental Awareness Induction, and this has been rolled out to all our students. Water saving tips have also been promoted amongst our staff and student Green Teams. The university has published a Water Management Plan and a Water Management Policy Statement on its website. These give details of the approaches it is taking to reduce potable water use.



Above: graph showing water usage in Cubic Meters from 2010/11 to 2022/23. The total usage has dropped slightly, although not significantly. **Note:** the water consumption figure for 2022/23 is estimated due the failure of the main supply meter.

	2020/21	2021/22	2022/23
Total water used (m3)	153,481	160,580	162,478
Staff & Students (FTE)*	4,241	4,671	4,726
Water use efficiency (m3/staff&student)**	36.2	34.4	34.4

Above: Table shows year on year comparison of water use and efficiency

*Includes Cranfield campus, excludes Shrivvenham. ** Excludes other Cranfield campus residents such as student partners and children and staff residing on site. The number for these in 2022/23 was 245.

Table of SDG KPIs relating to Water

The SDG indicators below are taken for the Times Higher Education (THE) Awards criteria. The measures are what the university is doing to meet that indicator.

THE	Indicator	Measures	Comments
6.2.1	Water consumption tracking	Water consumption reduction is key target;	Does not currently include water used by Cranfield University at Shrivenham as water metering and consumption is not under the University's control.
6.2.2	Water consumption per person	34.4 m3/person	162,478 m3 4,726 persons
6.3.1	Wastewater treatment	Wastewater is treated on site	
6.3.2	Preventing water system pollution	Procedures include Spill Prevention and Response, Discharge to Sinks and Drains:	Controlled through ISO 14001 certified environmental management system
6.3.3	Free drinking water provided	Drinking water fountains and filtered water dispensers	
6.3.4	Water conscious building standards	BREEAM assessment on new buildings Compliance with Building Regulations	University Design Standards being enhanced and developed.
6.3.5	Water conscious planting	Plantings are made at the appropriate time of year to avoid water stress	Guidance on suitable drought tolerant plants for the site is being developed
6.4.1	Water reuse policy	A water management policy has been developed and published	Options for water reuse and recycling are being explored
6.4.2	Water reuse measurement	None	This is still in the pilot stage
6.5.2	Promoting conscious water usage	Water conservation is promoted on campus	A project promoting efficient shower usage. Canvas Environmental Awareness module

Above: Table of SDG (Sustainable Development Goals) KPIs relating to water reduction, measures, and comments

Resources and Waste



The university is committed to putting the principles of the Circular Economy into practice by putting processes in place to:

- prevent materials from becoming waste in the first place
- ensure waste that is created is recycled, composted, or sent for anaerobic digestion and not sent to landfill or incineration*.

*Recyclable, compostable or digestible waste that ends up in the residual waste stream (waste sent for landfill or incineration with or without energy recovery) is defined as AVOIDABLE.

Avoidable Waste

The overarching target is to reach Zero Avoidable Waste by 2030. The starting point is to gather information on the materials ending up in the residual waste stream and use best management practices to apply the waste hierarchy to these materials: prevent, reduce, reuse, and recycle.

The audit of recycling and residual general waste bins around the different functional areas of the campus from residential to technical buildings has not happened this year due to contractor staff availability. However this requirement will be written into the new contract going forward to enable audit, analysis and action to take place in 23-24. Previous audit data has been used to calculate avoidable waste figure for 22-23. Of the 998 tonnes of waste produced, 47% was segregated on site and either reused, recycled, composted or sent for anaerobic digestion. Avoidable waste is 18% of total waste. Tonnages are summarised in the figure on the next page.

Total waste

Total waste produced by the Cranfield campus over 22-23 was less than the previous year.

	2021/22	2022/23
Total waste (tonnes)*	1,052	988**
Staff & Students (FTE)***	4,671	4,726
Waste per staff & student FTE (tonne/person)	0.23	0.21

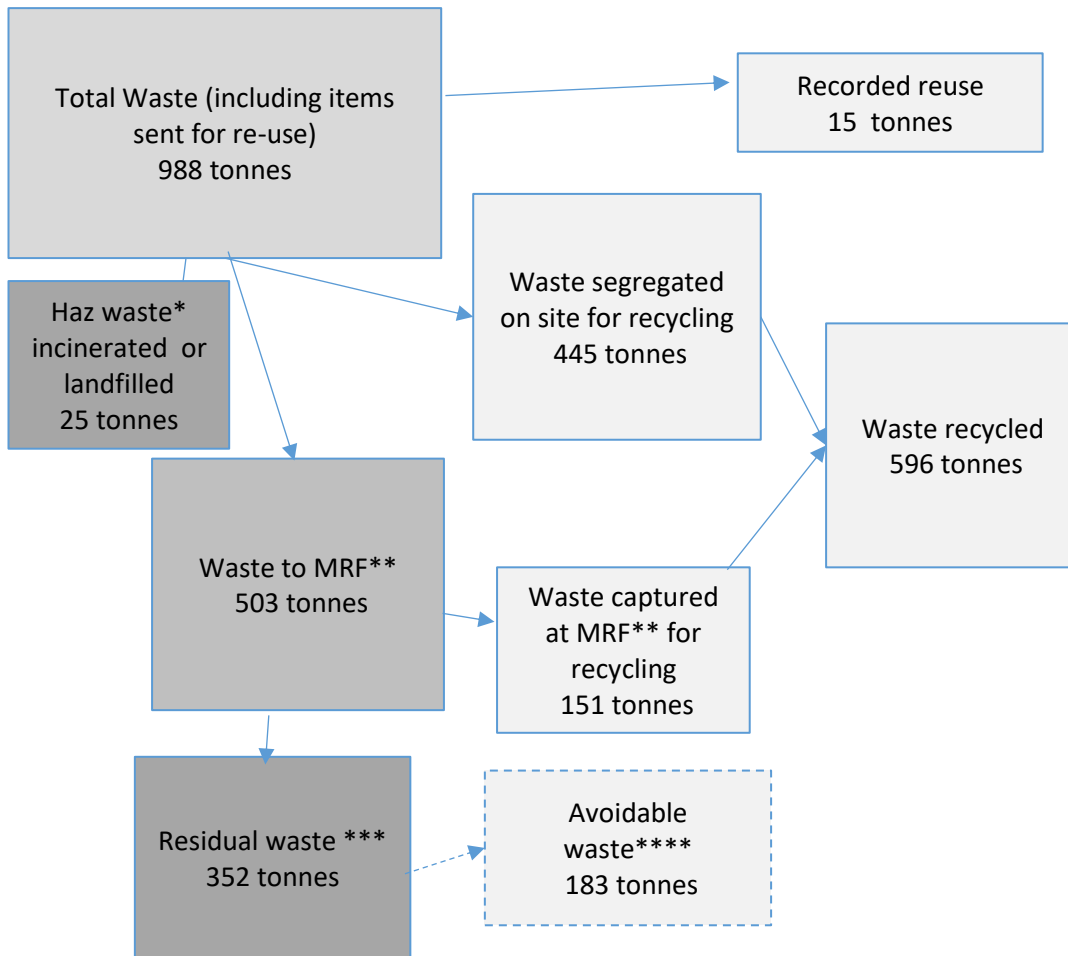
Above: Table showing total waste, number of staff and students, and waste per staff/students for years 2021/22 and 2022/23

*Cranfield campus waste only, not including construction waste from development sites.

**22-23 figures include for the first time tonnages from CCCL (85 tonnes). Future reports may amend previous year data to include CCCL estimate.

*** includes Cranfield and MKU, excludes Shrivenham. Excludes other Cranfield campus residents such as student partners and children and staff residing on site. The number for these in 2022/23 was 245.

Where the waste goes



Above: The diagram shows the breakdown of total waste generated on campus, and how it is managed. 445 tonnes of waste is segregated on site for recycling, and 503 tonnes of waste is sent to Cawley's Materials Recycling Facility (MRF). 183 tonnes of waste disposed of in general waste could have been recycled.

Notes: This data is from tonnage information provided by the University's waste contractor. It does not include construction waste from development sites. The avoidable waste figure is based on 2 audits representing 1% of the total residual waste. In future years further audits will be scheduled to gain confidence in the results.

*Haz waste – hazardous waste which is not recyclable. 5.9 tonnes biomass boiler ash landfilled and the remainder incinerated.

**MRF – Material Recycling Facility.

***Residual waste – waste which is sent for incineration with energy recovery and landfill (0.5 tonnes bulky waste landfilled and the remainder energy recovery).

****Avoidable waste – waste which could have been recycled.

Sustainable food and beverage policy

Developed by Sustainable Food working group the policy has been approved and commits to drive progress with aims such as reducing single use plastics and packaging, and operating catering services in accordance with the waste hierarchy.

Recording and monitoring of pre-consumer food waste from catering outlets

The University's Campus Services has placed reduction targets on food waste in an effort to reduce food being wasted during food preparation and service.

Food wastage (% revenue)

Area	Reduction Target 22/23	Achieved	Reduction Target 23/24
Conference Centre	2.5%	1.92%	1.75%
Mitchell Hall	3.0%	2.79%	2.5%
Cranberries	1.0%	1.27%	1.25%
Overall	2.5%	2.28%	2.0%

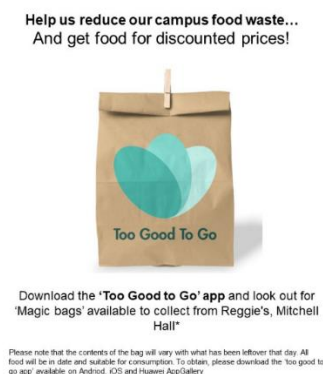
Above: The table shows Campus Service's food waste reduction targets per centre with progress made

Spotlight on disposables

The University's Cranfield Management Development Centre (CMDC) has removed the bottled water from bedrooms, and guests are encouraged to use the tap water which has been certified as potable. This has removed an average of 20,000 bottles from use annually in the CMDC. Mitchell Hall and CMDC operations between them have removed approximately 220,000 disposable cups and 51,000 lids from use in favour of reusable cups.

Note: these figures are based on usage at the height of disposable usage which was adversely affected by the covid pandemic

The student Green Team worked closely with staff to promote the reduction of disposable cup use and the use of 'Too good to go' as a scheme to reduce food waste. Efforts to continue reductions in disposable single use plastics are ongoing, this includes take away cutlery being replaced with stainless steel loan cutlery in catered student rooms.



Reuse of resources

The university's objective to increase the amount of items reused has seen steady progress, made possible by the university's relationship with re-use organisations, Reyooz, Milton Keynes Play Association (MKPA) and Unigreenscheme. These are items such as furniture and equipment which would otherwise have been sent for disposal.

The 22-23 student moveout campaign saw a continued arrangement with the British Heart Foundation's 'Pack for Good' campaign and The NEED Project. The donations provide much needed items for the charity shops and families in need in the local area.



Above: diagram showing total donations and money raised for British Heart Foundation in 2022 following the end of year student moveout. This shows that 5 tonnes of items were diverted from general waste and sent to British Heart Foundation shops for resale.

Procurement of resources

We are working to strengthen our procurement processes to include circular economy principles and sustainability requirements at each procurement stage. One example is our new furniture contract with PRS Office Furniture. They provide a five step approach to sustainable furniture provision: sourcing, fit for purpose, lifespan, delaying end of life through reuse, and recycling.

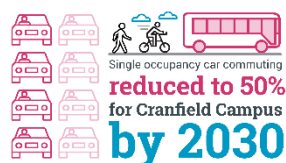
Table of SDG KPIs relating to Resources & Waste

The SDG indicators below are taken for the Times Higher Education (THE) Awards criteria. The measures are what the university is doing to meet that indicator.

THE	Indicator	Measures	Comments
12.2.1	Ethical sourcing policy	Promoting Fair Trade	Sustainable Food and Beverage policy adopted
12.2.3	Hazardous waste disposal policy	Procedures in place handling and disposal of hazardous waste	Hazardous waste procedure adopted
12.2.4	Disposal to Landfill policy	Target to monitor what goes to landfill/incineration and what can be recycled	Waste Code of Practice adopted
12.2.5	Minimisation of plastic	Single use plastics promotion	Waste Code of Practice adopted
12.2.6	Minimisation of disposable items	Single use plastics policy	Waste Code of Practice adopted
12.2.7	Extending disposal policies to supply chain	Currently ask suppliers for their environmental policies	This is being developed and incorporated within procurement processes
12.2.8	Extending minimisation policies to supply chain	Currently ask suppliers for their environmental policies	This is being developed and incorporated within procurement processes
12.3.1	Waste tracking Amount of waste generated and recycled across the university	Waste and recycling figures made available on web site. Whole university / partial coverage	Figures in annual environmental report. Does not currently include Shrivenham site as waste management is not under the control of Cranfield University. Does not include COTEC. Aiming to include COTEC 23/24
12.3.2	Amount of waste generated (tonnes)	tonnes	
12.3.2	Amount of waste recycled	tonnes	This figure includes tonnage sent for energy recovery , which is not included in the figures published on page 13
12.3.2	Amount sent to landfill	tonnes	
12.4.1	Sustainability Report	SDG reporting on web site: https://www.cranfield.ac.uk/sustainable-development-goals . Also report to EAUC for SDG Accord annually.	

Above: Table of SDG (Sustainable Development Goal) KPIs relating to Resources & Waste

Sustainable Commuting



Travel Survey

A travel survey in early 2023 confirms the trend seen in 2021 and the impact of working from home on the commute to Cranfield campus. There is a significant impact on the single occupancy car journeys and to a lesser extent the bus journeys.

Journeys/week	2011/12	2013/14	2015/16	2017/18	2021/22	2022/23
Car alone	70%	58%	59%	59%	35%	38%
Car share	13%	11%	13%	10%	5%	7%
Motorbike	1%	1%	1%	1%	0%	1%
Bus	7%	19%	13%	18%	14%	13%
Cycle	6%	8%	8%	7%	5%	4%
Walk	2%	3%	5%	3%	3%	2%
Other	1%	1%	2%	1%	5%	3%
Working at home *Avoided journeys					34%	29%

Above: Table shows percentages of staff and student travel modes from 2011/12 to 2022/23 according to travel survey data. Note that most staff travel to campus by 'car alone' if not working from home.

Uno Bus

The Uno bus service which connects the University to Bedford and Milton Keynes is subsidised by the university for staff and students to use. It is a public bus service and so the local community also benefit from a much more frequent and comprehensive service than anywhere else in rural Bedfordshire. Despite severe restrictions during the Covid pandemic, the service has bounced back and is busier than ever.

Uno set up a stand for welcome week to promote the bus service and provide the students with travel and ticketing information. Several meetings were held with student representatives throughout the year to answer queries and plan improvements to the service. Engagement with students has been ongoing through social media.

Cycling support and development

The cycle paths to the north and south of campus continue to provide a safer cycling and walking option for staff and students living in Cranfield village. The connectivity with National Cycle Route 51 also provides an option for those prepared to cycle from further afield.

Cycle Saviours continue to provide maintenance 'pop-up workshops' once a month along with the sale of reconditioned bikes. They offer training and employment in the form of an apprentice scheme to those not in school or employment. They salvage old bicycles and what cannot be refurbished is used for repairs or recycled.

In September and October 2022, Cycle Saviours held bicycle sales at Stafford Cripps. All students that attended were advised about road safety for cycling and walking particularly at night. Each student that attended was given a high visibility reflective vest and a leaflet about cycling at the university. Bicycles were also registered on the University cycle registration scheme established to keep track of bicycle owners.



Above: photos of Cycle Saviours carrying out repairs on bicycles and refurbished bicycles for sale

Table of SDG KPIs relating to Sustainable Transport

The SDG indicators below are taken for the Times Higher Education (THE) Awards criteria. The measures are what the university is doing to meet that indicator.

THE	Indicator	Measures	Comments
11.4.1	Sustainable commuting target	Travel plan and surveys; Target reduce single occupancy car commuting to 50% by 2030	Assuming working from home counts as avoided journeys then this target is already met
11.4.2	Sustainable commuting promotion	Support for local bus service, cycling repair workshops, membership of liftshare	The University has a budget which helps to subsidise bus travel and support cycling and car share
11.4.3	Allow remote working	University allows up to three days/week working from home	This has had a big impact on the daily commuting figures
11.4.6	Pedestrian priority on campus	Zebra crossings at all key crossing points	Next year traffic calming being introduced on College Road

Above: Table of SDG (Sustainable Development Goals) KPIs relating to Sustainable Transport

Green Spaces and Biodiversity



The Cranfield campus is a wildlife rich setting, providing opportunities for students, staff and visitors, to enjoy the benefits of experiencing biodiversity. As a landowner and a centre of learning the University has a responsibility to conserve protected species and 'practise what we teach'. Biodiversity will benefit from the new target of 'Net Environmental Gain including biodiversity to increase by 20% to maximise potential on site' by ensuring any development on site results in a positive impact on biodiversity. The masterplan for the University sets out areas for new buildings and also a wildlife corridor where new habitats can be established.

Areas have been targeted for biodiversity actions such as the brook, woodland and several grassland areas. The total biodiversity action area increases year on year with over 9 ha or 10% of the Cranfield Campus seeing some action to increase biodiversity including the expansion of "no mow" areas.



Above: photo of biodiversity flower plot near building 44. This is one of the many wildflower plots on campus.

Sustainability garden

The garden is an area set aside to showcase and develop sustainable gardening practices. Gardening Club, introduced in autumn 2021 has gone from strength to strength this year with active student involvement.



Above: photo of students enjoying the Sustainability Garden

Bee hives

The Grounds contractor Nurture Landscapes continue to maintain bee hives on site. They have held bee awareness days and a honey harvesting event. Honey sales are donated to charity.

Trees

In February 2023, we worked with Forest of Marston vale to plant over 320 trees and 800 hedging whips around Fedden house field as part of the 'Trees for Climate' scheme. Additionally, we worked with Earthwatch Europe to establish a 'Tiny (Miyawaki) Forest' on campus during March 2023. This accounts for over 600 trees and hedges planted into an area the size of a tennis court, and serves as a part of a nationwide and international project to plant trees to mitigate climate change and to improve biodiversity. A further 20 trees were planted on the main site as part of the 'Queens Green Canopy'. Once matured, trees planted should account for an total of 10,504 square meters area covered.



Above (top left clockwise): Photo of trees planed behind Fedden House for the 'trees for Climate scheme', tree planted for 'Queens Canopy' project, students surveying the Tiny (Miyawaki) Forest, and photo of the Tiny Forest after completion.

Table of SDG KPIs relating to green spaces and biodiversity

The SDG indicators below are taken for the Times Higher Education (THE) Awards criteria. The measures are what the university is doing to meet that indicator.

THE	Indicator	Measures	Comments
14.4.1	Water discharge guidelines and standards	The water treatment works has a discharge consent	Pollution monitoring of the main watercourse through campus is being developed
14.4.2	Minimisation of plastic plan	Single use plastics promotion	Waste Code of Practice
14.5.1	Minimising alteration of aquatic ecosystems	The main watercourse through campus is managed to enhance biodiversity as part of grounds maintenance	
14.5.2	Monitoring the health of aquatic ecosystems	Pollution monitoring of the main watercourse through campus is in place	This needs further development
15.2.1	Events about sustainable use of land	Regular biodiversity walks around campus	
15.2.2	Sustainably farmed food on campus	Sustainable Food and Beverage Policy. Vegetable and fruit production in sustainability garden	Garden only for demonstration and community engagement
15.2.3	Maintain and extend current ecosystems biodiversity	Target for 20% net environmental gain including biodiversity for new developments; Biodiversity Action Plan	Biodiversity Action Plan needs updating
15.3.1	Sustainable use, conservation, and restoration of land policy	This is covered in the Biodiversity Action Plan	Biodiversity Action Plan needs updating
15.3.2	Monitoring endangered species	This is covered in the Biodiversity Action Plan	Biodiversity Action Plan needs updating
15.3.3	Local biodiversity included in planning and development	Target for 20% net environmental gain including biodiversity for new developments	
15.3.4	Alien species impact reduction policy	This needs to be included in the Biodiversity Action Plan	Biodiversity Action Plan needs updating
15.4.1	Water discharge guidelines and standards	The water treatment works has a discharge consent	Pollution monitoring of the main watercourse through campus is being developed
15.4.2	Minimisation of plastic policy	Single use plastics promotion	Code of practice being developed
15.4.3	Hazardous waste disposal policy	Procedures in place handling and disposal of hazardous waste	Code of practice being developed

Above: Table of SDG (Sustainable Development Goals) KPIs relating to green spaces and biodiversity

Climate Adaptation



A strategy for Climate Adaptation has been developed and is awaiting University Executive approval.

Pollution Monitoring and Control



Cranfield Urban Observatory, with its campus-wide sensor network, is a key component of the Living Laboratory and facilitates research projects, securing links between the expertise, facilities and overall capabilities of our unique campus. As part of this, air, water, and soil sensors have been deployed across the Cranfield campus with the capability of monitoring a wide range of potential pollutants. Data is used both in teaching and learning and as a mechanism to monitor potential pollution on the Cranfield campus. Further analysis will produce baseline parameters from which we can work from in 23-24.

Community Involvement

2022-2023 was a great year for staff, student and local community engagement. At the start of the academic year, we hosted a popular evening bat walk and set up the Energy Champions network- a keen group of staff and research students who supported us on our mission to save energy on campus. This launched with a workshop session, and was followed up by fortnightly catch-ups. To aid the Energy Champions, a Systemslink online dashboard portal was set up for all to use.

During November, we hosted a variety of events for staff and students as part of our Green Week which included a popular talk on Hydrogen research and Development: H2@CU, a hedgehog themed raffle and cake sale event to raise money for Hedgehog Preservation Society, honey-harvesting taster events, and an off-campus Wildlife Trust conversation volunteering trip. Our enthusiastic Green Team led by Green Officer Louisa Winch, set up the first 'Clothes Swap' shop in the CSA in an effort to curb clothes waste on campus, and give to charity. Jars of honey from the Cranfield campus beehives were sold at the Christmas Fayre to raise money for the Need Project Bedford Food bank and raised over £1000.

The Miyawaki Tiny Forest was planted in February 2023 and is maintained by a group of voluntary tree keepers, who also carry out surveys. Earthwatch UK came back to campus in June to host a community open day. We continued throughout the year to engage staff and students in wildlife walks, litter picks, bee keeping experience events and Gardening Club, based within the expanding Sustainability Gardens. This year, a welcome addition to the

gardens was a bug house with an engraved plaque thanking the student Energy Champions based in Lanchester and Mitchell Hall for their efforts.

For the first time, the student Green Team organised a trip to the Grand Union canal in Cosgrove, Milton Keynes, to support Buckingham Canal Society with footpath clearance and painting as part of a wider project to restore the canal for people and wildlife. To top-up a successful year of engagement, our Green Officer Louisa Winch became a finalist for 'Student Sustainability Champion of the year' Green Gown Award. Overall, just under 1000 people were actively engaged throughout the year, and we saw many more hits via social media.

Total event engagement: 945 staff and students

Top events:

- Green Week 2022
- Tree planting (Fedden field, Tiny Forest)
- Clothes Swap Shop
- Bee keeping experience



Above: Students engaged in running a clothes swap shop at the CSA, and a raffle for 'Hedgehog Preservation Society' during Green Week 2022

Communications

There have been regular communications through social media and on the intranet. The following tables show the level of engagement:

Intranet	Hits
Average Intranet hits per month:	461

Social media followers	Followers
Instagram	862
Facebook	472
X	891

Top social media posts	Description	Hits
X	Snow picture of campus	2944
Facebook	Too good to go scheme launch	747
Instagram	'Too good to go' reel	2767

Above: Tables showing summary of staff and student engagement on the intranet and via social media.

Notes

1. **Dates:** Baseline and target years refers to the financial/academic year August to July (for example, for the Carbon target, the baseline year for carbon reporting is financial year 2005/2006 and the net zero target is to be achieved in academic year 2030/2031).
2. **Scope:** Tenants are included where it is not possible to distinguish between what is and is not a direct impact to the University as opposed to an impact of others operating on site. Examples include waste, car travel, some aspects of energy and water consumption and sewage discharges. As measurements and monitoring on site improve, this may become easier to distinguish. Additionally, the University is providing utility and other services to tenants and is in a position as landlord and service provider to influence their behaviour and assist in the reduction of their environmental impacts, whilst at the same time having an interest in minimising the risks to the University. The converse applies to the University's presence at Shrivenham. Here the University occupies space on a MOD site. For many of the targets it is not possible or appropriate to include this space as there is no operational control by the University (it is managed by MOD) and no data.
3. **Base Year Recalculation Policy:** Cranfield University will ensure that its greenhouse gas reporting is up to date, accurate and consistent with current Government guidance. In particular, when there are structural changes that have a significant effect on the baseline and the reported progress towards targets, the baseline and, if necessary, data for years in between will be recalculated.
Base year recalculation: It is important that progress is measured on a like for like basis. This means that any changes in calculation methodologies are applied to the previous figures as well as current figures.
Structural changes may include: mergers, acquisitions, and divestments; outsourcing and insourcing of relevant activities; changes in calculation methods or improvements in the accuracy of factors, such as emission, factors, or activity data that result in a significant impact on the base year figures; discovery of significant errors, or a number of cumulative errors that is collectively significant. The recalculation will be triggered and reported if the structural changes would result in a change of greater than 2% in the total baseline figure. At the same time any errors in the current year reporting greater than 2% will be amended and relevant reports updated, or notes attached explaining amendments.
4. **Changes to data:** Our carbon footprint is recalculated each year for all years in order to account for errors, changes to the scope and material changes to the conversion factors provided by DEFRA for company reporting purposes. They may not therefore compare directly with previous figures reported in the University Financial Statement. See also our baseline recalculation policy above. Note the figures exclude emissions for tenants on Cranfield Campus, Silsoe Campus, COTEC where these can be separately identified. University subsidiary companies are included. The same principle will apply to data for other targets.
5. **Water consumption and discharges figures:** These are for Cranfield Campus, including tenants. COTEC is included. Shrivenham data is not included. Discharges are taken as the average of the three consent targets.
6. **Waste figures:** These are for Cranfield Campus and include some, if not all, tenant waste. Note the key performance indicator for recycling is waste segregated on site. However, the waste contractor further segregates waste at their depot. This elevates the overall recycling performance, and it is this figure, which is reported in the HESA Estates Management Reporting.
7. **Academic expertise:** Wherever possible, the University is making use of its academic expertise and facilities to enhance its response to environmental improvement. The estate is also offering opportunities for research and teaching. Examples of this include audits carried out by students and the University laboratories to analyse local discharges. The new CHP unit is regularly used as a real life demonstration for teaching.
8. **Name:** The Energy and Environment Committee was previously known as the Committee for Energy and Environment (BEE).

Glossary

AIRC Aerospace Integration Research Centre; EEC Energy and Environment Committee; BOD Biochemical Oxygen Demand; BREEAM Building Research Establishment Environment Assessment Method; CHP Combined Heat and Power; COTEC Cranfield Ordnance Test and Evaluation Centre; CRC Carbon Reduction Commitment; DEFRA Department for Environmental Food, and Rural Affairs; EA Environment Agency; EAUC the Environmental Association for Universities and Colleges; GIS Geographical Information System; HESA Higher Education Statistics Agency; IMEC Intelligent Mobility Engineering Centre; LED Light Emitting Diode; MOD Ministry of Defence; OU Open University; PV Photovoltaic; SECR Streamlined Energy & Carbon Reporting, SHE Safety Health and Environment; SHEF Safety Health Environment and Fire; SUDS Sustainable Urban Drainage System.

Energy and Environment Committee

Members in 2022-3:

- Chair, Professor Chris Fogwill, Pro-Vice-Chancellor – School of Water, Energy & Environment
- Ian Sibbald, Director of Finance
- John Street, Director of Facilities
- Phil Longhurst, Director of Partnerships & Professor of Environment and Energy Technology
- Gareth Ellis, Head of Energy and Environment
- Christine Thompson, Corporate Planning Director
- Ginny Ford, Environment Advisor
- Ceri Dawson, Energy Advisor
- David Ford, Director of Information Services
- Geoff Say, Director of Finance and Operations CDS
- Stewart Elsmore, Director of Campus Services
- Rosina Watson, Head of Sustainable Business Group & Associate Professor of Sustainability
- Becky Shepherd, Environment Officer
- Louisa Winch, CSA Green Officer
- Abbi Legate, PA to Director of Energy (Committee Secretary)

Further information

For further information, please visit our environmental pages on the University Website:

<https://www.cranfield.ac.uk/about/our-sustainable-university>

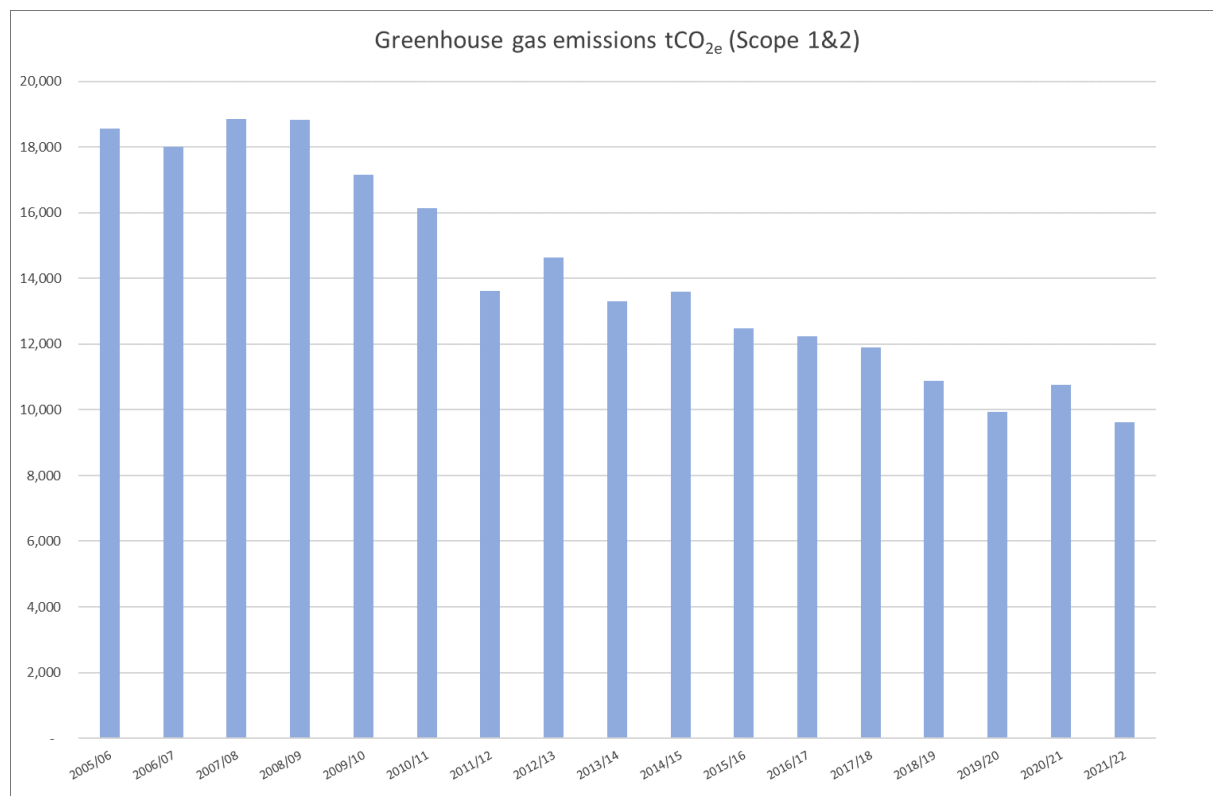
or the University Intranet: <https://intranet.cranfield.ac.uk/EnergyEnvironment/Pages/default.aspx>

If you have any questions on any other topics outlined within this report or would like to provide us with any feedback, please contact the Energy and Environment Team at green@cranfield.ac.uk.

Streamlined Energy and Carbon Reporting (SECR) 2021/2022

The University has a target to reduce its Carbon emissions to Net Zero by 2030/31 academic year. Since the implementation of carbon management planning in 2009 Scope 1 and 2 emissions have reduced steadily. They are now 49% lower than the original 2005 baseline. Our carbon footprint has been restated for previous years in accordance with Government Greenhouse Gas reporting guidelines which take account of changes in our estate and national conversion factors. This report provides energy and carbon data in line with the Governments Streamlined Energy and Carbon Reporting (SECR).

Graph of Scope 1 & 2 emission since 2005



The decrease reflects the significant investment the University has put into energy saving initiatives such as a large Combined Heat and Power unit, a new Biomass boiler, improvements to the district heating system, a solar farm and energy efficient refurbishments to the real estate. This was boosted this year with a successful bid for a Public Sector Decarbonisation Grant which has enabled an extension to the solar farm, a large-scale Air Source Heat Pump for the district heating, new Building Management System for the district heating along with other improvements, LED lighting installations and a 1 MWh battery to help balance the University's private wire network.

The emissions reported above are for scope 1 and 2 greenhouse gas emissions (excluding scope 3 electricity transmission and distribution emissions) include electricity, heating, process fuels and on-site vehicle fuels for the whole University estate but excluding activity at Shrivenham Campus which is managed by the MOD. Reporting years are from August to July. Other transport emissions and emissions associated with waste and water are not included at present although there are plans to include these within the footprint for future reports. Further information on the Carbon Management Plan can be found on the University website.

For SECR reporting purposes additional scope 3 emissions from business travel involving cars and motorbikes has been included. A breakdown of the emissions is detailed below. Note the SECR total is slightly different from the carbon management plan total shown above, because business mileage has not been included in the latter.

SECR data for 2021/2022

Fuel Type	Energy Purchased kWh		tCO _{2e}				
	2021/22	2020/21	Sc 1	Sc 2	Sc 3	2021/22	2020/21
Gas	37,835,753	48,913,762	6,907			6,907	8,959
Electricity	12,186,252	7,596,622	0	2,357	216	2,572	1,756
Biomass	2,389,428	1,325,419	31			31	20
Gas Oil	246,330	423,534	64			64	109
Aviation Turbine Fuel	641,815	456,332	160			160	113
Diesel	231,980	192,925	53			53	46
Aviation Spirit	117,323	84,471	29			29	21
Petrol	9,771	17,385	7			7	4
Burning Oil	28,363	20,587	2			2	5
LPG	1,893	1,285	0			0	0
Sub-Total	53,688,908	59,032,323	7,252	2,357	216	9,824	11,032
Business Travel (miles) (rental/employee owned vehicles where fuel is purchased)	254,122	110,013			70	70	30
Total Gross tCO_{2e}			7,252	2,357	285	9,894	11,063

The Intensity Ratio in 2021/22 for all emissions reported in table is 4.87 tCO_{2e}/£100,000 turnover. In 2020/21 it was 6.02 tCO_{2e}/£100,000 on the same basis.

Notes:

1. The methodology used follows the UK Government Environmental Reporting Guidelines. The University has an energy management system certified to ISO50001. Data from invoices is used unless this relies on estimates otherwise the University has extensive automatic meter reading and manual reading processes. Where no data is not available, estimates have been used in a few very minor instances amounting to less than 0.3% of the total. These estimates are based on existing data. The reporting period is August 2021 to July 2022. Government greenhouse gas emission factors for 2022 have been used.

2. The University generates more than half of its electricity from an on-site gas fuelled CHP with an output of 1.4 MW and also a 1.45 MW Solar farm and other smaller roof mounted PV systems. The output of the CHP in 2021/2022 was 6,877,930 kWh consuming 19,023,883 kWh of gas, and the output of the solar installations was 955,432 kWh. Note this means the overall consumption of electricity was 20,019,614 kWh.

3. More detailed information on the progress of the University towards reducing its greenhouse gas emissions and other aspects of environmental performance can be found in the annual environmental report on the website www.cranfield.ac.uk.

Environmental issues

The University is committed to sustainable development by integrating environmental issues into all aspects of its work and management processes. Environmental responsibilities are met through the management of the University's campuses and premises, through its dealings with client groups and trading partners, through the design and delivery of its academic, research and professional services and through its interaction with the local community. There is an Environmental Management System certified to ISO14001 to oversee this and an Energy Management System certified to ISO 50001. The University has several environmental targets related to the issues it faces, details of which can be found on the web site and in the Annual Environmental Report. We have made good progress towards the University's target to Net Zero Carbon with a significant reduction this year in emissions and a significant investment in clean technology through the Public Sector Decarbonisation Scheme. As part of development of the residential estate 6,000 m² of tree cover and woodland were planted, with further planting as part of the Queens Green Canopy. The University has committed to further reporting on its contribution to the Sustainable Development Goals through the THE Impact Awards. Further details have been included in the Highlights Report.

Statement

Title: Annual Environmental Report 2022/2023

Description: Annual Environmental Report 2022/2023

Date: 21/10/2024

Language: British English

Sharing Rights: Public

Relevant Stakeholders:
Cranfield University

Purpose: University



Student equity, diversity, inclusion

Statement

Title: Equity, Diversity and Inclusion Report 2022/2023

Description: Equity, Diversity and Inclusion Report 2022/2023

Date: 21/10/2024

Language: British English

Sharing Rights: Public

Relevant Stakeholders:
Cranfield University

Purpose: University



Travel

Statement

Title: Annual Environmental Report 2022/2023

Description: Annual Environmental Report 2022/2023

Date: 21/10/2024

Language: British English

Sharing Rights: Public

Relevant Stakeholders:
Cranfield University

Purpose: University



Annual Environmental Report 2022 / 2023

Energy and Environment Committee



Cover picture of group of volunteers who helped to plant Miyawaki Forest (see page 20)
Photo by Earthwatch UK

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Statement

Professor Chris Fogwill, Chair Energy and Environment Committee



Our vision is to be valued globally for tackling the real-world issues of today to deliver a sustainable future. We work in partnership with business, academia, governments, and other organisations to develop and deliver applied research and innovative science, technology, engineering and management.

Here, the Energy and Environment Committee (EEC) reports progress on our environmental targets. This is largely focused on the performance of our estate and facilities. Our academic contribution to sustainability is featured on the University website. Given the University undertakes world leading research and learning on sustainability and the environment it is important that we are reflecting this in our operations. Key performance indicators highlighted below and through the report are correlated with the Times Higher Education Impact Awards criteria giving an indication of the contribution to the UN Sustainable Development Goals (SDGs).

We remain indebted to our staff and students who contribute to our on-going improvements and to our Energy and Environment Team, Energy and Environment Committee and working group members who lead and coordinate our combined efforts. We are grateful for the on-going support of our contractors who help with the efficient running of the estate.

Key performance indicators

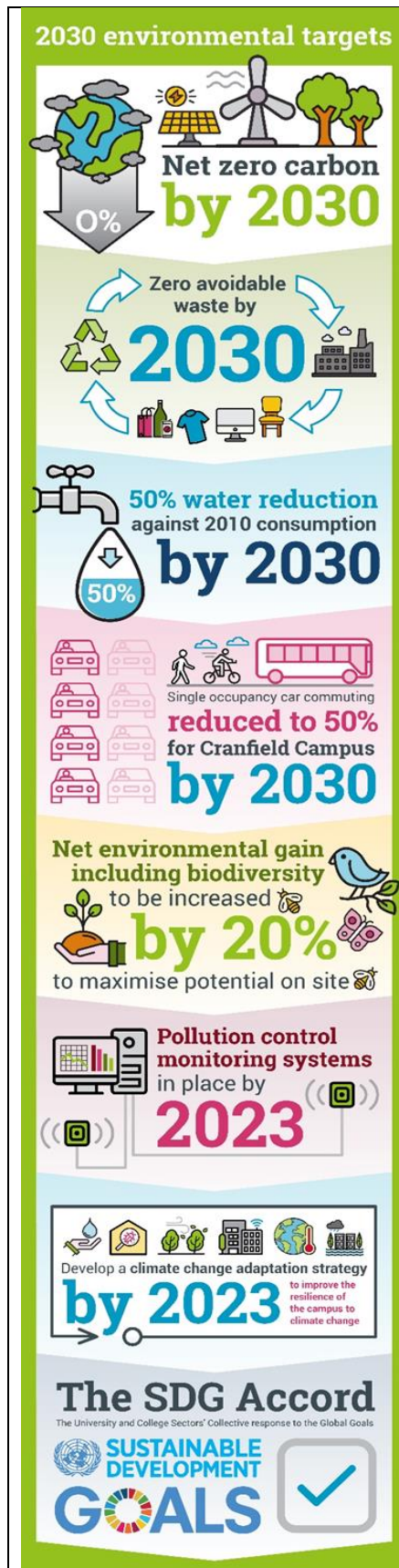
Issue	Description	Latest	Previous	SDG Contribution	Status	Comments
Carbon	Scope 1&2 emissions tCO2	9,532	9,612	THE – SDG* 13.4.1	A	1% reduction year on year
Carbon	Energy efficiency GJ/m2	0.82	0.90	THE - SDG 7.3	G	More efficient use of energy
Carbon	Renewable energy GWh	3,023	3,298	THE - SDG 13.2.3	A	Reduction in biomass output
Waste	Avoidable waste %	18%	18%	THE - SDG 12.2.4	A	Waste which could have been reduced, re-used or recycled
Waste	Total waste tonnes	988	1052	THE - SDG 12.3.2	G	Decrease despite including Conference Hotel for first time
Travel	Commuting alone by car %	38%	35%	THE - SDG 11.4.1	G	Continuing impact of working from home
Water	Water consumption m3/head	34.4	34.4	THE - SDG 6.2.2	R	No progress
Biodiversity	Biodiversity Action Areas ha	9.0	8.6	THE – SDG 15.2.3	G	In addition, 320 trees planted and additional hedging

Above: table shows key performance indicators for our environmental targets and progress, including SDG (Sustainable Development goal) contribution and comments.

* THE-SDG refers to the Times Higher Education Impact Awards Sustainable Development Goals categories.

Note: There are more indicators and objectives highlighted under each section in the report.

Environmental Targets



In 2020 the University Council committed to a new set of environmental targets. The strategy for delivering these targets can be found at:

<https://www.cranfield.ac.uk/about/our-sustainable-university/our-2030-environmental-targets>

The targets are to be achieved by academic year 2030/31. They include All Cranfield University activities including the activities of any subsidiaries including MK:U.

The aim of the Net Zero Carbon target is to reduce Scope 1 and 2 carbon emissions as quickly as possible through energy saving and renewable energy. Any remaining emissions will require other measures. The strategy for Scope 3 emissions is still being developed and these emissions will be included as deemed appropriate for the sector.

The Zero Avoidable Waste target aims to minimise waste ending up in landfill or going for incineration and embraces the application of circular economy principles.

The water reduction target aims to be consistent with best practice and future supply pressures in this part of the UK.

The sustainable commuting target continues to focus on promoting alternatives to the car. Walking, cycling and bus are the main options.

Biodiversity will benefit from the new target ensuring any development on site results in a net environmental gain. The masterplan for the University sets out areas for new buildings and also a wildlife corridor where new habitats can be established.

The application of sensors on campus through the Urban Observatory is helping with the monitoring of air, water and soil. This will be developed in the short term to set out new pollution control monitoring and targets.

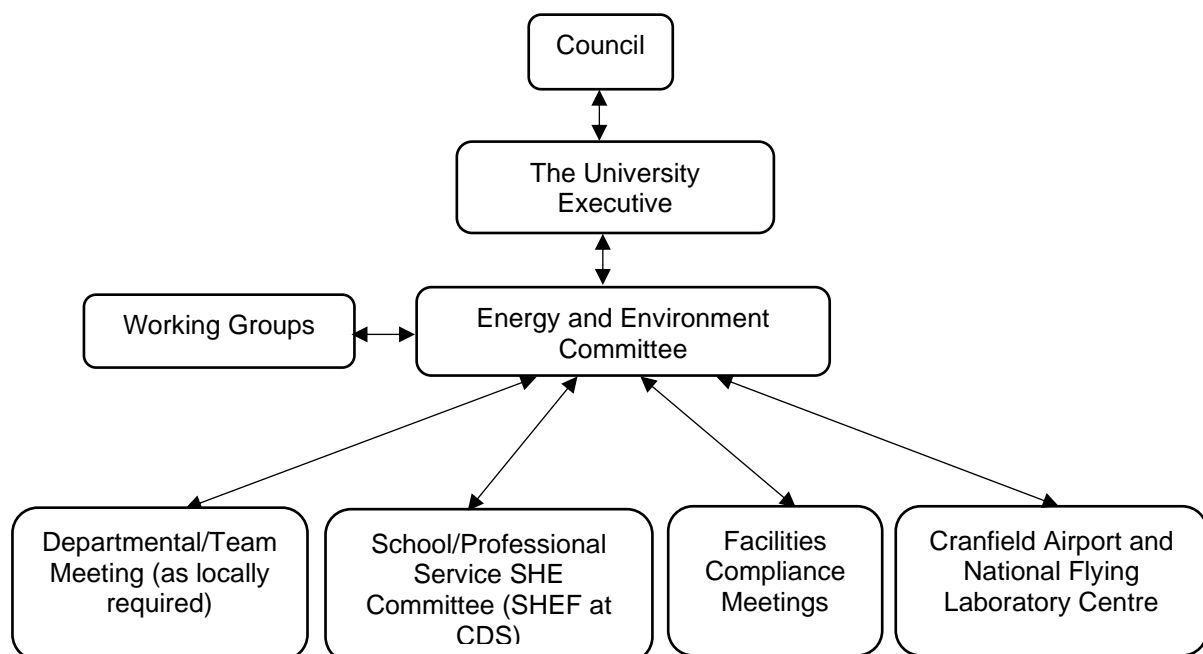
The risks of climate change impacts on the University are being investigated. This will be developed into a climate change strategy.

The University has signed the SDG Accord. This has led to more focus on the SDGs and how the university's contribution can be better communicated and developed.

Quality assurance

Governance

The Energy and Environment Committee (EEC) reports to the Cranfield Executive and Council on energy and environmental management issues. The priority of the Committee is to ensure Cranfield University demonstrates a leading capability in environmental performance by providing oversight and direction. The Committee is a sub-committee of the Executive and consists of senior managers from across the University along with student representation and members of the Energy and Environment Team. The Committee has working groups, with members drawn from operational and academic staff and students, to progress key environmental objectives. A dedicated Energy and Environment team facilitates delivery of the objectives and reports progress towards target to the Committee on a regular basis. The Committee aims to ensure a close relationship between EEC's environmental activities across the University and the teaching, learning and research taking place within the Themes on environmental best practice. The Governance structure is outlined below.



Above: Diagram shows governance structure for the Energy and Environment Committee

ISO 14001:2015

Cranfield University operates a university wide environmental management system. The system provides a framework for managing our environmental impacts, risks, and opportunities, for setting environmental objectives and establishing programmes to achieve them. The scope of the certification covers all University operations including Cranfield Defence and Security at the Shrivenham and COTEC sites.

A successful re-certification audit was carried out by BSI in May 2023. In a climate of continuous improvement, the reporting of all environmental incidents and near misses is encouraged.

ISO 50001:2018

Cranfield University operates a university wide Energy Management System, which provides a framework for managing our energy use. The scope of the certification covers all University operations on the Cranfield campus, Cranfield Defence and Security at the COTEC site and MK:U at Bouverie House. Recertification was achieved in July 2021, with surveillance audits taking place in July 2022 and July 2023.

Scope of reporting

The environmental targets on page 4 encompass activities taking place on the Cranfield Campus, including subsidiary companies and tenants on site (*see Notes section near end of document*). The University's operation at the Cranfield Ordnance Test & Evaluation Centre (COTEC) is included. The University is not directly involved in the management of Shrivenham Campus, so the University activities there do not contribute to the key performance indicators such as carbon emission in this report (*see Notes section near end of document*).

Other reporting

In line with the Higher Education Statistics Association (HESA) requirements, the University submits environmental data as part of the annual estate management reporting statistics. This data attempts to exclude tenant data and differs slightly from the data that appears in this report. Under the new Streamlined Energy and Carbon Reporting (SECR) rules, which replaced the Carbon Reduction Commitment (CRC) Energy Efficiency scheme in 2020, the University reports its annual carbon emissions in the University's annual Finance report. That data includes all primary energy use by the University Group, all imported electricity use and all fuel put into University owned vehicles or private or hire vehicles used for Business Travel.

Data submitted to HESA is also used by the '*People and planet University League*' (a student-led, People and Planet voluntary league table of University environmental performance). In People and Planet's University League, comparisons are made per student or per m² total floor area. Cranfield is a wholly Postgraduate University undertaking industrial scale research. This makes environmental impacts per student or per m² appear high. This annual report focuses on how the environmental performance of the University is improving over time. The University is also participating in the THE (Times Higher Education) Impact Awards. The contribution of the environmental management of the university estate to the SDGs in line with the THE criteria is highlighted in this report.

Base year recalculation policy

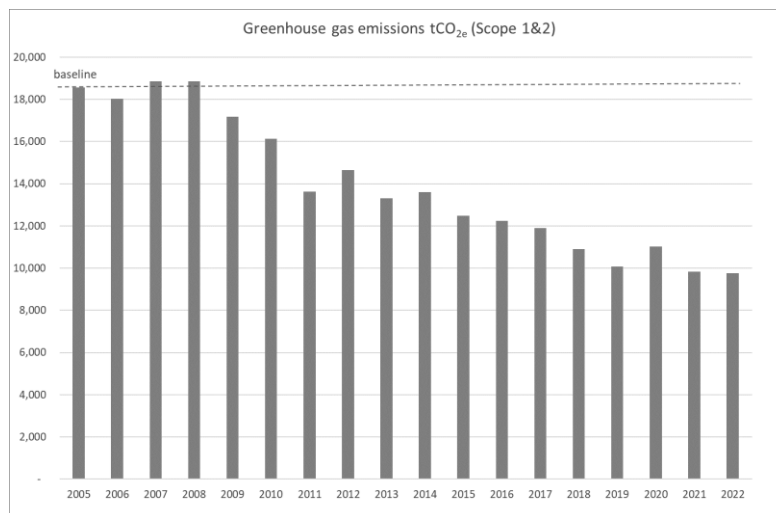
Our base year figures for reporting are reviewed from time to time to ensure like for like reporting. (*see Notes section near end of document*).

Carbon and Energy



Progress

Current Scope 1 and 2 emissions are 9,532 tonnes CO₂. A small reduction compared with the previous year at 9,612 tonnes. Recent investments in renewable energy and energy efficiency infrastructure have yet to take effect. These potentially add up to emissions savings of over 3,000 tonnes of CO₂ and will become apparent over the next two years as the new systems bed in and are optimised. The measures include replacing gas boilers with air source heat pumps, adding buildings to the campus district heating system, improved heating and ventilation controls, insulation, LED lighting, solar photovoltaic installations, and a large battery.



Above: Graph showing the amount of greenhouse gas emissions in tonnes of carbon dioxide equivalent scope 1 and 2, from 2005 to 2022. Graph shows a downwards decrease in emissions with time.

Note: Year 2005 runs from August 2005 to July 2006, etc.

Energy trends and efficiency

Total energy used has decreased for a second year, although the longer-term trend is slightly up. Nevertheless, the overall energy efficiency continues to improve with less energy used per building floor area. Renewable energy generation remains high with the enlargement of the solar farm and increased operation of the biomass boiler. The University does not currently purchase “green” electricity as typically green electricity offered on the UK market does not provide additionality. The University is however exploring Power Purchase Agreements for new renewable energy electricity which does provide new capacity.

	2019/20	2020/21	2021/22	2022/23
Total energy used (kWh)	44,841,986	50,176,963	48,022,909	44,050,024
Renewable energy generated/used (kWh)	2,138,441	2,236,208	3,297,839	3,022,661

Above: table shows total energy used in kWh and renewable energy generated/used in kWh, year on year, from 2019/20 to 2022/23. Renewable energy generated has increased with time.

	2019/20	2020/21	2021/22	2022/23
Total energy used (GJ)	161,431	180,637	172,882	158,580
Floor area (m2)	169,005	185,856	192,495	193,201
Energy efficiency (GJ/m2)	0.96	0.97	0.90	0.82

Above: table shows total energy used in GJ, total floor area in m², and energy efficiency per floor area in m² from 2019/20 to 2022/23 showing an increase in energy efficiency per m² with time.

Scope 3 emissions

The measurement of Scope 3 emissions relies largely on third party data based on spend and there is a lag in obtaining and verifying realistic information. As soon as figures are available this report will be updated.

The University has established a Scope 3 working group to develop our reporting, guided by the Standardised Carbon Emissions Framework (SCEF) established in December 2022 by the Environmental Association for Universities and Colleges (EAUC) the environmental and sustainability champion within Further and Higher Education in the UK and Ireland.

Infrastructure

In early 2022 an £11 Million bid to Public Sector Decarbonisation Scheme secured funding for the insulation of the two large aircraft hangars, further improvements to the district heating with an additional air source heat pump and an additional solar PV array. This has now been largely delivered and complements the district heating project undertaken in 2021/22. The two projects combined are projected to save 3,000 tCO₂.

A further £4 Million bid to Public Sector Decarbonisation Scheme has secured funding for further improvements to the district heating adding a large heat store and extending the network to the residential estate. Detailed planning for this project is underway and installation will proceed in 2024.



Above: photos of hangar 2 (building 84) insulation including cladding and improved hangar doors.



Above: photo of new solar farm installed on disused car park early 2023

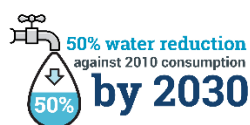
Table of SDG KPIs relating to Carbon & Energy

The SDG indicators below are taken for the Times Higher Education (THE) Awards criteria. The measures are what the university is doing to meet that indicator.

THE reference	Indicator	Measures	Comments
7.2.1	Energy and Efficient Renovation and Building	New buildings are assessed to the BREEAM standard	Key measures are being incorporated into University design guide / standards to address refurbishments / renovations
7.2.2	Plans to upgrade energy efficiency of buildings	These are set out in the annual Energy & Carbon Plan	See on website: https://www.cranfield.ac.uk/about/our-sustainable-university/carbon-and-energy-management
7.2.3	Carbon management and emission reduction process	This is set out in the annual Energy & Carbon Plan	See above
7.2.4	Plan to reduce energy consumption	This is set out in the annual Energy & Carbon Plan	See above
7.2.5	Energy wastage identification	This is set out in the annual Energy & Carbon Plan	See above
7.3.1	Energy use density- Total energy used per floor space	Ratio 0.82GJ/m ²	Energy used 158,580 GJ Floor space 193,201 m ²
13.2.1	Low carbon energy tracking	Solar 1.38 GWh Biomass 1.64 GWh	Renewable energy generated and used on site.
11.4.8	New build standards	New buildings are assessed to the BREEAM standard	
11.4.9	Building on brownfield sites	The University is using brownfield for new buildings	This is set out in the campus Masterplan
13.2.2	Total energy used	42,451,366 kWh	
13.2.3	Total energy used from low carbon sources	3,297,839 kWh	Note "Green Electricity" is not purchased as typically this does not provide additionality
13.3.2	Climate Action Plan	Energy & Carbon Plan on website	Climate adaptation strategy being developed
13.4.1	Commitment to carbon neutral university	Net zero carbon by 2030 target	Includes scope 3, but exact definition being developed
13.4.2	Carbon neutrality date	2030	

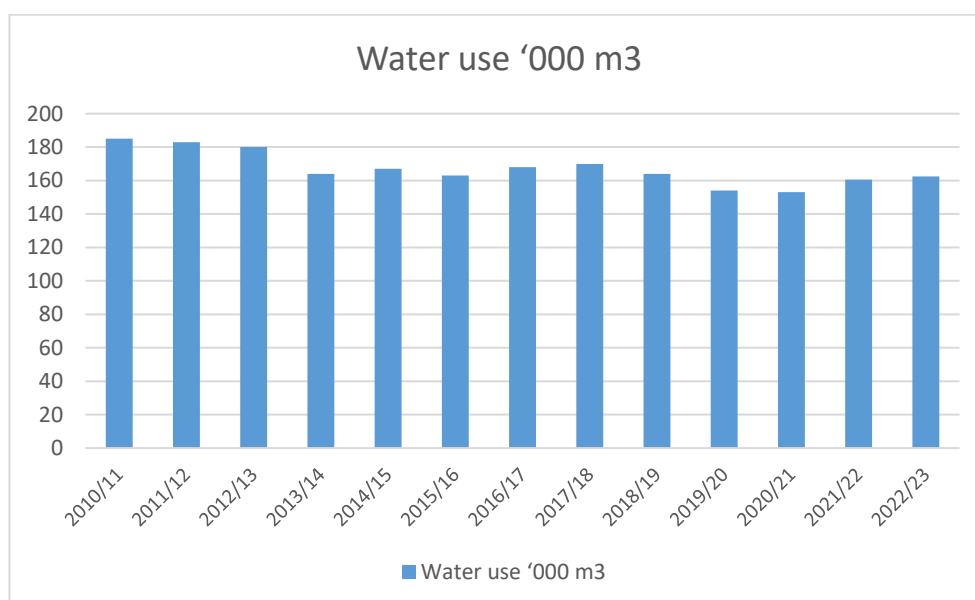
Above: Table of SDG KPIs (key performance indicators) relating to Carbon & Energy reduction

Water



Work has continued to improve water metering and monitoring on the main Cranfield Campus and to encourage the reporting of leaks, so they can be dealt with promptly. Several large leaks were identified on both the technical and residential sides over the last year. Some were linked to frost damage over the Christmas period and others were due to mechanical failures.

A number of urinals were also found to be flushing excessively and timers have been adjusted to reduce the amount of water used. A dedicated section on water saving is included in the Canvas Environmental Awareness Induction, and this has been rolled out to all our students. Water saving tips have also been promoted amongst our staff and student Green Teams. The university has published a Water Management Plan and a Water Management Policy Statement on its website. These give details of the approaches it is taking to reduce potable water use.



Above: graph showing water usage in Cubic Meters from 2010/11 to 2022/23. The total usage has dropped slightly, although not significantly. **Note:** the water consumption figure for 2022/23 is estimated due the failure of the main supply meter.

	2020/21	2021/22	2022/23
Total water used (m3)	153,481	160,580	162,478
Staff & Students (FTE)*	4,241	4,671	4,726
Water use efficiency (m3/staff&student)**	36.2	34.4	34.4

Above: Table shows year on year comparison of water use and efficiency

*Includes Cranfield campus, excludes Shrivvenham. ** Excludes other Cranfield campus residents such as student partners and children and staff residing on site. The number for these in 2022/23 was 245.

Table of SDG KPIs relating to Water

The SDG indicators below are taken for the Times Higher Education (THE) Awards criteria. The measures are what the university is doing to meet that indicator.

THE	Indicator	Measures	Comments
6.2.1	Water consumption tracking	Water consumption reduction is key target;	Does not currently include water used by Cranfield University at Shrivenham as water metering and consumption is not under the University's control.
6.2.2	Water consumption per person	34.4 m3/person	162,478 m3 4,726 persons
6.3.1	Wastewater treatment	Wastewater is treated on site	
6.3.2	Preventing water system pollution	Procedures include Spill Prevention and Response, Discharge to Sinks and Drains:	Controlled through ISO 14001 certified environmental management system
6.3.3	Free drinking water provided	Drinking water fountains and filtered water dispensers	
6.3.4	Water conscious building standards	BREEAM assessment on new buildings Compliance with Building Regulations	University Design Standards being enhanced and developed.
6.3.5	Water conscious planting	Plantings are made at the appropriate time of year to avoid water stress	Guidance on suitable drought tolerant plants for the site is being developed
6.4.1	Water reuse policy	A water management policy has been developed and published	Options for water reuse and recycling are being explored
6.4.2	Water reuse measurement	None	This is still in the pilot stage
6.5.2	Promoting conscious water usage	Water conservation is promoted on campus	A project promoting efficient shower usage. Canvas Environmental Awareness module

Above: Table of SDG (Sustainable Development Goals) KPIs relating to water reduction, measures, and comments

Resources and Waste



The university is committed to putting the principles of the Circular Economy into practice by putting processes in place to:

- prevent materials from becoming waste in the first place
- ensure waste that is created is recycled, composted, or sent for anaerobic digestion and not sent to landfill or incineration*.

*Recyclable, compostable or digestible waste that ends up in the residual waste stream (waste sent for landfill or incineration with or without energy recovery) is defined as AVOIDABLE.

Avoidable Waste

The overarching target is to reach Zero Avoidable Waste by 2030. The starting point is to gather information on the materials ending up in the residual waste stream and use best management practices to apply the waste hierarchy to these materials: prevent, reduce, reuse, and recycle.

The audit of recycling and residual general waste bins around the different functional areas of the campus from residential to technical buildings has not happened this year due to contractor staff availability. However this requirement will be written into the new contract going forward to enable audit, analysis and action to take place in 23-24. Previous audit data has been used to calculate avoidable waste figure for 22-23. Of the 998 tonnes of waste produced, 47% was segregated on site and either reused, recycled, composted or sent for anaerobic digestion. Avoidable waste is 18% of total waste. Tonnages are summarised in the figure on the next page.

Total waste

Total waste produced by the Cranfield campus over 22-23 was less than the previous year.

	2021/22	2022/23
Total waste (tonnes)*	1,052	988**
Staff & Students (FTE)***	4,671	4,726
Waste per staff & student FTE (tonne/person)	0.23	0.21

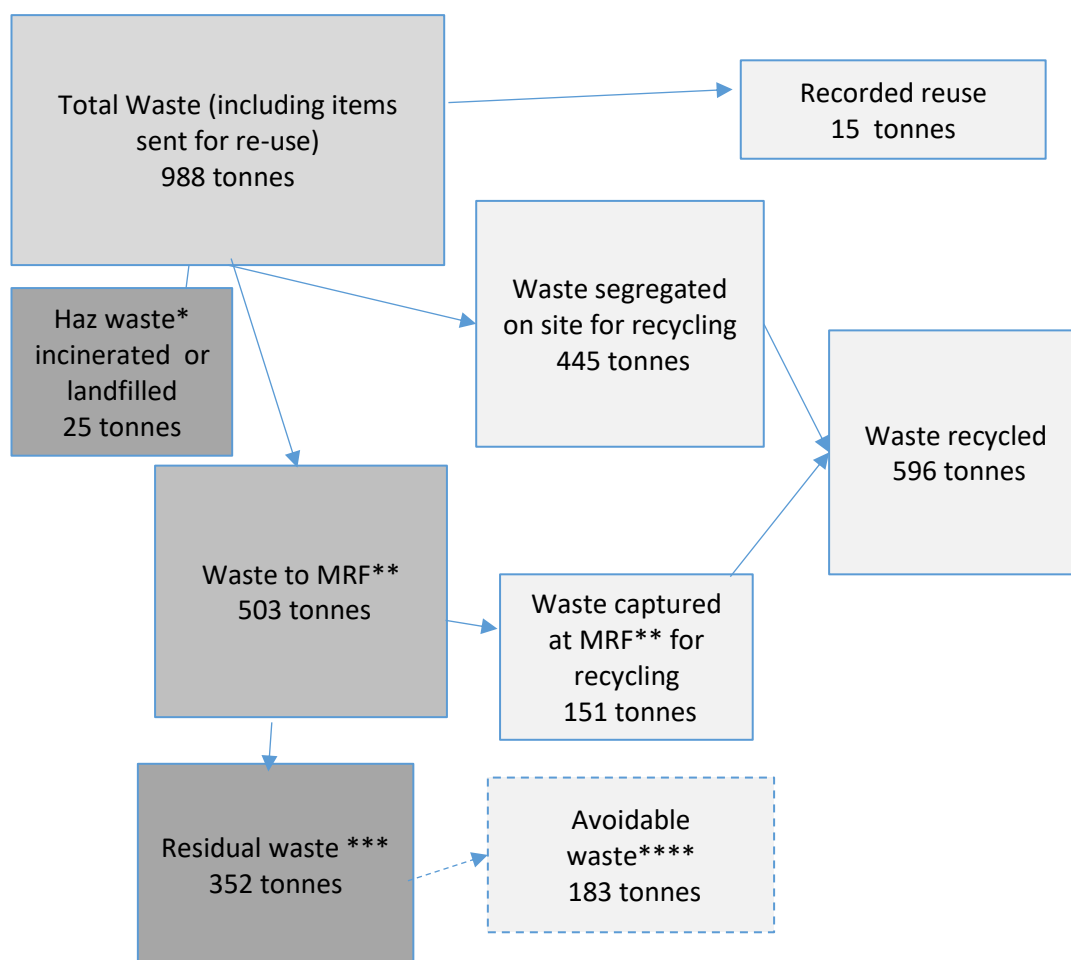
Above: Table showing total waste, number of staff and students, and waste per staff/students for years 2021/22 and 2022/23

*Cranfield campus waste only, not including construction waste from development sites.

**22-23 figures include for the first time tonnages from CCCL (85 tonnes). Future reports may amend previous year data to include CCCL estimate.

*** includes Cranfield and MKU, excludes Shrivenham. Excludes other Cranfield campus residents such as student partners and children and staff residing on site. The number for these in 2022/23 was 245.

Where the waste goes



Above: The diagram shows the breakdown of total waste generated on campus, and how it is managed. 445 tonnes of waste is segregated on site for recycling, and 503 tonnes of waste is sent to Cawley's Materials Recycling Facility (MRF). 183 tonnes of waste disposed of in general waste could have been recycled.

Notes: This data is from tonnage information provided by the University's waste contractor. It does not include construction waste from development sites. The avoidable waste figure is based on 2 audits representing 1% of the total residual waste. In future years further audits will be scheduled to gain confidence in the results.

*Haz waste – hazardous waste which is not recyclable. 5.9 tonnes biomass boiler ash landfilled and the remainder incinerated.

**MRF – Material Recycling Facility.

***Residual waste – waste which is sent for incineration with energy recovery and landfill (0.5 tonnes bulky waste landfilled and the remainder energy recovery).

****Avoidable waste – waste which could have been recycled.

Sustainable food and beverage policy

Developed by Sustainable Food working group the policy has been approved and commits to drive progress with aims such as reducing single use plastics and packaging, and operating catering services in accordance with the waste hierarchy.

Recording and monitoring of pre-consumer food waste from catering outlets

The University's Campus Services has placed reduction targets on food waste in an effort to reduce food being wasted during food preparation and service.

Food wastage (% revenue)

Area	Reduction Target 22/23	Achieved	Reduction Target 23/24
Conference Centre	2.5%	1.92%	1.75%
Mitchell Hall	3.0%	2.79%	2.5%
Cranberries	1.0%	1.27%	1.25%
Overall	2.5%	2.28%	2.0%

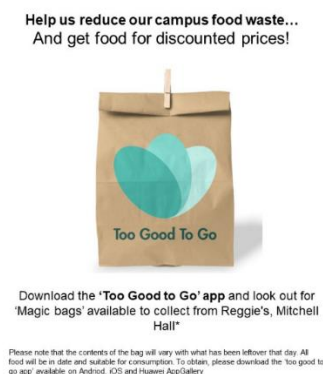
Above: The table shows Campus Service's food waste reduction targets per centre with progress made

Spotlight on disposables

The University's Cranfield Management Development Centre (CMDC) has removed the bottled water from bedrooms, and guests are encouraged to use the tap water which has been certified as potable. This has removed an average of 20,000 bottles from use annually in the CMDC. Mitchell Hall and CMDC operations between them have removed approximately 220,000 disposable cups and 51,000 lids from use in favour of reusable cups.

Note: these figures are based on usage at the height of disposable usage which was adversely affected by the covid pandemic

The student Green Team worked closely with staff to promote the reduction of disposable cup use and the use of 'Too good to go' as a scheme to reduce food waste. Efforts to continue reductions in disposable single use plastics are ongoing, this includes take away cutlery being replaced with stainless steel loan cutlery in catered student rooms.



Reuse of resources

The university's objective to increase the amount of items reused has seen steady progress, made possible by the university's relationship with re-use organisations, Reyooz, Milton Keynes Play Association (MKPA) and Unigreenscheme. These are items such as furniture and equipment which would otherwise have been sent for disposal.

The 22-23 student moveout campaign saw a continued arrangement with the British Heart Foundation's 'Pack for Good' campaign and The NEED Project. The donations provide much needed items for the charity shops and families in need in the local area.



Above: diagram showing total donations and money raised for British Heart Foundation in 2022 following the end of year student moveout. This shows that 5 tonnes of items were diverted from general waste and sent to British Heart Foundation shops for resale.

Procurement of resources

We are working to strengthen our procurement processes to include circular economy principles and sustainability requirements at each procurement stage. One example is our new furniture contract with PRS Office Furniture. They provide a five step approach to sustainable furniture provision: sourcing, fit for purpose, lifespan, delaying end of life through reuse, and recycling.

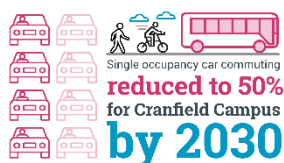
Table of SDG KPIs relating to Resources & Waste

The SDG indicators below are taken for the Times Higher Education (THE) Awards criteria. The measures are what the university is doing to meet that indicator.

THE	Indicator	Measures	Comments
12.2.1	Ethical sourcing policy	Promoting Fair Trade	Sustainable Food and Beverage policy adopted
12.2.3	Hazardous waste disposal policy	Procedures in place handling and disposal of hazardous waste	Hazardous waste procedure adopted
12.2.4	Disposal to Landfill policy	Target to monitor what goes to landfill/incineration and what can be recycled	Waste Code of Practice adopted
12.2.5	Minimisation of plastic	Single use plastics promotion	Waste Code of Practice adopted
12.2.6	Minimisation of disposable items	Single use plastics policy	Waste Code of Practice adopted
12.2.7	Extending disposal policies to supply chain	Currently ask suppliers for their environmental policies	This is being developed and incorporated within procurement processes
12.2.8	Extending minimisation policies to supply chain	Currently ask suppliers for their environmental policies	This is being developed and incorporated within procurement processes
12.3.1	Waste tracking Amount of waste generated and recycled across the university	Waste and recycling figures made available on web site. Whole university / partial coverage	Figures in annual environmental report. Does not currently include Shrivenham site as waste management is not under the control of Cranfield University. Does not include COTEC. Aiming to include COTEC 23/24
12.3.2	Amount of waste generated (tonnes)	tonnes	
12.3.2	Amount of waste recycled	tonnes	This figure includes tonnage sent for energy recovery , which is not included in the figures published on page 13
12.3.2	Amount sent to landfill	tonnes	
12.4.1	Sustainability Report	SDG reporting on web site: https://www.cranfield.ac.uk/sustainable-development-goals . Also report to EAUC for SDG Accord annually.	

Above: Table of SDG (Sustainable Development Goal) KPIs relating to Resources & Waste

Sustainable Commuting



Travel Survey

A travel survey in early 2023 confirms the trend seen in 2021 and the impact of working from home on the commute to Cranfield campus. There is a significant impact on the single occupancy car journeys and to a lesser extent the bus journeys.

Journeys/week	2011/12	2013/14	2015/16	2017/18	2021/22	2022/23
Car alone	70%	58%	59%	59%	35%	38%
Car share	13%	11%	13%	10%	5%	7%
Motorbike	1%	1%	1%	1%	0%	1%
Bus	7%	19%	13%	18%	14%	13%
Cycle	6%	8%	8%	7%	5%	4%
Walk	2%	3%	5%	3%	3%	2%
Other	1%	1%	2%	1%	5%	3%
Working at home *Avoided journeys					34%	29%

Above: Table shows percentages of staff and student travel modes from 2011/12 to 2022/23 according to travel survey data. Note that most staff travel to campus by 'car alone' if not working from home.

Uno Bus

The Uno bus service which connects the University to Bedford and Milton Keynes is subsidised by the university for staff and students to use. It is a public bus service and so the local community also benefit from a much more frequent and comprehensive service than anywhere else in rural Bedfordshire. Despite severe restrictions during the Covid pandemic, the service has bounced back and is busier than ever.

Uno set up a stand for welcome week to promote the bus service and provide the students with travel and ticketing information. Several meetings were held with student representatives throughout the year to answer queries and plan improvements to the service. Engagement with students has been ongoing through social media.

Cycling support and development

The cycle paths to the north and south of campus continue to provide a safer cycling and walking option for staff and students living in Cranfield village. The connectivity with National Cycle Route 51 also provides an option for those prepared to cycle from further afield.

Cycle Saviours continue to provide maintenance 'pop-up workshops' once a month along with the sale of reconditioned bikes. They offer training and employment in the form of an apprentice scheme to those not in school or employment. They salvage old bicycles and what cannot be refurbished is used for repairs or recycled.

In September and October 2022, Cycle Saviours held bicycle sales at Stafford Cripps. All students that attended were advised about road safety for cycling and walking particularly at night. Each student that attended was given a high visibility reflective vest and a leaflet about cycling at the university. Bicycles were also registered on the University cycle registration scheme established to keep track of bicycle owners.



Above: photos of Cycle Saviours carrying out repairs on bicycles and refurbished bicycles for sale

Table of SDG KPIs relating to Sustainable Transport

The SDG indicators below are taken for the Times Higher Education (THE) Awards criteria. The measures are what the university is doing to meet that indicator.

THE	Indicator	Measures	Comments
11.4.1	Sustainable commuting target	Travel plan and surveys; Target reduce single occupancy car commuting to 50% by 2030	Assuming working from home counts as avoided journeys then this target is already met
11.4.2	Sustainable commuting promotion	Support for local bus service, cycling repair workshops, membership of liftshare	The University has a budget which helps to subsidise bus travel and support cycling and car share
11.4.3	Allow remote working	University allows up to three days/week working from home	This has had a big impact on the daily commuting figures
11.4.6	Pedestrian priority on campus	Zebra crossings at all key crossing points	Next year traffic calming being introduced on College Road

Above: Table of SDG (Sustainable Development Goals) KPIs relating to Sustainable Transport

Green Spaces and Biodiversity



The Cranfield campus is a wildlife rich setting, providing opportunities for students, staff and visitors, to enjoy the benefits of experiencing biodiversity. As a landowner and a centre of learning the University has a responsibility to conserve protected species and 'practise what we teach'. Biodiversity will benefit from the new target of 'Net Environmental Gain including biodiversity to increase by 20% to maximise potential on site' by ensuring any development on site results in a positive impact on biodiversity. The masterplan for the University sets out areas for new buildings and also a wildlife corridor where new habitats can be established.

Areas have been targeted for biodiversity actions such as the brook, woodland and several grassland areas. The total biodiversity action area increases year on year with over 9 ha or 10% of the Cranfield Campus seeing some action to increase biodiversity including the expansion of "no mow" areas.



Above: photo of biodiversity flower plot near building 44. This is one of the many wildflower plots on campus.

Sustainability garden

The garden is an area set aside to showcase and develop sustainable gardening practices. Gardening Club, introduced in autumn 2021 has gone from strength to strength this year with active student involvement.



Above: photo of students enjoying the Sustainability Garden

Bee hives

The Grounds contractor Nurture Landscapes continue to maintain bee hives on site. They have held bee awareness days and a honey harvesting event. Honey sales are donated to charity.

Trees

In February 2023, we worked with Forest of Marston vale to plant over 320 trees and 800 hedging whips around Fedden house field as part of the 'Trees for Climate' scheme. Additionally, we worked with Earthwatch Europe to establish a 'Tiny (Miyawaki) Forest' on campus during March 2023. This accounts for over 600 trees and hedges planted into an area the size of a tennis court, and serves as a part of a nationwide and international project to plant trees to mitigate climate change and to improve biodiversity. A further 20 trees were planted on the main site as part of the 'Queens Green Canopy'. Once matured, trees planted should account for an total of 10,504 square meters area covered.



Above (top left clockwise): Photo of trees planed behind Fedden House for the 'trees for Climate scheme', tree planted for 'Queens Canopy' project, students surveying the Tiny (Miyawaki) Forest, and photo of the Tiny Forest after completion.

Table of SDG KPIs relating to green spaces and biodiversity

The SDG indicators below are taken for the Times Higher Education (THE) Awards criteria. The measures are what the university is doing to meet that indicator.

THE	Indicator	Measures	Comments
14.4.1	Water discharge guidelines and standards	The water treatment works has a discharge consent	Pollution monitoring of the main watercourse through campus is being developed
14.4.2	Minimisation of plastic plan	Single use plastics promotion	Waste Code of Practice
14.5.1	Minimising alteration of aquatic ecosystems	The main watercourse through campus is managed to enhance biodiversity as part of grounds maintenance	
14.5.2	Monitoring the health of aquatic ecosystems	Pollution monitoring of the main watercourse through campus is in place	This needs further development
15.2.1	Events about sustainable use of land	Regular biodiversity walks around campus	
15.2.2	Sustainably farmed food on campus	Sustainable Food and Beverage Policy. Vegetable and fruit production in sustainability garden	Garden only for demonstration and community engagement
15.2.3	Maintain and extend current ecosystems biodiversity	Target for 20% net environmental gain including biodiversity for new developments; Biodiversity Action Plan	Biodiversity Action Plan needs updating
15.3.1	Sustainable use, conservation, and restoration of land policy	This is covered in the Biodiversity Action Plan	Biodiversity Action Plan needs updating
15.3.2	Monitoring endangered species	This is covered in the Biodiversity Action Plan	Biodiversity Action Plan needs updating
15.3.3	Local biodiversity included in planning and development	Target for 20% net environmental gain including biodiversity for new developments	
15.3.4	Alien species impact reduction policy	This needs to be included in the Biodiversity Action Plan	Biodiversity Action Plan needs updating
15.4.1	Water discharge guidelines and standards	The water treatment works has a discharge consent	Pollution monitoring of the main watercourse through campus is being developed
15.4.2	Minimisation of plastic policy	Single use plastics promotion	Code of practice being developed
15.4.3	Hazardous waste disposal policy	Procedures in place handling and disposal of hazardous waste	Code of practice being developed

Above: Table of SDG (Sustainable Development Goals) KPIs relating to green spaces and biodiversity

Climate Adaptation



A strategy for Climate Adaptation has been developed and is awaiting University Executive approval.

Pollution Monitoring and Control



Cranfield Urban Observatory, with its campus-wide sensor network, is a key component of the Living Laboratory and facilitates research projects, securing links between the expertise, facilities and overall capabilities of our unique campus. As part of this, air, water, and soil sensors have been deployed across the Cranfield campus with the capability of monitoring a wide range of potential pollutants. Data is used both in teaching and learning and as a mechanism to monitor potential pollution on the Cranfield campus. Further analysis will produce baseline parameters from which we can work from in 23-24.

Community Involvement

2022-2023 was a great year for staff, student and local community engagement. At the start of the academic year, we hosted a popular evening bat walk and set up the Energy Champions network- a keen group of staff and research students who supported us on our mission to save energy on campus. This launched with a workshop session, and was followed up by fortnightly catch-ups. To aid the Energy Champions, a Systemslink online dashboard portal was set up for all to use.

During November, we hosted a variety of events for staff and students as part of our Green Week which included a popular talk on Hydrogen research and Development: H2@CU, a hedgehog themed raffle and cake sale event to raise money for Hedgehog Preservation Society, honey-harvesting taster events, and an off-campus Wildlife Trust conversation volunteering trip. Our enthusiastic Green Team led by Green Officer Louisa Winch, set up the first 'Clothes Swap' shop in the CSA in an effort to curb clothes waste on campus, and give to charity. Jars of honey from the Cranfield campus beehives were sold at the Christmas Fayre to raise money for the Need Project Bedford Food bank and raised over £1000.

The Miyawaki Tiny Forest was planted in February 2023 and is maintained by a group of voluntary tree keepers, who also carry out surveys. Earthwatch UK came back to campus in June to host a community open day. We continued throughout the year to engage staff and students in wildlife walks, litter picks, bee keeping experience events and Gardening Club, based within the expanding Sustainability Gardens. This year, a welcome addition to the

gardens was a bug house with an engraved plaque thanking the student Energy Champions based in Lanchester and Mitchell Hall for their efforts.

For the first time, the student Green Team organised a trip to the Grand Union canal in Cosgrove, Milton Keynes, to support Buckingham Canal Society with footpath clearance and painting as part of a wider project to restore the canal for people and wildlife. To top-up a successful year of engagement, our Green Officer Louisa Winch became a finalist for 'Student Sustainability Champion of the year' Green Gown Award. Overall, just under 1000 people were actively engaged throughout the year, and we saw many more hits via social media.

Total event engagement: 945 staff and students

Top events:

- Green Week 2022
- Tree planting (Fedden field, Tiny Forest)
- Clothes Swap Shop
- Bee keeping experience



Above: Students engaged in running a clothes swap shop at the CSA, and a raffle for 'Hedgehog Preservation Society' during Green Week 2022

Communications

There have been regular communications through social media and on the intranet. The following tables show the level of engagement:

Intranet	Hits
Average Intranet hits per month:	461

Social media followers	Followers
Instagram	862
Facebook	472
X	891

Top social media posts	Description	Hits
X	Snow picture of campus	2944
Facebook	Too good to go scheme launch	747
Instagram	'Too good to go' reel	2767

Above: Tables showing summary of staff and student engagement on the intranet and via social media.

Notes

1. **Dates:** Baseline and target years refers to the financial/academic year August to July (for example, for the Carbon target, the baseline year for carbon reporting is financial year 2005/2006 and the net zero target is to be achieved in academic year 2030/2031).
2. **Scope:** Tenants are included where it is not possible to distinguish between what is and is not a direct impact to the University as opposed to an impact of others operating on site. Examples include waste, car travel, some aspects of energy and water consumption and sewage discharges. As measurements and monitoring on site improve, this may become easier to distinguish. Additionally, the University is providing utility and other services to tenants and is in a position as landlord and service provider to influence their behaviour and assist in the reduction of their environmental impacts, whilst at the same time having an interest in minimising the risks to the University. The converse applies to the University's presence at Shrivenham. Here the University occupies space on a MOD site. For many of the targets it is not possible or appropriate to include this space as there is no operational control by the University (it is managed by MOD) and no data.
3. **Base Year Recalculation Policy:** Cranfield University will ensure that its greenhouse gas reporting is up to date, accurate and consistent with current Government guidance. In particular, when there are structural changes that have a significant effect on the baseline and the reported progress towards targets, the baseline and, if necessary, data for years in between will be recalculated.
Base year recalculation: It is important that progress is measured on a like for like basis. This means that any changes in calculation methodologies are applied to the previous figures as well as current figures.
Structural changes may include: mergers, acquisitions, and divestments; outsourcing and insourcing of relevant activities; changes in calculation methods or improvements in the accuracy of factors, such as emission, factors, or activity data that result in a significant impact on the base year figures; discovery of significant errors, or a number of cumulative errors that is collectively significant. The recalculation will be triggered and reported if the structural changes would result in a change of greater than 2% in the total baseline figure. At the same time any errors in the current year reporting greater than 2% will be amended and relevant reports updated, or notes attached explaining amendments.
4. **Changes to data:** Our carbon footprint is recalculated each year for all years in order to account for errors, changes to the scope and material changes to the conversion factors provided by DEFRA for company reporting purposes. They may not therefore compare directly with previous figures reported in the University Financial Statement. See also our baseline recalculation policy above. Note the figures exclude emissions for tenants on Cranfield Campus, Silsoe Campus, COTEC where these can be separately identified. University subsidiary companies are included. The same principle will apply to data for other targets.
5. **Water consumption and discharges figures:** These are for Cranfield Campus, including tenants. COTEC is included. Shrivenham data is not included. Discharges are taken as the average of the three consent targets.
6. **Waste figures:** These are for Cranfield Campus and include some, if not all, tenant waste. Note the key performance indicator for recycling is waste segregated on site. However, the waste contractor further segregates waste at their depot. This elevates the overall recycling performance, and it is this figure, which is reported in the HESA Estates Management Reporting.
7. **Academic expertise:** Wherever possible, the University is making use of its academic expertise and facilities to enhance its response to environmental improvement. The estate is also offering opportunities for research and teaching. Examples of this include audits carried out by students and the University laboratories to analyse local discharges. The new CHP unit is regularly used as a real life demonstration for teaching.
8. **Name:** The Energy and Environment Committee was previously known as the Committee for Energy and Environment (BEE).

Glossary

AIRC Aerospace Integration Research Centre; EEC Energy and Environment Committee; BOD Biochemical Oxygen Demand; BREEAM Building Research Establishment Environment Assessment Method; CHP Combined Heat and Power; COTEC Cranfield Ordnance Test and Evaluation Centre; CRC Carbon Reduction Commitment; DEFRA Department for Environmental Food, and Rural Affairs; EA Environment Agency; EAUC the Environmental Association for Universities and Colleges; GIS Geographical Information System; HESA Higher Education Statistics Agency; IMEC Intelligent Mobility Engineering Centre; LED Light Emitting Diode; MOD Ministry of Defence; OU Open University; PV Photovoltaic; SECR Streamlined Energy & Carbon Reporting, SHE Safety Health and Environment; SHEF Safety Health Environment and Fire; SUDS Sustainable Urban Drainage System.

Energy and Environment Committee

Members in 2022-3:

- Chair, Professor Chris Fogwill, Pro-Vice-Chancellor – School of Water, Energy & Environment
- Ian Sibbald, Director of Finance
- John Street, Director of Facilities
- Phil Longhurst, Director of Partnerships & Professor of Environment and Energy Technology
- Gareth Ellis, Head of Energy and Environment
- Christine Thompson, Corporate Planning Director
- Ginny Ford, Environment Advisor
- Ceri Dawson, Energy Advisor
- David Ford, Director of Information Services
- Geoff Say, Director of Finance and Operations CDS
- Stewart Elsmore, Director of Campus Services
- Rosina Watson, Head of Sustainable Business Group & Associate Professor of Sustainability
- Becky Shepherd, Environment Officer
- Louisa Winch, CSA Green Officer
- Abbi Legate, PA to Director of Energy (Committee Secretary)

Further information

For further information, please visit our environmental pages on the University Website:

<https://www.cranfield.ac.uk/about/our-sustainable-university>

or the University Intranet: <https://intranet.cranfield.ac.uk/EnergyEnvironment/Pages/default.aspx>

If you have any questions on any other topics outlined within this report or would like to provide us with any feedback, please contact the Energy and Environment Team at green@cranfield.ac.uk.



Equity, Diversity and Inclusion Annual Report

August 2022 – July 2023

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Introduction

This Equity, Diversity and Inclusion (EDI) report provides an account of our staff data and actions for the period August 2022 - July 2023. It has been written in line with our statutory reporting to the Higher Education Statistics Agency (HESA) and to demonstrate compliance with the Public Sector Equality Duty and Equality Act (2010). This report also offers the opportunity to highlight Cranfield's ongoing progress and successes in EDI while acknowledging the challenges we continue to face.

This report covers the period 2022-2023. During this time, we [published our new EDI strategy - Making Change Happen, together with a video bringing it to life](#). As well as summarising our progress against our previous EDI strategy, we set four new strategic ambitions. By 2027 our ambitions are to be:

1. A diverse organisation that is more representative of our local and global communities and partners than we were in 2022.
2. An inclusive organisation where all our staff and students have a voice and feel safe (physically and psychologically) and respected, and where everyone can fulfil their own potential.
3. An organisation where EDI is strongly integrated across all our activities and everyone feels confident when talking about EDI matters.
4. An organisation that continues to take decisions and actions which are informed by our data.

This report for the period 2022-2023 therefore spans across our previous and our current strategies.

Our commitment to equity, diversity and building an inclusive culture is interwoven throughout our corporate plan, [Ambition 2027](#). The corporate plan was also launched during the reporting period and is supported by a number of enabling strategies and areas of focus, including “Applied Research Powerhouse”, “Distinctive Cranfield Learner” and “Employer of Choice”. All these elements reflect our EDI aspirations.

Overview 2022-2023

We regularly analyse our EDI data, not only to meet our statutory obligations, but to assist us with understanding our staff demographics. By understanding our staff data, we can tailor actions that, in turn, support our goal of being an Employer of Choice, in line with Ambition 2027.

In summary, over the period we have made positive progress against our four new EDI strategic ambitions (outlined above). The data in this report are presented in line with statutory requirements, by individual protected characteristics. We do also acknowledge that there are complexities and barriers experienced by people with intersecting identities in our workplace which will require further analysis.

The charts and tables provide a detailed account of our data. Some of our positive actions and successes during this period are summarised now.

Highlights

Gender

- Introduced a sector-leading enhanced maternity leave policy offering 22 weeks of paid leave at full pay.
- For the second year running we were recognised in the Top 30 Employers in the UK by the charity Working Families, reflecting our innovative, flexible and family-friendly policies and practices that support parents and carers.
- Our gender pay gap continues to reduce. In the relevant period, our mean pay gap reduced from 22.2% to 21.0% and our median from 18.7% to 18.4%. While this progress is positive, we recognise the need for ongoing improvement. For details, please refer to the [published report on our website](#).

Ethnicity

- Reported our ethnicity pay gap for the first time. While this is not currently a statutory requirement, it signals our commitment and provides a benchmark for us to make continued improvements. For details, please refer to the [published report on our website](#).
- Celebrated Black History Month by inviting Nels Abbey, a writer, media executive and corporate leadership & diversity consultant to join us and run a workshop.
- In January 2023, Cranfield's executive leadership team signed individual pledges supporting race equality as part of [Race Equality Matter's Big Promise](#).

Disability

- Members of our community who chose to share a disability, condition or impairment increased during the reporting period. Sharing rates have improved and at 7% are in line with the sector benchmark.
- Organised a series of events, blogs and speakers for Neurodiversity Celebration week in March 2023, and established a Neurodiversity working group.
- Launched a Digital Accessibility YouTube playlist with video guides to help staff and students produce accessible documents and presentations.

Sexual orientation

- Developed a new Sexual Orientation report on our EDI data dashboard, which helped to achieve an increase in the percentage of people who chose to share their LGBTQ+ status from 2% to 3%.

- Celebrated LGBTQ+ History Month by sharing information about Cranfield's LGBTQ+ community and what we can all do to promote an inclusive culture.
- During Pride 2023, our community members shared how they would be celebrating throughout the month, and their experiences of inclusivity at Cranfield.

Intersectionality

To support our communities and EDI agenda more broadly, recognising the intersectional challenges we face, we have taken additional actions, some of which are highlighted below:

- established a new University Executive Forum with a broader, more diverse membership to support the Chief Executive and Vice Chancellor and the Executive Team in the operation of the University, in particular the delivery of the corporate plan. The first forum included a session on inclusive, candidate centric recruitment practices;
- established a men's mental health community and support network as a forum to provide a space for male colleagues to open up, share their experiences and show they're not alone;
- ran Inclusive Leadership Development and Conscious Decision-making workshops which were well attended and positively received; and
- launched a [new report + support tool](#) which makes it easier for staff and students to seek support and report behaviours such as bullying, harassment and discrimination which are not acceptable and have no place at Cranfield.

Recruitment

Attraction, recruitment and selection continued to be a focus, and many initiatives were implemented in the year to enhance the candidate experience, and improve our practices, including:

- collaborated with local recruitment providers and attended careers fairs in our region to help us attract and recruit more diverse talent from our local community;
- launched a new in-house workshop, "The Art of Successful Recruitment" which has been well attended and positively received; and
- enhanced the inclusivity of our recruitment practices which included:
 - reviewing the "essential" criteria for a role to ensure we are not causing people to self-select out of applying;
 - promoting job opportunities through video content shared on social media;
 - writing our adverts in an engaging, candidate focused way, in plain, gender-neutral language; and
 - using assessments to evaluate candidates, not just relying on a single interview.

Student engagement

Throughout this period, we have been working more closely with our student community. This includes delivering a variety of EDI workshops and sessions to students, collaborating with the [Student Wellbeing and Disability Support team](#) to support students with their needs, and engaging with the Cranfield Students Association and [Cranfield Careers and Employability Service](#).

New Senior Academic Promotions Process

In 2022, we launched a new Senior Academic Promotions Process, after a comprehensive review. This involved consultation with colleagues and trade unions, and significant research into sector best practice to inform our new process. One of the key principles guiding this review was to ensure an inclusive process, where decision makers are aware of, and mitigate bias, and outcomes are subject to independent review.

The positive impact of our new process is reflected in the demographics data and analysis section of this report, and we hope to see further improvements in our data in the next reporting period.

We conducted an equality impact assessment (EIA) on the promotion candidates and their success rates which is summarised in Table 1. Please note, the number of candidates who chose to share if they are disabled or their sexual orientation was too low to be able to conduct analysis. Contract hours were evaluated, distinguishing between full time and part time staff. The EIA revealed that a higher proportion of staff working full-time hours were considered for promotion compared to those working part-time. This insight will inform our approach to the 2023-2024 promotions round.

Characteristic	% of eligible candidates considered	% Successful
Female	21%	79%
Male	15%	72%
White	17%	77%
Minority ethnic	19%	68%
Full time	19%	75%
Part time	2%	0%

Table 1 EIA - Senior Academic Promotions

Research Acceleration Fellowship

We introduced a Research Acceleration Fellowship to provide funding for additional time in support of personal research and research career development from January 2023-July 2023. We actively encouraged applications from researchers belonging to minoritised or underrepresented groups. We conducted an EIA of the applications and awarded fellowships, the results of which were:

- 27% of applicants were female, and 40% of the fellowships were awarded to women;
- 6% of applicants shared they are disabled, and 10% of fellowships were awarded to people who shared they are disabled;
- 6% of applicants shared their sexual orientation as being LGBTQ+ and 7% of fellowships were awarded to LGBTQ+ applicants; and
- 62% of applicants were from Black, Asian or minoritised ethnic groups and 42% of fellowships were awarded to Black, Asian and minoritised ethnic people.

The relatively small applicant numbers did not allow more detailed analysis to be conducted into individual characteristics, or intersecting identities.

Positive pulse survey results

We regularly carry out pulse surveys to ask our staff how they feel about working at Cranfield. This includes questions about Cranfield's progress on EDI and how they perceive Cranfield as an "employer of choice".

The survey results from January 2023 showed:

- 84% of staff agree they are proud to work at Cranfield from a baseline of 82% in 2022;
- 77% of staff agree they feel part of a supportive community from a baseline of 71% in 2022; and
- 63% of staff agree we are making progress on our EDI agenda from a baseline of 55% in 2022.

Staff networks

Our staff networks continue to gain momentum and have created active calendars of meetings and events. We have established a new parent and carers staff network, and are members of [Employers for Carers UK](#). We established a forum specifically to bring together our network chairs and to provide support in their roles and encourage intersectional sharing of perspectives and ideas. Our networks are supporting cultural change at Cranfield through fostering a wider understanding of the EDI agenda.

Data Analysis

In this section we provide a snapshot of our staff demographic data in a series of tables and charts, with brief commentary to help interpret the data.

Staff gender profile

When looking at the gender balance across the University, this is stable compared with the previous years – women now make up 48% of all University staff, a small increase from 47% last year.

The proportion of female staff increased within all schools and professional services units (PSUs), with the exception of the School of Aerospace Transport and Manufacturing (SATM) which remained the same as shown in Figure 1 below. It should be noted that while the percentage of female staff within SATM remained static, the actual number of female staff has increased.

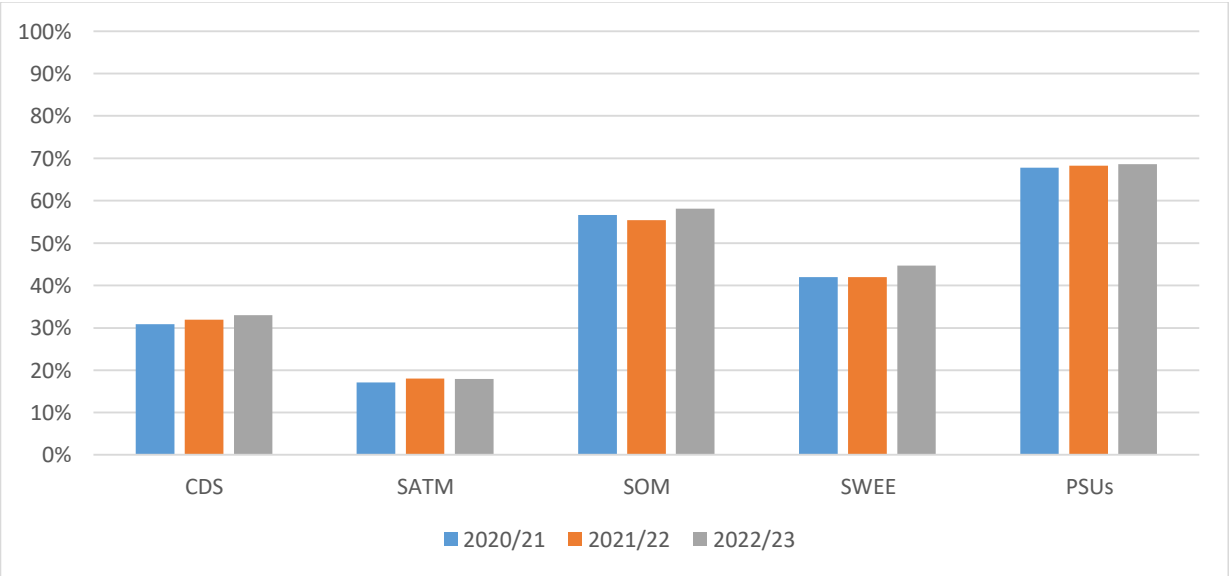


Figure 1 Female staff by School/Professional Support Units (PSUs)

As shown in Figure 2, when looking at gender representation by job family, it is pleasing to see the number of female academics has risen steadily over last three years, from 84 in 2021 to 103 in 2023. The number of female professors has also increased by three since last year.

We have seen a small rise in the number and percentage of female technicians compared to last year, another positive result.

Women continue to be the majority in business services roles. The apparent fall in the percentage of women within the operational job family this year is as a result of an increase in men in this job family, rather than a fall in the number of women employed in these roles.

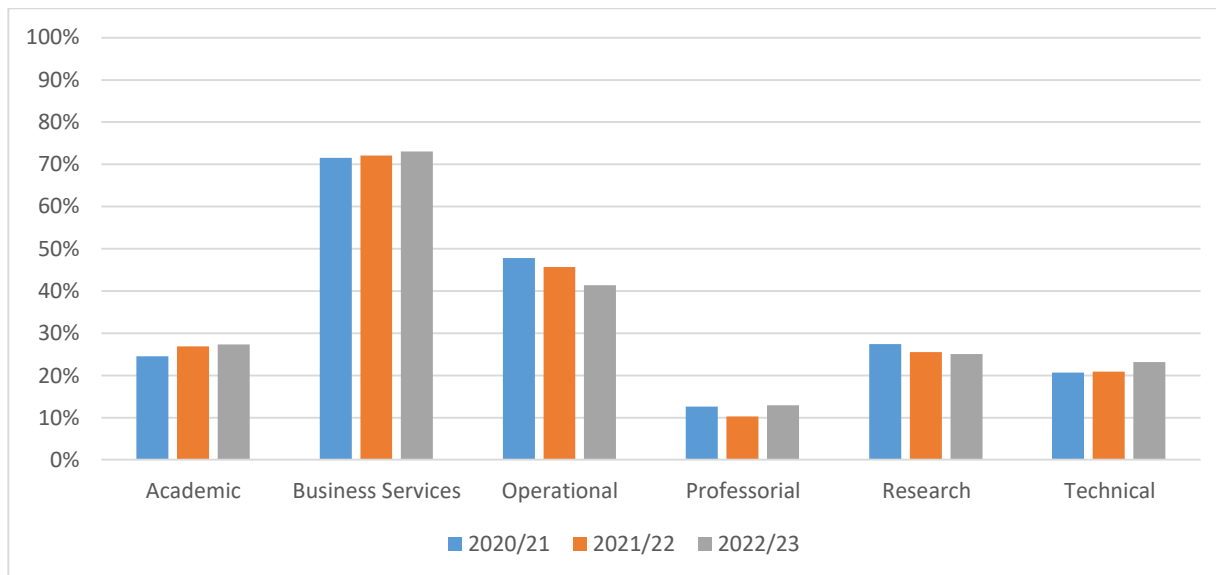


Figure 2 Female staff by job family

Gender representation on senior committees of the University

We improved representation on University senior committees in the reporting period, shown in Table 2. In 2023, the University established a new University Executive Forum with a broader, more diverse membership, replacing the previous Senior Management Team structure. Representation on Senate has also improved based on the previous reporting year, now with 20% female representation (Senate has authority delegated by Council to oversee the academic work of the University, assure academic quality and standards and regulate student affairs. Membership is predominantly made up of the Cranfield's professoriate).

Committee	2022 - 2023		2021- 2022	
	% Female	% Male	% Female	% Male
Council	53	47	50	50
University Executive	31	69	31	69
University Executive Forum*	43	57	28	72
Senate	20	80	13	87
* Created in 2023. Previous to this we had a Senior Management Team in place.				

Table 2 Gender representation on senior committees of the University

Staff ethnicity profile

Our staff nationality and ethnicity data for the period are shown in the tables and figures below. When looking at the ethnicity of our staff in Table 3, staff from a minority ethnic background represent 22% of all University staff, a rise of 3% from last year. This is explained by a

significant increase in the number of non-UK minority ethnic and an increase in UK minority ethnic staff. This increase in UK minority ethnic staff is very positive, as we continue to seek to become more representative of our local demographic*.

Frustratingly, we experienced a significant increase in the number of “undisclosed” ethnicity data amongst our staff. This is a direct result of changes to the ethnicity categories made by HESA which required staff to re-share their personal data with us. Significant efforts are being made to encourage re-sharing of this information.

*UK Census 2021 ethnic minority people: Milton Keynes – 28%, Bedford 24%, Shrivenham 9%, Swindon 18%.

	2020/21		2021/22		2022/23	
	Count	%	Count	%	Count	%
Non-UK Minority Ethnic	188	11%	197	12%	244	14%
Non-UK White	228	14%	231	14%	61	3%
UK - Minority Ethnic	118	7%	116	7%	136	8%
UK - White	1049	64%	1053	64%	434	25%
Undisclosed*	58	4%	56	3%	894	51%
University	1641	100%	1653	100%	1769	100%

Table 3 Staff nationality and ethnicity

There has been little change from last year in the specific ethnicities of UK minority ethnic staff. The changes to HESA categories for general ethnicity mean a direct comparison year on year is not made, but the current ethnicities are shown in Table 4.

Ethnicity	Count	%
Asian - Indian or Indian British	34	25%
Any other Asian background	16	12%
Asian - Chinese or Chinese British	15	11%
Asian - Pakistani or Pakistani British	13	10%
Any other ethnic background	12	9%
Black - African or African British	11	8%
Black - Caribbean or Caribbean British	9	7%
Mixed - White or White British and Asian or Asian British	7	5%
Any other Mixed or Multiple ethnic background	5	4%

Mixed - White or White British and Black Caribbean or Black Caribbean British	5	4%
Asian - Bangladeshi or Bangladeshi British	5	4%
Arab	3	2%
Mixed - White or White British and Black African or Black African British	1	1%

Table 4 UK ethnicity

Figures 3 and 4 show the ethnicity of our staff by school/PSU and by job family. These figures highlight the high percentage of 'Undisclosed' ethnicity that has resulted from recent changes to the ethnicity categories made by HESA which required us to seek the information anew from staff. Efforts are being made to encourage re-sharing of this information by all our staff.

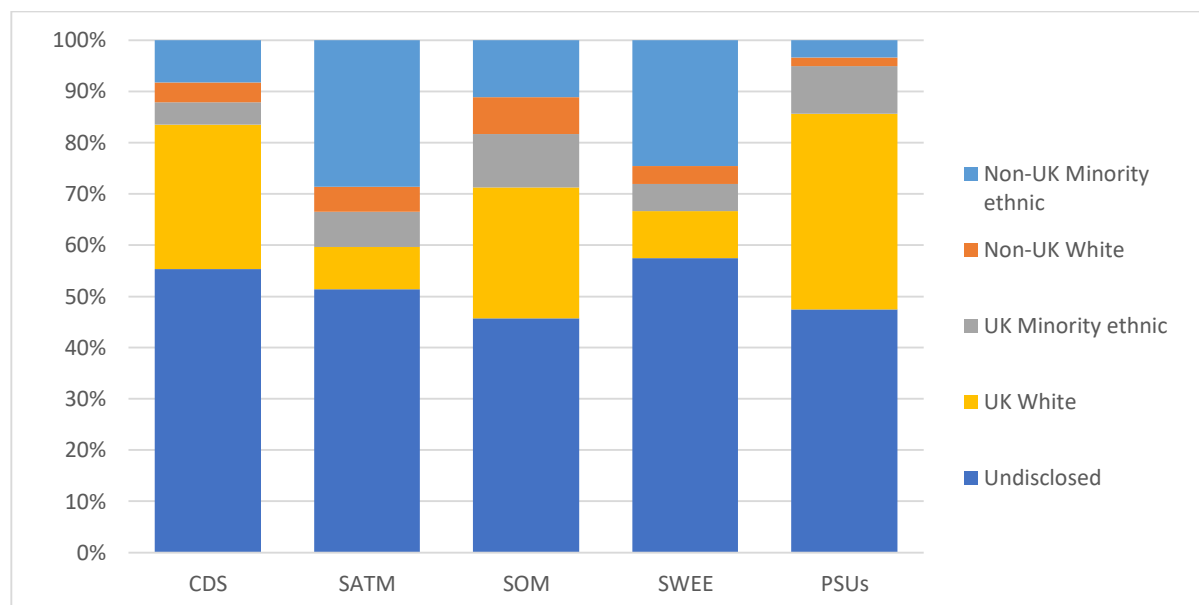


Figure 3 Ethnicity by School/PSUs

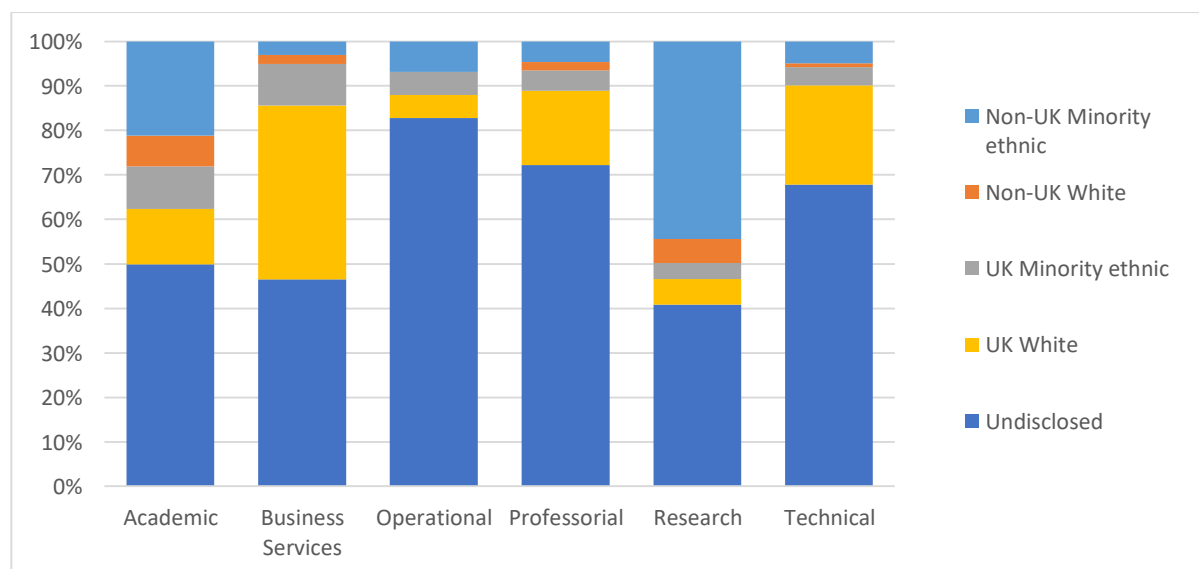


Figure 4 Ethnicity by job family

Staff disability profile

When analysing the staff disability data, we are very pleased that the percentage of staff sharing a disability, condition or impairment has increased from 5% to 7%, as shown in Table 5.

	2020/21		2021/22		2022/23	
	Count	%	Count	%	Count	%
No shared disability	1545	94%	1552	94%	1593	90%
Disability shared	71	4%	78	5%	126	7%
Undisclosed	25	2%	23	1%	50	3%

Table 5 Staff sharing a disability, condition or impairment

A further positive this year is a new option to share details of more than one disability, condition or impairment, making our data more inclusive and relevant. This is shown in Table 6.

The increase in sharing rates is particularly notable in the following areas:

- increase in long-term conditions, was 12 last year, now 30;
- increase in sharing of learning differences, was 14, now 25;
- increase in sharing mental health conditions, was 14, now 22; and
- increase in sharing hearing difficulties, was 4 now 12.

Disability, condition or impairment	Count	%
Long-term illness or health condition such as cancer, HIV, diabetes, chronic heart disease, or epilepsy	30	24%
Learning difference such as dyslexia, dyspraxia or AD(H)D	25	20%
Mental health condition, challenge or disorder, such as depression, schizophrenia or anxiety	22	17%
An impairment, health condition or learning difference not listed above	20	16%
D/deaf or have a hearing impairment	12	10%
Physical impairment (a condition that substantially limits one or more basic physical activities such as walking, climbing stairs, lifting or carrying)	11	9%
Two or more impairments and/or disabling medical conditions	3	2%

Social/communication conditions such as a speech and language impairment or an autistic spectrum condition	2	2%
Blind or have a visual impairment uncorrected by glasses	1	1%

Table 6 Disability, condition or impairment

Staff sexual orientation profile

The number of staff sharing their LGBTQ+ sexual orientation with us has increased, but remains relatively small as a percentage of our total staff. However, we are pleased to report a 36% increase in the number of people sharing they are LGBTQ+ during the six-month period after first publishing these numbers in a new data dashboard. This is a reflection of the work of our staff network, Q at Cranfield. This is shown Table 7.

	Count	%
Heterosexual	1331	75%
LGBTQ+	57	3%
Undisclosed	381	22%
University	1769	100%

Table 7 Sexual orientation

Staff age profile

There has been little change in the age profile of our staff compared with last year, as shown in Figure 5. We have seen a slight increase in the proportion of University staff under the age of 30. The percentage of staff over the age of 60 in our professorial and operational job families, shown in Table 8, is significant for our succession planning.

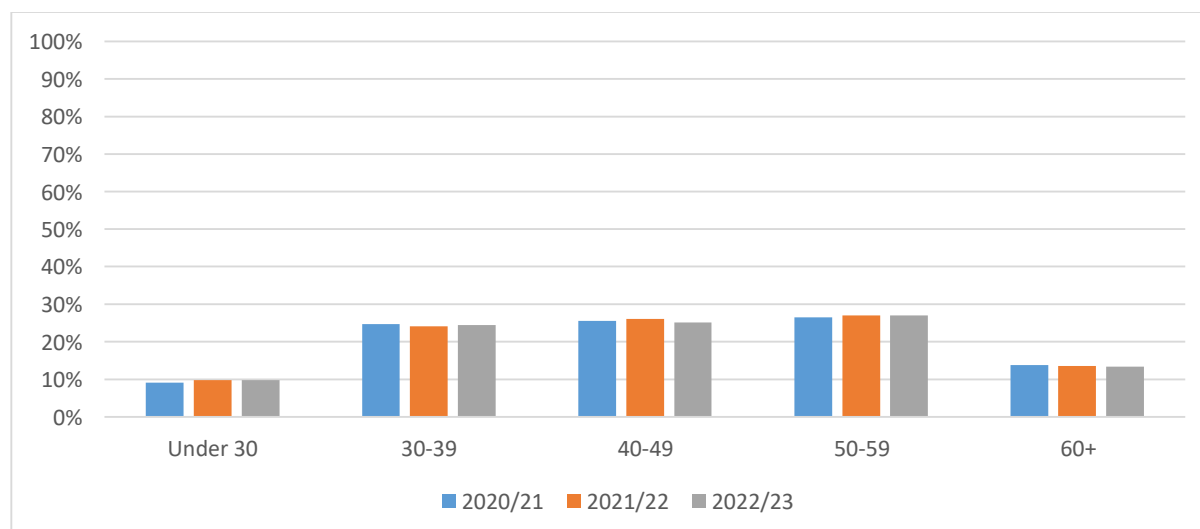


Figure 5 Age profile

	% age within job family						
	Academic	Business Services	Operational	Professorial	Research	Technical	University
< 30	1%	9%	10%	0%	23%	26%	10%
30-39	27%	21%	9%	1%	48%	16%	24%
40-49	35%	26%	22%	22%	17%	15%	25%
50-59	26%	33%	31%	38%	8%	24%	27%
60+	12%	12%	28%	39%	4%	19%	13%

Table 8 Staff age by job family

Staff recruitment data

The data presented in this section are summary results from analysing recruitment activity for the six-month period August 2022 to January 2023, covering the gender, ethnicity and disability of applicants. The data are presented to show our recruitment activity by job family.

Gender in recruitment data

Overall, women represented 41% of all applicants, and 58% of those hired, resulting in a higher overall success rate of 15% for female applicants compared to that of 7% for male applicants. This is an increase on the year 2021-2022, when overall 38% of all applicants were female.

These results were replicated across all job families except for technical and apprentice roles where the number of female applicants and those shortlisted was lower. Similar female success was seen in roles across the pay scales, including those at senior level.

As in previous years, male applicants continue to have a low success rate for business service roles, with men making up 37% of all applicants, but only 17% of those hired for these roles. The percentage of offers made to women remained stable compared to last year, at 53%. The data are provided in Table 9

Female					
Job Family	Applications	Shortlisted	Offered	Hired	Conversion Rate
Academic	31%	34%	37%	35%	6%
Professorial	40%	100%	100%	100%	50%
Research	19%	25%	29%	29%	14%
Business Services	63%	72%	83%	83%	16%
Operational	42%	55%	58%	58%	28%
Technical	23%	26%	14%	14%	10%
Apprentice	26%	10%	17%	17%	7%
All University	41%	53%	58%	58%	15%

Male					
Job Family	Applications	Shortlisted	Offered	Hired	Conversion Rate
Academic	69%	66%	63%	65%	5%
Professorial	60%	0%	0%	0%	0%
Research	81%	75%	71%	71%	8%
Business Services	37%	28%	17%	17%	6%
Operational	58%	45%	42%	42%	15%
Technical	77%	74%	86%	86%	18%
Apprentice	74%	90%	83%	83%	13%
All University	57%	46%	40%	40%	7%
Elected not to share	1%	1%	1%	2%	13%

Table 9 Recruitment activity by gender for August 2022 - January 2023

Ethnicity in recruitment data

Compared to the reporting period in 2021-2022, our recruitment data for ethnicity shows little change. UK white applicants continued to have the highest success rate across all roles with 21% of this group being successfully hired (compared to 19% last year), shown in Table 10. Non-UK ethnic minority applicants again had a low conversion rate of 4% (3% last year); non-UK white had a 11% conversion rate (9% last year), shown in Table 11.

Encouragingly, UK-ethnic applicants had a conversion rate of 11% this year which was up from 6% last year.

Overall, the conversion rates for minority ethnic staff have improved since the last reporting period, by 5% for UK ethnic applicants, and by 1% for non-UK ethnic applicants. This is evidenced in the overall increase in ethnic minority staff numbers this year.

As in previous years, ethnic minority applicants from outside the UK make up the largest proportion of all applicants at 47% in the reporting period. This is a slight decrease over previous years (around 50%) and may reflect changes in the immigration landscape in the UK in the previous period. Non-UK ethnic minority applicants had the lowest success rate in terms of being appointed across all job family roles. In particular, they had a low success rate for academic and research roles even though they comprised the majority of applicants for roles of this type. UK ethnic minority applicants were shown to have low success rates in academic, operational and apprentice roles.

Our focus for 2023 -2024 will continue to be on increasing candidate attraction and identifying and removing barriers in the recruitment process to improve hiring levels for minoritised ethnic candidates.

UK White					
Job Family	Applications	Shortlisted	Offered	Hired	Conversion Rate
Academic	10%	26%	37%	41%	22%
Professorial	60%	100%	100%	100%	33%
Research	5%	13%	19%	19%	35%
Business Services	50%	71%	77%	76%	19%
Operational	51%	80%	100%	100%	38%
Technical	32%	63%	67%	67%	33%
Apprentice	45%	76%	83%	83%	21%
All University	28%	52%	58%	58%	21%

Non-UK White					
Job Family	Applications	Shortlisted	Offered	Hired	Conversion Rate
Academic	17%	28%	42%	41%	13%
Professorial	20%	0%	0%	0%	0%
Research	12%	14%	21%	21%	16%
Business Services	8%	5%	3%	3%	5%
Operational	5%	3%	0%	0%	0%
Technical	16%	6%	0%	0%	0%
Apprentice	6%	5%	17%	17%	33%
All University	10%	9%	11%	11%	11%

Table 10 Recruitment activity by white or non white ethnicity for August 2022 - January 2023

UK Minority Ethnic					
Job Family	Applied	Shortlisted	Offered	Hired	Conversion Rate
Academic	9%	13%	5%	6%	4%
Professorial	0%	0%	0%	0%	
Research	3%	3%	4%	4%	15%
Business Services	15%	15%	14%	14%	12%
Operational	4%	3%	0%	0%	0%
Technical	5%	6%	17%	17%	50%
Apprentice	11%	14%	0%	0%	0%
All University	9%	11%	9%	9%	11%

	Non-UK Minority Ethnic				
Job Family	Applied	Shortlisted	Offered	Hired	Conversion Rate
Academic	64%	33%	16%	12%	1%
Professorial	20%	0%	0%	0%	0%
Research	80%	70%	55%	55%	6%
Business Services	27%	8%	7%	7%	3%
Operational	40%	13%	0%	0%	0%
Technical	46%	25%	17%	17%	6%
Apprentice	38%	5%	0%	0%	0%
All University	47%	24%	19%	19%	4%
Elected not to share	5%	4%	4%	4%	9%

Table 11 Recruitment activity by minoritised ethnicity for August 2022 - January 2023

Disability in recruitment data

The sharing rates among candidates who apply for posts at Cranfield remain relatively low as a percentage of candidates. We aim to improve our understanding of the candidate experience for disabled candidates, and therefore request people share their data with us, in line with our commitments as a Disability Confident Employer. Of those applicants who chose to share that they are disabled, 8% were successfully appointed, whereas 13% of applicants who did not share any disability-related information with us were appointed, as shown in Table 12. It is important to note that this lower success rate may be due to the fact that many applicants elect not to share their personal information until they have been offered a role. This analysis marks the first year we have published this form of analysis and serves as a benchmark for our ongoing progress. In addition, the changes to HESA codes in 2023, which have made the categories of data that we collect more inclusive, may further assist us with increasing sharing rates.

Shared Disability					
Job Family	Applications	Shortlisted	Offered	Hired	Conversion Rate
Academic	3%	7%	5%	6%	9%
Professorial	0%	0%	0%	0%	
Research	2%	4%	0%	0%	0%
Business Services	7%	9%	5%	5%	8%
Operational	7%	10%	0%	0%	0%
Technical	2%	5%	0%	0%	0%
Apprentice	6%	10%	17%	17%	33%
All University	5%	7%	3%	4%	8%

None Shared					
Job Family	Applied	Shortlisted	Offered	Hired	Conversion Rate
Academic	97%	93%	95%	94%	5%
Professorial	100%	100%	100%	100%	20%
Research	98%	96%	100%	100%	10%
Business Services	93%	91%	95%	95%	12%
Operational	93%	90%	100%	100%	22%
Technical	98%	95%	100%	100%	17%
Apprentice	94%	90%	83%	83%	10%
All University	94%	92%	95%	95%	11%
Elected not to share	1%	1%	1%	2%	13%

Table 12 Recruitment activity by disability for August 2022 - January 2023

Sexual orientation in recruitment data

Our data on sexual orientation of candidates during the recruitment process is currently too small to perform meaningful analysis. We maintain our commitment to encouraging applicants to share their sexual orientation with us during recruitment stages through our engagement with the LGBTQ+ community. We have demonstrated good progress with increasing sharing rates with our employees when they join us, and we will continue to promote this practice. In addition, the changes to HESA codes in 2023, which broaden the categories of data we collect for sexual orientation, may further aid us in this regard.

Staff voluntary turnover data

Voluntary turnover occurs when staff willingly leave an organisation, as opposed to leaving at the end of a fixed term contract or other reasons initiated by the employer.

At Cranfield, our voluntary turnover rate for the six-month period to January 2023 was 5% which when extrapolated to a full year, is in line with the previous EDI annual report when voluntary turnover was 11% for the full year. This slightly lower voluntary turnover rate could reflect a stabilising of the general recruitment climate in the UK following the peak during the 'Great Resignation' and 'Great Retirement' that affected the country as a whole in 2021-2022. This rate continues to be in line with the rest of the sector.

During the six-month period, women and men experienced similar turnover rates, with women having a voluntary turnover rate of 6% and men 5%. The primary reasons for leaving were similar for both men and women, with career prospects and retirement being the most common reasons provided, however some women also referred to 'work/life balance' as a contributing factor. This is an important trend that also reflects the broader UK trends and is being considered as part of our wellbeing initiatives.

Variations in turnover can be seen within different ethnic groups. UK ethnic minority staff had the highest voluntary turnover rate of all groups during the six-month period, at 7%. The ethnic groups of non-UK ethnic, UK white and non-UK white all had a voluntary turnover rate of 5%.

Sector Benchmarks

Referencing [HESA staff data](#) for the academic year 2021/22, and the latest [AdvanceHE staff statistical report](#) which looks at staff data for the academic year 2020/21, the tables below benchmark Cranfield's key staff demographic metrics against the wider HEI sector where comparisons are available. The HESA data is a year older than the Cranfield reported data, due to HESA reporting timelines.

The tables below also show our People strategy KPIs to benchmark our progress towards our goals for 2027.

Gender	Cranfield July 2023	Strategy KPI by 2027	HESA 2021/22	Advance HE 2020/21 (rounded)
Females as % of all staff	48%	-	55%	54%
Females as % of all academics	27%	35%	-	-
Females as % of all professors	13%	20%	30%	28%

Ethnicity	Cranfield July 2023	Strategy KPI by 2027	HESA 2021/22	Advance HE 2020/21 (rounded)
Ethnic staff as % of all staff	21%	-	16%	16%
UK Ethnic staff as a % of all staff	8%	12%	-	9%
Ethnic staff as % of all professors	9%	-	12%	11%
Black staff as a % of all professors	0%	-	1%	1%

Disability	Cranfield July 2023	Strategy KPI by 2027	HESA 2021/22	Advance HE 2020/21 (rounded)
Shared disability as % of all staff	7%	6%	7%	6%

Sexual Orientation	Cranfield July 2023	Strategy KPI by 2027	HESA 2021/22	Advance HE 2020/21 (rounded)
Staff sharing their LGBTQ+ status as a % of all staff	3%	-	-	4%

Making Change Happen 2023 – 2024

Cranfield has strong ambitions to continue our progress and make change happen as outlined in our new [EDI strategy](#). While this report demonstrates good progress in a number of key areas, we recognise there is still more we aim to achieve. We acknowledge the need to make firm commitments to take the necessary actions to enable us to achieve our aspirations. A summary of some of our operational actions for 2023-2024 is provided below.

Operational actions

We will continue our EDI work in recruitment, career development, wellbeing, pay and reward and retention. In addition, we have planned new operational actions for the period 2023-2024, including:

1. establishing an executive committee for EDI and Wellbeing to further strengthen leadership and governance;
2. commencing the pilot for small and specialist institutions for [AdvanceHE's Race Equality Charter](#) submission;
3. applying for recognition as a [Trailblazer by Race Equality Matters](#). The Trailblazer series spotlights forward-thinking organisations that are implementing impactful solutions to drive race equality;
4. re-establishing our [Athena Swan](#) self-assessment team for our Bronze level Charter re-submission;
5. expanding our outreach activities with local communities, including participation in job shows, and ongoing engagement with organisations such as Women Leaders UK.
6. implementing a working group to review our disability adjustments processes;
7. submitting evidence towards achieving [Disability Confident Leader](#) status under the Disability Confident Scheme, building on our current level 2 status, Disability Confident Employer;
8. developing an enhanced shared parental leave policy to remove a barrier that may disincentivise co-parents from returning to work;
9. reviewing our People KPIs for staff sharing rates which have made strong progress in the past 12 months and may be revised upwards if this trend continues; and
10. sustaining our momentum of engaging with students, by increased partnering with the Cranfield Students' Association, and collaboration with colleagues such as our [Student Wellbeing and Disability Support team](#) and [Careers and Employability Service](#).



Annual Environmental Report 2022 / 2023

Energy and Environment Committee



Cover picture of group of volunteers who helped to plant Miyawaki Forest (see page 20)
Photo by Earthwatch UK

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Statement

Professor Chris Fogwill, Chair Energy and Environment Committee



Our vision is to be valued globally for tackling the real-world issues of today to deliver a sustainable future. We work in partnership with business, academia, governments, and other organisations to develop and deliver applied research and innovative science, technology, engineering and management.

Here, the Energy and Environment Committee (EEC) reports progress on our environmental targets. This is largely focused on the performance of our estate and facilities. Our academic contribution to sustainability is featured on the University website. Given the University undertakes world leading research and learning on sustainability and the environment it is important that we are reflecting this in our operations. Key performance indicators highlighted below and through the report are correlated with the Times Higher Education Impact Awards criteria giving an indication of the contribution to the UN Sustainable Development Goals (SDGs).

We remain indebted to our staff and students who contribute to our on-going improvements and to our Energy and Environment Team, Energy and Environment Committee and working group members who lead and coordinate our combined efforts. We are grateful for the on-going support of our contractors who help with the efficient running of the estate.

Key performance indicators

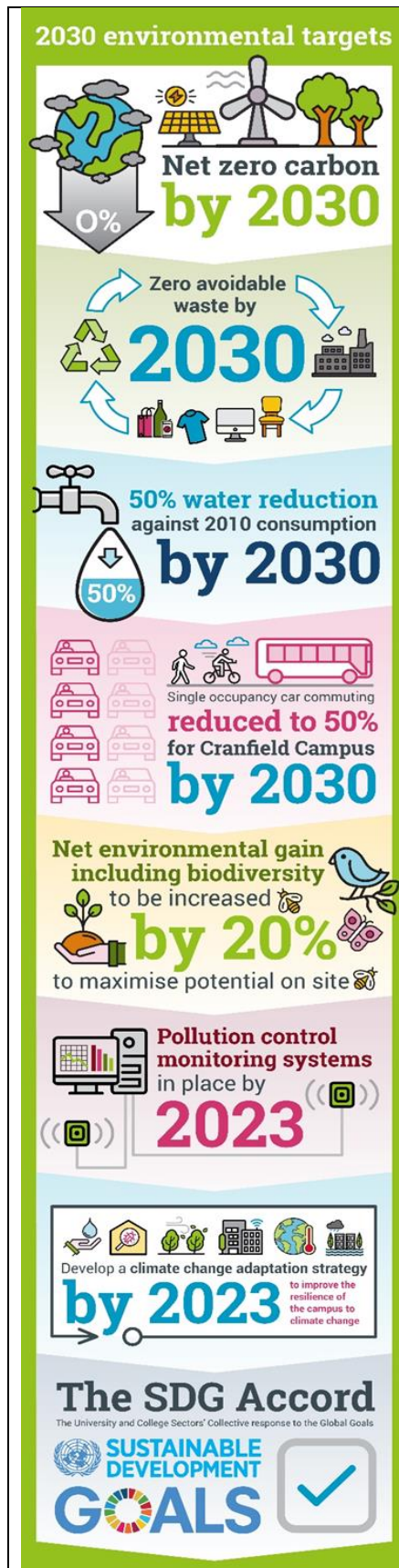
Issue	Description	Latest	Previous	SDG Contribution	Status	Comments
Carbon	Scope 1&2 emissions tCO2	9,532	9,612	THE – SDG* 13.4.1	A	1% reduction year on year
Carbon	Energy efficiency GJ/m2	0.82	0.90	THE - SDG 7.3	G	More efficient use of energy
Carbon	Renewable energy GWh	3,023	3,298	THE - SDG 13.2.3	A	Reduction in biomass output
Waste	Avoidable waste %	18%	18%	THE - SDG 12.2.4	A	Waste which could have been reduced, re-used or recycled
Waste	Total waste tonnes	988	1052	THE - SDG 12.3.2	G	Decrease despite including Conference Hotel for first time
Travel	Commuting alone by car %	38%	35%	THE - SDG 11.4.1	G	Continuing impact of working from home
Water	Water consumption m3/head	34.4	34.4	THE - SDG 6.2.2	R	No progress
Biodiversity	Biodiversity Action Areas ha	9.0	8.6	THE – SDG 15.2.3	G	In addition, 320 trees planted and additional hedging

Above: table shows key performance indicators for our environmental targets and progress, including SDG (Sustainable Development goal) contribution and comments.

* THE-SDG refers to the Times Higher Education Impact Awards Sustainable Development Goals categories.

Note: There are more indicators and objectives highlighted under each section in the report.

Environmental Targets



In 2020 the University Council committed to a new set of environmental targets. The strategy for delivering these targets can be found at:

<https://www.cranfield.ac.uk/about/our-sustainable-university/our-2030-environmental-targets>

The targets are to be achieved by academic year 2030/31. They include All Cranfield University activities including the activities of any subsidiaries including MK:U.

The aim of the Net Zero Carbon target is to reduce Scope 1 and 2 carbon emissions as quickly as possible through energy saving and renewable energy. Any remaining emissions will require other measures. The strategy for Scope 3 emissions is still being developed and these emissions will be included as deemed appropriate for the sector.

The Zero Avoidable Waste target aims to minimise waste ending up in landfill or going for incineration and embraces the application of circular economy principles.

The water reduction target aims to be consistent with best practice and future supply pressures in this part of the UK.

The sustainable commuting target continues to focus on promoting alternatives to the car. Walking, cycling and bus are the main options.

Biodiversity will benefit from the new target ensuring any development on site results in a net environmental gain. The masterplan for the University sets out areas for new buildings and also a wildlife corridor where new habitats can be established.

The application of sensors on campus through the Urban Observatory is helping with the monitoring of air, water and soil. This will be developed in the short term to set out new pollution control monitoring and targets.

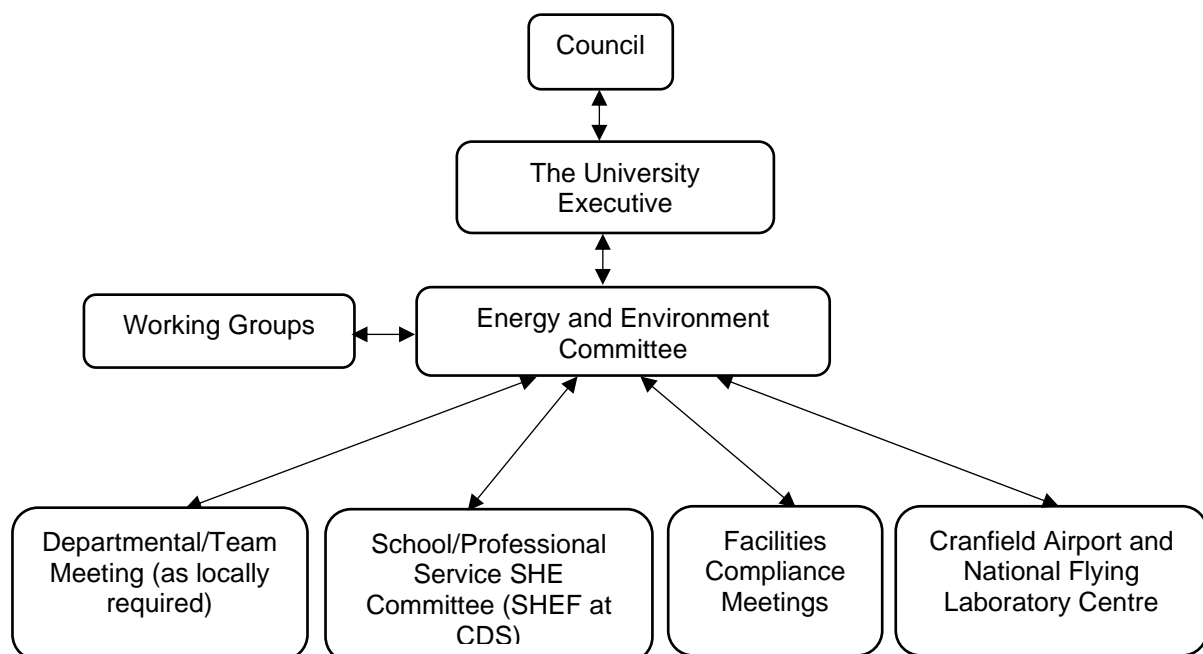
The risks of climate change impacts on the University are being investigated. This will be developed into a climate change strategy.

The University has signed the SDG Accord. This has led to more focus on the SDGs and how the university's contribution can be better communicated and developed.

Quality assurance

Governance

The Energy and Environment Committee (EEC) reports to the Cranfield Executive and Council on energy and environmental management issues. The priority of the Committee is to ensure Cranfield University demonstrates a leading capability in environmental performance by providing oversight and direction. The Committee is a sub-committee of the Executive and consists of senior managers from across the University along with student representation and members of the Energy and Environment Team. The Committee has working groups, with members drawn from operational and academic staff and students, to progress key environmental objectives. A dedicated Energy and Environment team facilitates delivery of the objectives and reports progress towards target to the Committee on a regular basis. The Committee aims to ensure a close relationship between EEC's environmental activities across the University and the teaching, learning and research taking place within the Themes on environmental best practice. The Governance structure is outlined below.



Above: Diagram shows governance structure for the Energy and Environment Committee

ISO 14001:2015

Cranfield University operates a university wide environmental management system. The system provides a framework for managing our environmental impacts, risks, and opportunities, for setting environmental objectives and establishing programmes to achieve them. The scope of the certification covers all University operations including Cranfield Defence and Security at the Shrivenham and COTEC sites.

A successful re-certification audit was carried out by BSI in May 2023. In a climate of continuous improvement, the reporting of all environmental incidents and near misses is encouraged.

ISO 50001:2018

Cranfield University operates a university wide Energy Management System, which provides a framework for managing our energy use. The scope of the certification covers all University operations on the Cranfield campus, Cranfield Defence and Security at the COTEC site and MK:U at Bouverie House. Recertification was achieved in July 2021, with surveillance audits taking place in July 2022 and July 2023.

Scope of reporting

The environmental targets on page 4 encompass activities taking place on the Cranfield Campus, including subsidiary companies and tenants on site (*see Notes section near end of document*). The University's operation at the Cranfield Ordnance Test & Evaluation Centre (COTEC) is included. The University is not directly involved in the management of Shrivenham Campus, so the University activities there do not contribute to the key performance indicators such as carbon emission in this report (*see Notes section near end of document*).

Other reporting

In line with the Higher Education Statistics Association (HESA) requirements, the University submits environmental data as part of the annual estate management reporting statistics. This data attempts to exclude tenant data and differs slightly from the data that appears in this report. Under the new Streamlined Energy and Carbon Reporting (SECR) rules, which replaced the Carbon Reduction Commitment (CRC) Energy Efficiency scheme in 2020, the University reports its annual carbon emissions in the University's annual Finance report. That data includes all primary energy use by the University Group, all imported electricity use and all fuel put into University owned vehicles or private or hire vehicles used for Business Travel.

Data submitted to HESA is also used by the '*People and planet University League*' (a student-led, People and Planet voluntary league table of University environmental performance). In People and Planet's University League, comparisons are made per student or per m² total floor area. Cranfield is a wholly Postgraduate University undertaking industrial scale research. This makes environmental impacts per student or per m² appear high. This annual report focuses on how the environmental performance of the University is improving over time. The University is also participating in the THE (Times Higher Education) Impact Awards. The contribution of the environmental management of the university estate to the SDGs in line with the THE criteria is highlighted in this report.

Base year recalculation policy

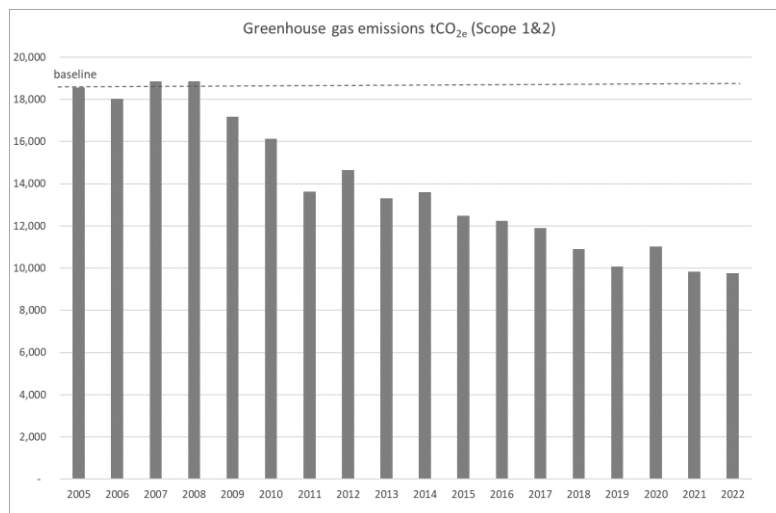
Our base year figures for reporting are reviewed from time to time to ensure like for like reporting. (*see Notes section near end of document*).

Carbon and Energy



Progress

Current Scope 1 and 2 emissions are 9,532 tonnes CO₂. A small reduction compared with the previous year at 9,612 tonnes. Recent investments in renewable energy and energy efficiency infrastructure have yet to take effect. These potentially add up to emissions savings of over 3,000 tonnes of CO₂ and will become apparent over the next two years as the new systems bed in and are optimised. The measures include replacing gas boilers with air source heat pumps, adding buildings to the campus district heating system, improved heating and ventilation controls, insulation, LED lighting, solar photovoltaic installations, and a large battery.



Above: Graph showing the amount of greenhouse gas emissions in tonnes of carbon dioxide equivalent scope 1 and 2, from 2005 to 2022. Graph shows a downwards decrease in emissions with time.

Note: Year 2005 runs from August 2005 to July 2006, etc.

Energy trends and efficiency

Total energy used has decreased for a second year, although the longer-term trend is slightly up. Nevertheless, the overall energy efficiency continues to improve with less energy used per building floor area. Renewable energy generation remains high with the enlargement of the solar farm and increased operation of the biomass boiler. The University does not currently purchase “green” electricity as typically green electricity offered on the UK market does not provide additionality. The University is however exploring Power Purchase Agreements for new renewable energy electricity which does provide new capacity.

	2019/20	2020/21	2021/22	2022/23
Total energy used (kWh)	44,841,986	50,176,963	48,022,909	44,050,024
Renewable energy generated/used (kWh)	2,138,441	2,236,208	3,297,839	3,022,661

Above: table shows total energy used in kWh and renewable energy generated/used in kWh, year on year, from 2019/20 to 2022/23. Renewable energy generated has increased with time.

	2019/20	2020/21	2021/22	2022/23
Total energy used (GJ)	161,431	180,637	172,882	158,580
Floor area (m2)	169,005	185,856	192,495	193,201
Energy efficiency (GJ/m2)	0.96	0.97	0.90	0.82

Above: table shows total energy used in GJ, total floor area in m², and energy efficiency per floor area in m² from 2019/20 to 2022/23 showing an increase in energy efficiency per m² with time.

Scope 3 emissions

The measurement of Scope 3 emissions relies largely on third party data based on spend and there is a lag in obtaining and verifying realistic information. As soon as figures are available this report will be updated.

The University has established a Scope 3 working group to develop our reporting, guided by the Standardised Carbon Emissions Framework (SCEF) established in December 2022 by the Environmental Association for Universities and Colleges (EAUC) the environmental and sustainability champion within Further and Higher Education in the UK and Ireland.

Infrastructure

In early 2022 an £11 Million bid to Public Sector Decarbonisation Scheme secured funding for the insulation of the two large aircraft hangars, further improvements to the district heating with an additional air source heat pump and an additional solar PV array. This has now been largely delivered and complements the district heating project undertaken in 2021/22. The two projects combined are projected to save 3,000 tCO₂.

A further £4 Million bid to Public Sector Decarbonisation Scheme has secured funding for further improvements to the district heating adding a large heat store and extending the network to the residential estate. Detailed planning for this project is underway and installation will proceed in 2024.



Above: photos of hangar 2 (building 84) insulation including cladding and improved hangar doors.



Above: photo of new solar farm installed on disused car park early 2023

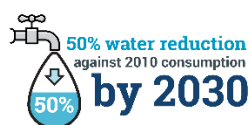
Table of SDG KPIs relating to Carbon & Energy

The SDG indicators below are taken for the Times Higher Education (THE) Awards criteria. The measures are what the university is doing to meet that indicator.

THE reference	Indicator	Measures	Comments
7.2.1	Energy and Efficient Renovation and Building	New buildings are assessed to the BREEAM standard	Key measures are being incorporated into University design guide / standards to address refurbishments / renovations
7.2.2	Plans to upgrade energy efficiency of buildings	These are set out in the annual Energy & Carbon Plan	See on website: https://www.cranfield.ac.uk/about/our-sustainable-university/carbon-and-energy-management
7.2.3	Carbon management and emission reduction process	This is set out in the annual Energy & Carbon Plan	See above
7.2.4	Plan to reduce energy consumption	This is set out in the annual Energy & Carbon Plan	See above
7.2.5	Energy wastage identification	This is set out in the annual Energy & Carbon Plan	See above
7.3.1	Energy use density- Total energy used per floor space	Ratio 0.82GJ/m ²	Energy used 158,580 GJ Floor space 193,201 m ²
13.2.1	Low carbon energy tracking	Solar 1.38 GWh Biomass 1.64 GWh	Renewable energy generated and used on site.
11.4.8	New build standards	New buildings are assessed to the BREEAM standard	
11.4.9	Building on brownfield sites	The University is using brownfield for new buildings	This is set out in the campus Masterplan
13.2.2	Total energy used	42,451,366 kWh	
13.2.3	Total energy used from low carbon sources	3,297,839 kWh	Note "Green Electricity" is not purchased as typically this does not provide additionality
13.3.2	Climate Action Plan	Energy & Carbon Plan on website	Climate adaptation strategy being developed
13.4.1	Commitment to carbon neutral university	Net zero carbon by 2030 target	Includes scope 3, but exact definition being developed
13.4.2	Carbon neutrality date	2030	

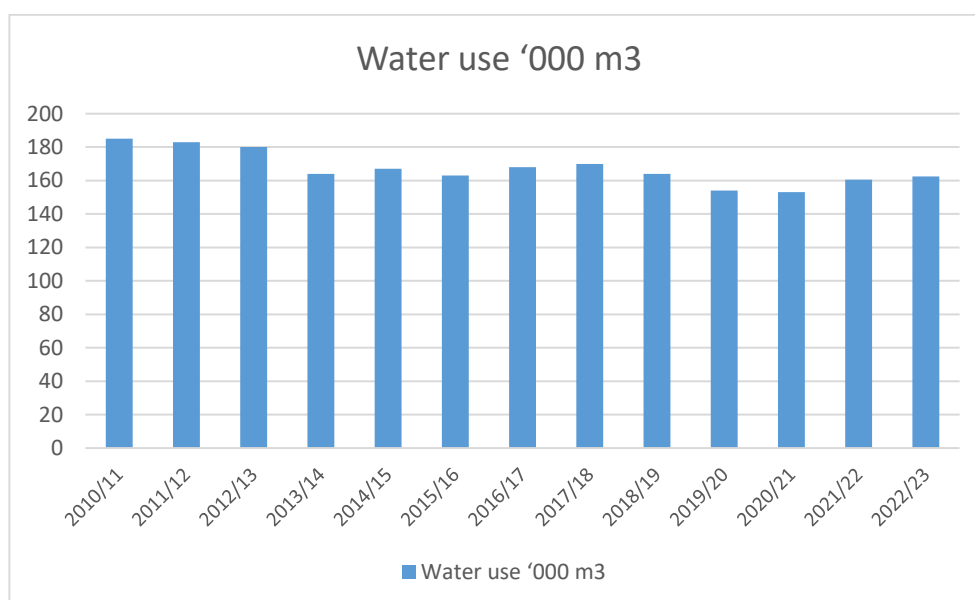
Above: Table of SDG KPIs (key performance indicators) relating to Carbon & Energy reduction

Water



Work has continued to improve water metering and monitoring on the main Cranfield Campus and to encourage the reporting of leaks, so they can be dealt with promptly. Several large leaks were identified on both the technical and residential sides over the last year. Some were linked to frost damage over the Christmas period and others were due to mechanical failures.

A number of urinals were also found to be flushing excessively and timers have been adjusted to reduce the amount of water used. A dedicated section on water saving is included in the Canvas Environmental Awareness Induction, and this has been rolled out to all our students. Water saving tips have also been promoted amongst our staff and student Green Teams. The university has published a Water Management Plan and a Water Management Policy Statement on its website. These give details of the approaches it is taking to reduce potable water use.



Above: graph showing water usage in Cubic Meters from 2010/11 to 2022/23. The total usage has dropped slightly, although not significantly. **Note:** the water consumption figure for 2022/23 is estimated due the failure of the main supply meter.

	2020/21	2021/22	2022/23
Total water used (m3)	153,481	160,580	162,478
Staff & Students (FTE)*	4,241	4,671	4,726
Water use efficiency (m3/staff&student)**	36.2	34.4	34.4

Above: Table shows year on year comparison of water use and efficiency

*Includes Cranfield campus, excludes Shrivvenham. ** Excludes other Cranfield campus residents such as student partners and children and staff residing on site. The number for these in 2022/23 was 245.

Table of SDG KPIs relating to Water

The SDG indicators below are taken for the Times Higher Education (THE) Awards criteria. The measures are what the university is doing to meet that indicator.

THE	Indicator	Measures	Comments
6.2.1	Water consumption tracking	Water consumption reduction is key target;	Does not currently include water used by Cranfield University at Shrivenham as water metering and consumption is not under the University's control.
6.2.2	Water consumption per person	34.4 m3/person	162,478 m3 4,726 persons
6.3.1	Wastewater treatment	Wastewater is treated on site	
6.3.2	Preventing water system pollution	Procedures include Spill Prevention and Response, Discharge to Sinks and Drains:	Controlled through ISO 14001 certified environmental management system
6.3.3	Free drinking water provided	Drinking water fountains and filtered water dispensers	
6.3.4	Water conscious building standards	BREEAM assessment on new buildings Compliance with Building Regulations	University Design Standards being enhanced and developed.
6.3.5	Water conscious planting	Plantings are made at the appropriate time of year to avoid water stress	Guidance on suitable drought tolerant plants for the site is being developed
6.4.1	Water reuse policy	A water management policy has been developed and published	Options for water reuse and recycling are being explored
6.4.2	Water reuse measurement	None	This is still in the pilot stage
6.5.2	Promoting conscious water usage	Water conservation is promoted on campus	A project promoting efficient shower usage. Canvas Environmental Awareness module

Above: Table of SDG (Sustainable Development Goals) KPIs relating to water reduction, measures, and comments

Resources and Waste



The university is committed to putting the principles of the Circular Economy into practice by putting processes in place to:

- prevent materials from becoming waste in the first place
- ensure waste that is created is recycled, composted, or sent for anaerobic digestion and not sent to landfill or incineration*.

*Recyclable, compostable or digestible waste that ends up in the residual waste stream (waste sent for landfill or incineration with or without energy recovery) is defined as AVOIDABLE.

Avoidable Waste

The overarching target is to reach Zero Avoidable Waste by 2030. The starting point is to gather information on the materials ending up in the residual waste stream and use best management practices to apply the waste hierarchy to these materials: prevent, reduce, reuse, and recycle.

The audit of recycling and residual general waste bins around the different functional areas of the campus from residential to technical buildings has not happened this year due to contractor staff availability. However this requirement will be written into the new contract going forward to enable audit, analysis and action to take place in 23-24. Previous audit data has been used to calculate avoidable waste figure for 22-23. Of the 998 tonnes of waste produced, 47% was segregated on site and either reused, recycled, composted or sent for anaerobic digestion. Avoidable waste is 18% of total waste. Tonnages are summarised in the figure on the next page.

Total waste

Total waste produced by the Cranfield campus over 22-23 was less than the previous year.

	2021/22	2022/23
Total waste (tonnes)*	1,052	988**
Staff & Students (FTE)***	4,671	4,726
Waste per staff & student FTE (tonne/person)	0.23	0.21

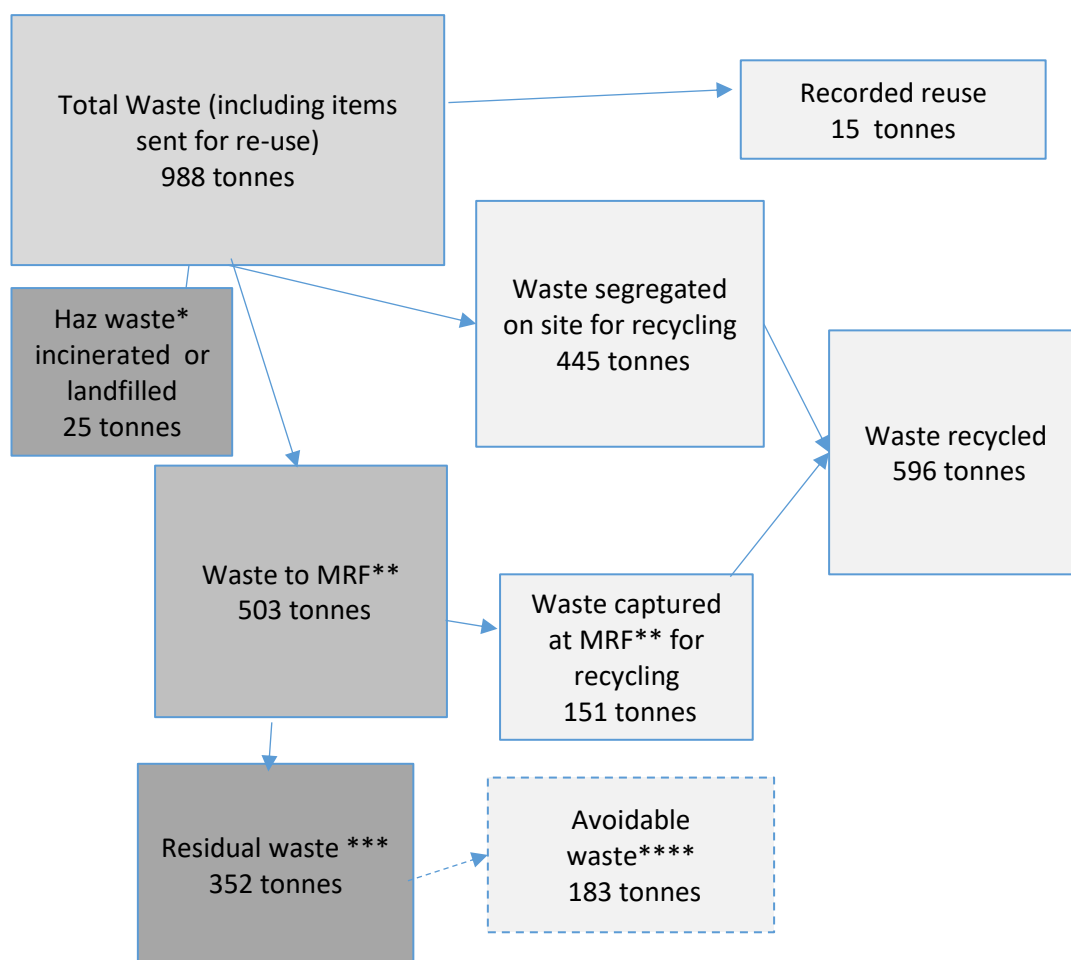
Above: Table showing total waste, number of staff and students, and waste per staff/students for years 2021/22 and 2022/23

*Cranfield campus waste only, not including construction waste from development sites.

**22-23 figures include for the first time tonnages from CCCL (85 tonnes). Future reports may amend previous year data to include CCCL estimate.

*** includes Cranfield and MKU, excludes Shrivenham. Excludes other Cranfield campus residents such as student partners and children and staff residing on site. The number for these in 2022/23 was 245.

Where the waste goes



Above: The diagram shows the breakdown of total waste generated on campus, and how it is managed. 445 tonnes of waste is segregated on site for recycling, and 503 tonnes of waste is sent to Cawley's Materials Recycling Facility (MRF). 183 tonnes of waste disposed of in general waste could have been recycled.

Notes: This data is from tonnage information provided by the University's waste contractor. It does not include construction waste from development sites. The avoidable waste figure is based on 2 audits representing 1% of the total residual waste. In future years further audits will be scheduled to gain confidence in the results.

*Haz waste – hazardous waste which is not recyclable. 5.9 tonnes biomass boiler ash landfilled and the remainder incinerated.

**MRF – Material Recycling Facility.

***Residual waste – waste which is sent for incineration with energy recovery and landfill (0.5 tonnes bulky waste landfilled and the remainder energy recovery).

****Avoidable waste – waste which could have been recycled.

Sustainable food and beverage policy

Developed by Sustainable Food working group the policy has been approved and commits to drive progress with aims such as reducing single use plastics and packaging, and operating catering services in accordance with the waste hierarchy.

Recording and monitoring of pre-consumer food waste from catering outlets

The University's Campus Services has placed reduction targets on food waste in an effort to reduce food being wasted during food preparation and service.

Food wastage (% revenue)

Area	Reduction Target 22/23	Achieved	Reduction Target 23/24
Conference Centre	2.5%	1.92%	1.75%
Mitchell Hall	3.0%	2.79%	2.5%
Cranberries	1.0%	1.27%	1.25%
Overall	2.5%	2.28%	2.0%

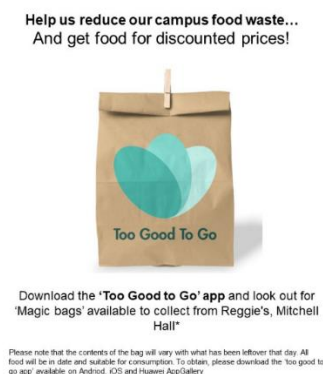
Above: The table shows Campus Service's food waste reduction targets per centre with progress made

Spotlight on disposables

The University's Cranfield Management Development Centre (CMDC) has removed the bottled water from bedrooms, and guests are encouraged to use the tap water which has been certified as potable. This has removed an average of 20,000 bottles from use annually in the CMDC. Mitchell Hall and CMDC operations between them have removed approximately 220,000 disposable cups and 51,000 lids from use in favour of reusable cups.

Note: these figures are based on usage at the height of disposable usage which was adversely affected by the covid pandemic

The student Green Team worked closely with staff to promote the reduction of disposable cup use and the use of 'Too good to go' as a scheme to reduce food waste. Efforts to continue reductions in disposable single use plastics are ongoing, this includes take away cutlery being replaced with stainless steel loan cutlery in catered student rooms.



Reuse of resources

The university's objective to increase the amount of items reused has seen steady progress, made possible by the university's relationship with re-use organisations, Reyooz, Milton Keynes Play Association (MKPA) and Unigreenscheme. These are items such as furniture and equipment which would otherwise have been sent for disposal.

The 22-23 student moveout campaign saw a continued arrangement with the British Heart Foundation's 'Pack for Good' campaign and The NEED Project. The donations provide much needed items for the charity shops and families in need in the local area.



Above: diagram showing total donations and money raised for British Heart Foundation in 2022 following the end of year student moveout. This shows that 5 tonnes of items were diverted from general waste and sent to British Heart Foundation shops for resale.

Procurement of resources

We are working to strengthen our procurement processes to include circular economy principles and sustainability requirements at each procurement stage. One example is our new furniture contract with PRS Office Furniture. They provide a five step approach to sustainable furniture provision: sourcing, fit for purpose, lifespan, delaying end of life through reuse, and recycling.

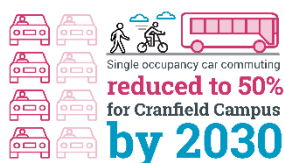
Table of SDG KPIs relating to Resources & Waste

The SDG indicators below are taken for the Times Higher Education (THE) Awards criteria. The measures are what the university is doing to meet that indicator.

THE	Indicator	Measures	Comments
12.2.1	Ethical sourcing policy	Promoting Fair Trade	Sustainable Food and Beverage policy adopted
12.2.3	Hazardous waste disposal policy	Procedures in place handling and disposal of hazardous waste	Hazardous waste procedure adopted
12.2.4	Disposal to Landfill policy	Target to monitor what goes to landfill/incineration and what can be recycled	Waste Code of Practice adopted
12.2.5	Minimisation of plastic	Single use plastics promotion	Waste Code of Practice adopted
12.2.6	Minimisation of disposable items	Single use plastics policy	Waste Code of Practice adopted
12.2.7	Extending disposal policies to supply chain	Currently ask suppliers for their environmental policies	This is being developed and incorporated within procurement processes
12.2.8	Extending minimisation policies to supply chain	Currently ask suppliers for their environmental policies	This is being developed and incorporated within procurement processes
12.3.1	Waste tracking Amount of waste generated and recycled across the university	Waste and recycling figures made available on web site. Whole university / partial coverage	Figures in annual environmental report. Does not currently include Shrivenham site as waste management is not under the control of Cranfield University. Does not include COTEC. Aiming to include COTEC 23/24
12.3.2	Amount of waste generated (tonnes)	tonnes	
12.3.2	Amount of waste recycled	tonnes	This figure includes tonnage sent for energy recovery , which is not included in the figures published on page 13
12.3.2	Amount sent to landfill	tonnes	
12.4.1	Sustainability Report	SDG reporting on web site: https://www.cranfield.ac.uk/sustainable-development-goals . Also report to EAUC for SDG Accord annually.	

Above: Table of SDG (Sustainable Development Goal) KPIs relating to Resources & Waste

Sustainable Commuting



Travel Survey

A travel survey in early 2023 confirms the trend seen in 2021 and the impact of working from home on the commute to Cranfield campus. There is a significant impact on the single occupancy car journeys and to a lesser extent the bus journeys.

Journeys/week	2011/12	2013/14	2015/16	2017/18	2021/22	2022/23
Car alone	70%	58%	59%	59%	35%	38%
Car share	13%	11%	13%	10%	5%	7%
Motorbike	1%	1%	1%	1%	0%	1%
Bus	7%	19%	13%	18%	14%	13%
Cycle	6%	8%	8%	7%	5%	4%
Walk	2%	3%	5%	3%	3%	2%
Other	1%	1%	2%	1%	5%	3%
Working at home *Avoided journeys					34%	29%

Above: Table shows percentages of staff and student travel modes from 2011/12 to 2022/23 according to travel survey data. Note that most staff travel to campus by 'car alone' if not working from home.

Uno Bus

The Uno bus service which connects the University to Bedford and Milton Keynes is subsidised by the university for staff and students to use. It is a public bus service and so the local community also benefit from a much more frequent and comprehensive service than anywhere else in rural Bedfordshire. Despite severe restrictions during the Covid pandemic, the service has bounced back and is busier than ever.

Uno set up a stand for welcome week to promote the bus service and provide the students with travel and ticketing information. Several meetings were held with student representatives throughout the year to answer queries and plan improvements to the service. Engagement with students has been ongoing through social media.

Cycling support and development

The cycle paths to the north and south of campus continue to provide a safer cycling and walking option for staff and students living in Cranfield village. The connectivity with National Cycle Route 51 also provides an option for those prepared to cycle from further afield.

Cycle Saviours continue to provide maintenance 'pop-up workshops' once a month along with the sale of reconditioned bikes. They offer training and employment in the form of an apprentice scheme to those not in school or employment. They salvage old bicycles and what cannot be refurbished is used for repairs or recycled.

In September and October 2022, Cycle Saviours held bicycle sales at Stafford Cripps. All students that attended were advised about road safety for cycling and walking particularly at night. Each student that attended was given a high visibility reflective vest and a leaflet about cycling at the university. Bicycles were also registered on the University cycle registration scheme established to keep track of bicycle owners.



Above: photos of Cycle Saviours carrying out repairs on bicycles and refurbished bicycles for sale

Table of SDG KPIs relating to Sustainable Transport

The SDG indicators below are taken for the Times Higher Education (THE) Awards criteria. The measures are what the university is doing to meet that indicator.

THE	Indicator	Measures	Comments
11.4.1	Sustainable commuting target	Travel plan and surveys; Target reduce single occupancy car commuting to 50% by 2030	Assuming working from home counts as avoided journeys then this target is already met
11.4.2	Sustainable commuting promotion	Support for local bus service, cycling repair workshops, membership of liftshare	The University has a budget which helps to subsidise bus travel and support cycling and car share
11.4.3	Allow remote working	University allows up to three days/week working from home	This has had a big impact on the daily commuting figures
11.4.6	Pedestrian priority on campus	Zebra crossings at all key crossing points	Next year traffic calming being introduced on College Road

Above: Table of SDG (Sustainable Development Goals) KPIs relating to Sustainable Transport

Green Spaces and Biodiversity



The Cranfield campus is a wildlife rich setting, providing opportunities for students, staff and visitors, to enjoy the benefits of experiencing biodiversity. As a landowner and a centre of learning the University has a responsibility to conserve protected species and 'practise what we teach'. Biodiversity will benefit from the new target of 'Net Environmental Gain including biodiversity to increase by 20% to maximise potential on site' by ensuring any development on site results in a positive impact on biodiversity. The masterplan for the University sets out areas for new buildings and also a wildlife corridor where new habitats can be established.

Areas have been targeted for biodiversity actions such as the brook, woodland and several grassland areas. The total biodiversity action area increases year on year with over 9 ha or 10% of the Cranfield Campus seeing some action to increase biodiversity including the expansion of "no mow" areas.



Above: photo of biodiversity flower plot near building 44. This is one of the many wildflower plots on campus.

Sustainability garden

The garden is an area set aside to showcase and develop sustainable gardening practices. Gardening Club, introduced in autumn 2021 has gone from strength to strength this year with active student involvement.



Above: photo of students enjoying the Sustainability Garden

Bee hives

The Grounds contractor Nurture Landscapes continue to maintain bee hives on site. They have held bee awareness days and a honey harvesting event. Honey sales are donated to charity.

Trees

In February 2023, we worked with Forest of Marston vale to plant over 320 trees and 800 hedging whips around Fedden house field as part of the 'Trees for Climate' scheme. Additionally, we worked with Earthwatch Europe to establish a 'Tiny (Miyawaki) Forest' on campus during March 2023. This accounts for over 600 trees and hedges planted into an area the size of a tennis court, and serves as a part of a nationwide and international project to plant trees to mitigate climate change and to improve biodiversity. A further 20 trees were planted on the main site as part of the 'Queens Green Canopy'. Once matured, trees planted should account for an total of 10,504 square meters area covered.



Above (top left clockwise): Photo of trees planed behind Fedden House for the 'trees for Climate scheme', tree planted for 'Queens Canopy' project, students surveying the Tiny (Miyawaki) Forest, and photo of the Tiny Forest after completion.

Table of SDG KPIs relating to green spaces and biodiversity

The SDG indicators below are taken for the Times Higher Education (THE) Awards criteria. The measures are what the university is doing to meet that indicator.

THE	Indicator	Measures	Comments
14.4.1	Water discharge guidelines and standards	The water treatment works has a discharge consent	Pollution monitoring of the main watercourse through campus is being developed
14.4.2	Minimisation of plastic plan	Single use plastics promotion	Waste Code of Practice
14.5.1	Minimising alteration of aquatic ecosystems	The main watercourse through campus is managed to enhance biodiversity as part of grounds maintenance	
14.5.2	Monitoring the health of aquatic ecosystems	Pollution monitoring of the main watercourse through campus is in place	This needs further development
15.2.1	Events about sustainable use of land	Regular biodiversity walks around campus	
15.2.2	Sustainably farmed food on campus	Sustainable Food and Beverage Policy. Vegetable and fruit production in sustainability garden	Garden only for demonstration and community engagement
15.2.3	Maintain and extend current ecosystems biodiversity	Target for 20% net environmental gain including biodiversity for new developments; Biodiversity Action Plan	Biodiversity Action Plan needs updating
15.3.1	Sustainable use, conservation, and restoration of land policy	This is covered in the Biodiversity Action Plan	Biodiversity Action Plan needs updating
15.3.2	Monitoring endangered species	This is covered in the Biodiversity Action Plan	Biodiversity Action Plan needs updating
15.3.3	Local biodiversity included in planning and development	Target for 20% net environmental gain including biodiversity for new developments	
15.3.4	Alien species impact reduction policy	This needs to be included in the Biodiversity Action Plan	Biodiversity Action Plan needs updating
15.4.1	Water discharge guidelines and standards	The water treatment works has a discharge consent	Pollution monitoring of the main watercourse through campus is being developed
15.4.2	Minimisation of plastic policy	Single use plastics promotion	Code of practice being developed
15.4.3	Hazardous waste disposal policy	Procedures in place handling and disposal of hazardous waste	Code of practice being developed

Above: Table of SDG (Sustainable Development Goals) KPIs relating to green spaces and biodiversity

Climate Adaptation



A strategy for Climate Adaptation has been developed and is awaiting University Executive approval.

Pollution Monitoring and Control



Cranfield Urban Observatory, with its campus-wide sensor network, is a key component of the Living Laboratory and facilitates research projects, securing links between the expertise, facilities and overall capabilities of our unique campus. As part of this, air, water, and soil sensors have been deployed across the Cranfield campus with the capability of monitoring a wide range of potential pollutants. Data is used both in teaching and learning and as a mechanism to monitor potential pollution on the Cranfield campus. Further analysis will produce baseline parameters from which we can work from in 23-24.

Community Involvement

2022-2023 was a great year for staff, student and local community engagement. At the start of the academic year, we hosted a popular evening bat walk and set up the Energy Champions network- a keen group of staff and research students who supported us on our mission to save energy on campus. This launched with a workshop session, and was followed up by fortnightly catch-ups. To aid the Energy Champions, a Systemslink online dashboard portal was set up for all to use.

During November, we hosted a variety of events for staff and students as part of our Green Week which included a popular talk on Hydrogen research and Development: H2@CU, a hedgehog themed raffle and cake sale event to raise money for Hedgehog Preservation Society, honey-harvesting taster events, and an off-campus Wildlife Trust conversation volunteering trip. Our enthusiastic Green Team led by Green Officer Louisa Winch, set up the first 'Clothes Swap' shop in the CSA in an effort to curb clothes waste on campus, and give to charity. Jars of honey from the Cranfield campus beehives were sold at the Christmas Fayre to raise money for the Need Project Bedford Food bank and raised over £1000.

The Miyawaki Tiny Forest was planted in February 2023 and is maintained by a group of voluntary tree keepers, who also carry out surveys. Earthwatch UK came back to campus in June to host a community open day. We continued throughout the year to engage staff and students in wildlife walks, litter picks, bee keeping experience events and Gardening Club, based within the expanding Sustainability Gardens. This year, a welcome addition to the

gardens was a bug house with an engraved plaque thanking the student Energy Champions based in Lanchester and Mitchell Hall for their efforts.

For the first time, the student Green Team organised a trip to the Grand Union canal in Cosgrove, Milton Keynes, to support Buckingham Canal Society with footpath clearance and painting as part of a wider project to restore the canal for people and wildlife. To top-up a successful year of engagement, our Green Officer Louisa Winch became a finalist for 'Student Sustainability Champion of the year' Green Gown Award. Overall, just under 1000 people were actively engaged throughout the year, and we saw many more hits via social media.

Total event engagement: 945 staff and students

Top events:

- Green Week 2022
- Tree planting (Fedden field, Tiny Forest)
- Clothes Swap Shop
- Bee keeping experience



Above: Students engaged in running a clothes swap shop at the CSA, and a raffle for 'Hedgehog Preservation Society' during Green Week 2022

Communications

There have been regular communications through social media and on the intranet. The following tables show the level of engagement:

Intranet	Hits
Average Intranet hits per month:	461

Social media followers	Followers
Instagram	862
Facebook	472
X	891

Top social media posts	Description	Hits
X	Snow picture of campus	2944
Facebook	Too good to go scheme launch	747
Instagram	'Too good to go' reel	2767

Above: Tables showing summary of staff and student engagement on the intranet and via social media.

Notes

1. **Dates:** Baseline and target years refers to the financial/academic year August to July (for example, for the Carbon target, the baseline year for carbon reporting is financial year 2005/2006 and the net zero target is to be achieved in academic year 2030/2031).
2. **Scope:** Tenants are included where it is not possible to distinguish between what is and is not a direct impact to the University as opposed to an impact of others operating on site. Examples include waste, car travel, some aspects of energy and water consumption and sewage discharges. As measurements and monitoring on site improve, this may become easier to distinguish. Additionally, the University is providing utility and other services to tenants and is in a position as landlord and service provider to influence their behaviour and assist in the reduction of their environmental impacts, whilst at the same time having an interest in minimising the risks to the University. The converse applies to the University's presence at Shrivenham. Here the University occupies space on a MOD site. For many of the targets it is not possible or appropriate to include this space as there is no operational control by the University (it is managed by MOD) and no data.
3. **Base Year Recalculation Policy:** Cranfield University will ensure that its greenhouse gas reporting is up to date, accurate and consistent with current Government guidance. In particular, when there are structural changes that have a significant effect on the baseline and the reported progress towards targets, the baseline and, if necessary, data for years in between will be recalculated.
Base year recalculation: It is important that progress is measured on a like for like basis. This means that any changes in calculation methodologies are applied to the previous figures as well as current figures.
Structural changes may include: mergers, acquisitions, and divestments; outsourcing and insourcing of relevant activities; changes in calculation methods or improvements in the accuracy of factors, such as emission, factors, or activity data that result in a significant impact on the base year figures; discovery of significant errors, or a number of cumulative errors that is collectively significant. The recalculation will be triggered and reported if the structural changes would result in a change of greater than 2% in the total baseline figure. At the same time any errors in the current year reporting greater than 2% will be amended and relevant reports updated, or notes attached explaining amendments.
4. **Changes to data:** Our carbon footprint is recalculated each year for all years in order to account for errors, changes to the scope and material changes to the conversion factors provided by DEFRA for company reporting purposes. They may not therefore compare directly with previous figures reported in the University Financial Statement. See also our baseline recalculation policy above. Note the figures exclude emissions for tenants on Cranfield Campus, Silsoe Campus, COTEC where these can be separately identified. University subsidiary companies are included. The same principle will apply to data for other targets.
5. **Water consumption and discharges figures:** These are for Cranfield Campus, including tenants. COTEC is included. Shrivenham data is not included. Discharges are taken as the average of the three consent targets.
6. **Waste figures:** These are for Cranfield Campus and include some, if not all, tenant waste. Note the key performance indicator for recycling is waste segregated on site. However, the waste contractor further segregates waste at their depot. This elevates the overall recycling performance, and it is this figure, which is reported in the HESA Estates Management Reporting.
7. **Academic expertise:** Wherever possible, the University is making use of its academic expertise and facilities to enhance its response to environmental improvement. The estate is also offering opportunities for research and teaching. Examples of this include audits carried out by students and the University laboratories to analyse local discharges. The new CHP unit is regularly used as a real life demonstration for teaching.
8. **Name:** The Energy and Environment Committee was previously known as the Committee for Energy and Environment (BEE).

Glossary

AIRC Aerospace Integration Research Centre; EEC Energy and Environment Committee; BOD Biochemical Oxygen Demand; BREEAM Building Research Establishment Environment Assessment Method; CHP Combined Heat and Power; COTEC Cranfield Ordnance Test and Evaluation Centre; CRC Carbon Reduction Commitment; DEFRA Department for Environmental Food, and Rural Affairs; EA Environment Agency; EAUC the Environmental Association for Universities and Colleges; GIS Geographical Information System; HESA Higher Education Statistics Agency; IMEC Intelligent Mobility Engineering Centre; LED Light Emitting Diode; MOD Ministry of Defence; OU Open University; PV Photovoltaic; SECR Streamlined Energy & Carbon Reporting, SHE Safety Health and Environment; SHEF Safety Health Environment and Fire; SUDS Sustainable Urban Drainage System.

Energy and Environment Committee

Members in 2022-3:

- Chair, Professor Chris Fogwill, Pro-Vice-Chancellor – School of Water, Energy & Environment
- Ian Sibbald, Director of Finance
- John Street, Director of Facilities
- Phil Longhurst, Director of Partnerships & Professor of Environment and Energy Technology
- Gareth Ellis, Head of Energy and Environment
- Christine Thompson, Corporate Planning Director
- Ginny Ford, Environment Advisor
- Ceri Dawson, Energy Advisor
- David Ford, Director of Information Services
- Geoff Say, Director of Finance and Operations CDS
- Stewart Elsmore, Director of Campus Services
- Rosina Watson, Head of Sustainable Business Group & Associate Professor of Sustainability
- Becky Shepherd, Environment Officer
- Louisa Winch, CSA Green Officer
- Abbi Legate, PA to Director of Energy (Committee Secretary)

Further information

For further information, please visit our environmental pages on the University Website:

<https://www.cranfield.ac.uk/about/our-sustainable-university>

or the University Intranet: <https://intranet.cranfield.ac.uk/EnergyEnvironment/Pages/default.aspx>

If you have any questions on any other topics outlined within this report or would like to provide us with any feedback, please contact the Energy and Environment Team at green@cranfield.ac.uk.

Statement

Title: Annual Environmental Report 2022/2023

Description: Annual Environmental Report 2022/2023

Date: 21/10/2024

Language: British English

Sharing Rights: Public

Relevant Stakeholders:
Cranfield University

Purpose: University



Water

Statement

Title: Annual Environmental Report 2022/2023

Description: Annual Environmental Report 2022/2023

Date: 21/10/2024

Language: British English

Sharing Rights: Public

Relevant Stakeholders:
Cranfield University

Purpose: University

Statement

Title: Water Management Plan

Description: This water management plan reviews the current performance against the University target to reduce water consumption and sets out a plan for water management for the current year and up to 2025.

Date: 21/10/2024

Language: British English

Sharing Rights: Public

Relevant Stakeholders:
Cranfield University

Purpose: University



Annual Environmental Report 2022 / 2023

Energy and Environment Committee



Cover picture of group of volunteers who helped to plant Miyawaki Forest (see page 20)
Photo by Earthwatch UK

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Statement

Professor Chris Fogwill, Chair Energy and Environment Committee



Our vision is to be valued globally for tackling the real-world issues of today to deliver a sustainable future. We work in partnership with business, academia, governments, and other organisations to develop and deliver applied research and innovative science, technology, engineering and management.

Here, the Energy and Environment Committee (EEC) reports progress on our environmental targets. This is largely focused on the performance of our estate and facilities. Our academic contribution to sustainability is featured on the University website. Given the University undertakes world leading research and learning on sustainability and the environment it is important that we are reflecting this in our operations. Key performance indicators highlighted below and through the report are correlated with the Times Higher Education Impact Awards criteria giving an indication of the contribution to the UN Sustainable Development Goals (SDGs).

We remain indebted to our staff and students who contribute to our on-going improvements and to our Energy and Environment Team, Energy and Environment Committee and working group members who lead and coordinate our combined efforts. We are grateful for the on-going support of our contractors who help with the efficient running of the estate.

Key performance indicators

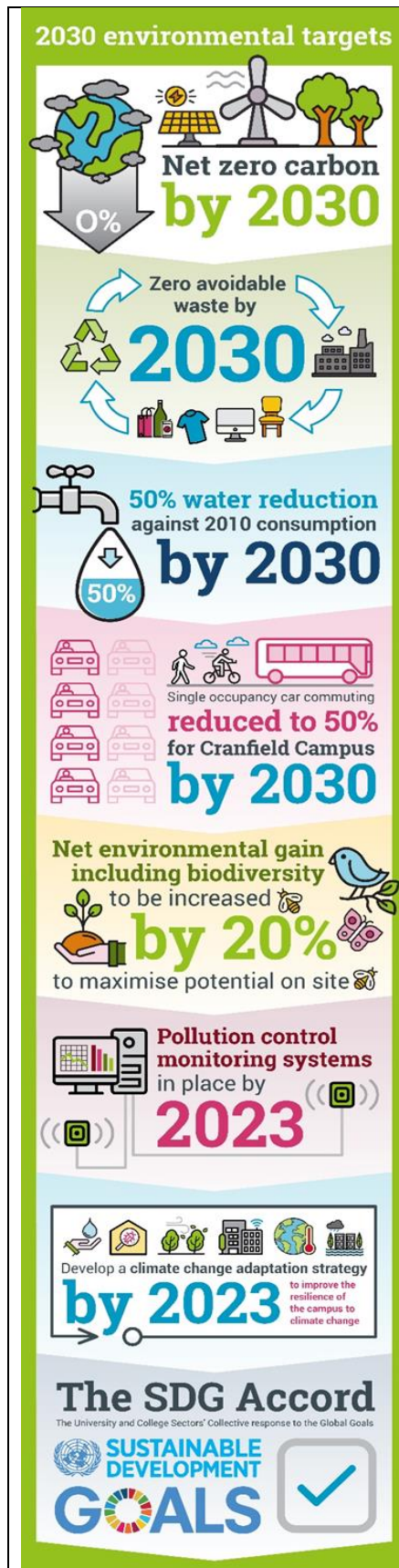
Issue	Description	Latest	Previous	SDG Contribution	Status	Comments
Carbon	Scope 1&2 emissions tCO ₂	9,532	9,612	THE – SDG* 13.4.1	A	1% reduction year on year
Carbon	Energy efficiency GJ/m ²	0.82	0.90	THE - SDG 7.3	G	More efficient use of energy
Carbon	Renewable energy GWh	3,023	3,298	THE - SDG 13.2.3	A	Reduction in biomass output
Waste	Avoidable waste %	18%	18%	THE - SDG 12.2.4	A	Waste which could have been reduced, re-used or recycled
Waste	Total waste tonnes	988	1052	THE - SDG 12.3.2	G	Decrease despite including Conference Hotel for first time
Travel	Commuting alone by car %	38%	35%	THE - SDG 11.4.1	G	Continuing impact of working from home
Water	Water consumption m ³ /head	34.4	34.4	THE - SDG 6.2.2	R	No progress
Biodiversity	Biodiversity Action Areas ha	9.0	8.6	THE – SDG 15.2.3	G	In addition, 320 trees planted and additional hedging

Above: table shows key performance indicators for our environmental targets and progress, including SDG (Sustainable Development goal) contribution and comments.

* THE-SDG refers to the Times Higher Education Impact Awards Sustainable Development Goals categories.

Note: There are more indicators and objectives highlighted under each section in the report.

Environmental Targets



In 2020 the University Council committed to a new set of environmental targets. The strategy for delivering these targets can be found at:

<https://www.cranfield.ac.uk/about/our-sustainable-university/our-2030-environmental-targets>

The targets are to be achieved by academic year 2030/31. They include All Cranfield University activities including the activities of any subsidiaries including MK:U.

The aim of the Net Zero Carbon target is to reduce Scope 1 and 2 carbon emissions as quickly as possible through energy saving and renewable energy. Any remaining emissions will require other measures. The strategy for Scope 3 emissions is still being developed and these emissions will be included as deemed appropriate for the sector.

The Zero Avoidable Waste target aims to minimise waste ending up in landfill or going for incineration and embraces the application of circular economy principles.

The water reduction target aims to be consistent with best practice and future supply pressures in this part of the UK.

The sustainable commuting target continues to focus on promoting alternatives to the car. Walking, cycling and bus are the main options.

Biodiversity will benefit from the new target ensuring any development on site results in a net environmental gain. The masterplan for the University sets out areas for new buildings and also a wildlife corridor where new habitats can be established.

The application of sensors on campus through the Urban Observatory is helping with the monitoring of air, water and soil. This will be developed in the short term to set out new pollution control monitoring and targets.

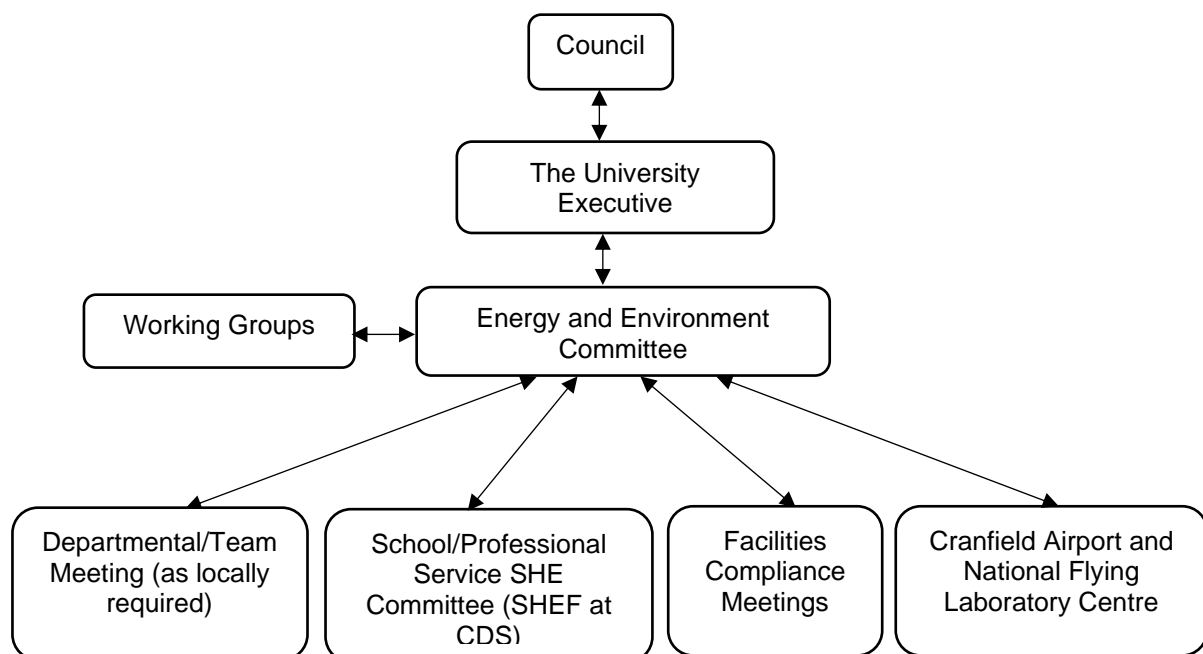
The risks of climate change impacts on the University are being investigated. This will be developed into a climate change strategy.

The University has signed the SDG Accord. This has led to more focus on the SDGs and how the university's contribution can be better communicated and developed.

Quality assurance

Governance

The Energy and Environment Committee (EEC) reports to the Cranfield Executive and Council on energy and environmental management issues. The priority of the Committee is to ensure Cranfield University demonstrates a leading capability in environmental performance by providing oversight and direction. The Committee is a sub-committee of the Executive and consists of senior managers from across the University along with student representation and members of the Energy and Environment Team. The Committee has working groups, with members drawn from operational and academic staff and students, to progress key environmental objectives. A dedicated Energy and Environment team facilitates delivery of the objectives and reports progress towards target to the Committee on a regular basis. The Committee aims to ensure a close relationship between EEC's environmental activities across the University and the teaching, learning and research taking place within the Themes on environmental best practice. The Governance structure is outlined below.



Above: Diagram shows governance structure for the Energy and Environment Committee

ISO 14001:2015

Cranfield University operates a university wide environmental management system. The system provides a framework for managing our environmental impacts, risks, and opportunities, for setting environmental objectives and establishing programmes to achieve them. The scope of the certification covers all University operations including Cranfield Defence and Security at the Shrivenham and COTEC sites.

A successful re-certification audit was carried out by BSI in May 2023. In a climate of continuous improvement, the reporting of all environmental incidents and near misses is encouraged.

ISO 50001:2018

Cranfield University operates a university wide Energy Management System, which provides a framework for managing our energy use. The scope of the certification covers all University operations on the Cranfield campus, Cranfield Defence and Security at the COTEC site and MK:U at Bouverie House. Recertification was achieved in July 2021, with surveillance audits taking place in July 2022 and July 2023.

Scope of reporting

The environmental targets on page 4 encompass activities taking place on the Cranfield Campus, including subsidiary companies and tenants on site (*see Notes section near end of document*). The University's operation at the Cranfield Ordnance Test & Evaluation Centre (COTEC) is included. The University is not directly involved in the management of Shrivenham Campus, so the University activities there do not contribute to the key performance indicators such as carbon emission in this report (*see Notes section near end of document*).

Other reporting

In line with the Higher Education Statistics Association (HESA) requirements, the University submits environmental data as part of the annual estate management reporting statistics. This data attempts to exclude tenant data and differs slightly from the data that appears in this report. Under the new Streamlined Energy and Carbon Reporting (SECR) rules, which replaced the Carbon Reduction Commitment (CRC) Energy Efficiency scheme in 2020, the University reports its annual carbon emissions in the University's annual Finance report. That data includes all primary energy use by the University Group, all imported electricity use and all fuel put into University owned vehicles or private or hire vehicles used for Business Travel.

Data submitted to HESA is also used by the '*People and planet University League*' (a student-led, People and Planet voluntary league table of University environmental performance). In People and Planet's University League, comparisons are made per student or per m² total floor area. Cranfield is a wholly Postgraduate University undertaking industrial scale research. This makes environmental impacts per student or per m² appear high. This annual report focuses on how the environmental performance of the University is improving over time. The University is also participating in the THE (Times Higher Education) Impact Awards. The contribution of the environmental management of the university estate to the SDGs in line with the THE criteria is highlighted in this report.

Base year recalculation policy

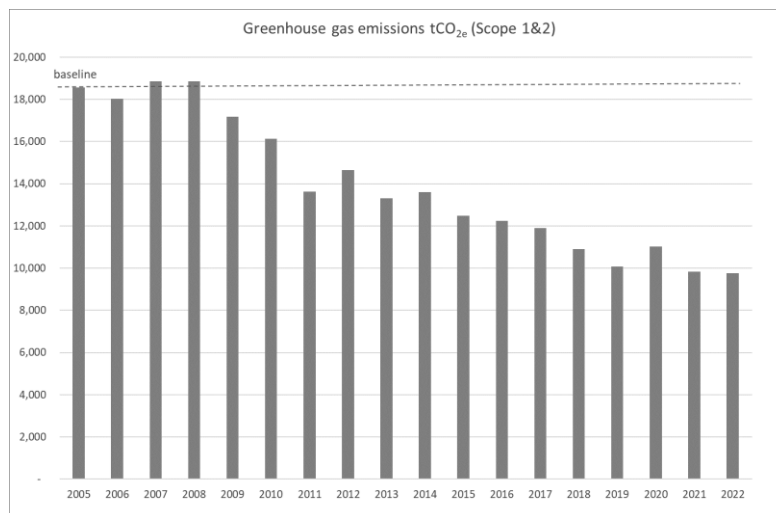
Our base year figures for reporting are reviewed from time to time to ensure like for like reporting. (*see Notes section near end of document*).

Carbon and Energy



Progress

Current Scope 1 and 2 emissions are 9,532 tonnes CO₂. A small reduction compared with the previous year at 9,612 tonnes. Recent investments in renewable energy and energy efficiency infrastructure have yet to take effect. These potentially add up to emissions savings of over 3,000 tonnes of CO₂ and will become apparent over the next two years as the new systems bed in and are optimised. The measures include replacing gas boilers with air source heat pumps, adding buildings to the campus district heating system, improved heating and ventilation controls, insulation, LED lighting, solar photovoltaic installations, and a large battery.



Above: Graph showing the amount of greenhouse gas emissions in tonnes of carbon dioxide equivalent scope 1 and 2, from 2005 to 2022. Graph shows a downwards decrease in emissions with time.

Note: Year 2005 runs from August 2005 to July 2006, etc.

Energy trends and efficiency

Total energy used has decreased for a second year, although the longer-term trend is slightly up. Nevertheless, the overall energy efficiency continues to improve with less energy used per building floor area. Renewable energy generation remains high with the enlargement of the solar farm and increased operation of the biomass boiler. The University does not currently purchase “green” electricity as typically green electricity offered on the UK market does not provide additionality. The University is however exploring Power Purchase Agreements for new renewable energy electricity which does provide new capacity.

	2019/20	2020/21	2021/22	2022/23
Total energy used (kWh)	44,841,986	50,176,963	48,022,909	44,050,024
Renewable energy generated/used (kWh)	2,138,441	2,236,208	3,297,839	3,022,661

Above: table shows total energy used in kWh and renewable energy generated/used in kWh, year on year, from 2019/20 to 2022/23. Renewable energy generated has increased with time.

	2019/20	2020/21	2021/22	2022/23
Total energy used (GJ)	161,431	180,637	172,882	158,580
Floor area (m2)	169,005	185,856	192,495	193,201
Energy efficiency (GJ/m2)	0.96	0.97	0.90	0.82

Above: table shows total energy used in GJ, total floor area in m², and energy efficiency per floor area in m² from 2019/20 to 2022/23 showing an increase in energy efficiency per m² with time.

Scope 3 emissions

The measurement of Scope 3 emissions relies largely on third party data based on spend and there is a lag in obtaining and verifying realistic information. As soon as figures are available this report will be updated.

The University has established a Scope 3 working group to develop our reporting, guided by the Standardised Carbon Emissions Framework (SCEF) established in December 2022 by the Environmental Association for Universities and Colleges (EAUC) the environmental and sustainability champion within Further and Higher Education in the UK and Ireland.

Infrastructure

In early 2022 an £11 Million bid to Public Sector Decarbonisation Scheme secured funding for the insulation of the two large aircraft hangars, further improvements to the district heating with an additional air source heat pump and an additional solar PV array. This has now been largely delivered and complements the district heating project undertaken in 2021/22. The two projects combined are projected to save 3,000 tCO₂.

A further £4 Million bid to Public Sector Decarbonisation Scheme has secured funding for further improvements to the district heating adding a large heat store and extending the network to the residential estate. Detailed planning for this project is underway and installation will proceed in 2024.



Above: photos of hangar 2 (building 84) insulation including cladding and improved hangar doors.



Above: photo of new solar farm installed on disused car park early 2023

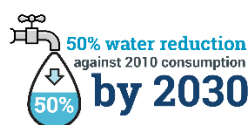
Table of SDG KPIs relating to Carbon & Energy

The SDG indicators below are taken for the Times Higher Education (THE) Awards criteria. The measures are what the university is doing to meet that indicator.

THE reference	Indicator	Measures	Comments
7.2.1	Energy and Efficient Renovation and Building	New buildings are assessed to the BREEAM standard	Key measures are being incorporated into University design guide / standards to address refurbishments / renovations
7.2.2	Plans to upgrade energy efficiency of buildings	These are set out in the annual Energy & Carbon Plan	See on website: https://www.cranfield.ac.uk/about/our-sustainable-university/carbon-and-energy-management
7.2.3	Carbon management and emission reduction process	This is set out in the annual Energy & Carbon Plan	See above
7.2.4	Plan to reduce energy consumption	This is set out in the annual Energy & Carbon Plan	See above
7.2.5	Energy wastage identification	This is set out in the annual Energy & Carbon Plan	See above
7.3.1	Energy use density- Total energy used per floor space	Ratio 0.82GJ/m ²	Energy used 158,580 GJ Floor space 193,201 m ²
13.2.1	Low carbon energy tracking	Solar 1.38 GWh Biomass 1.64 GWh	Renewable energy generated and used on site.
11.4.8	New build standards	New buildings are assessed to the BREEAM standard	
11.4.9	Building on brownfield sites	The University is using brownfield for new buildings	This is set out in the campus Masterplan
13.2.2	Total energy used	42,451,366 kWh	
13.2.3	Total energy used from low carbon sources	3,297,839 kWh	Note "Green Electricity" is not purchased as typically this does not provide additionality
13.3.2	Climate Action Plan	Energy & Carbon Plan on website	Climate adaptation strategy being developed
13.4.1	Commitment to carbon neutral university	Net zero carbon by 2030 target	Includes scope 3, but exact definition being developed
13.4.2	Carbon neutrality date	2030	

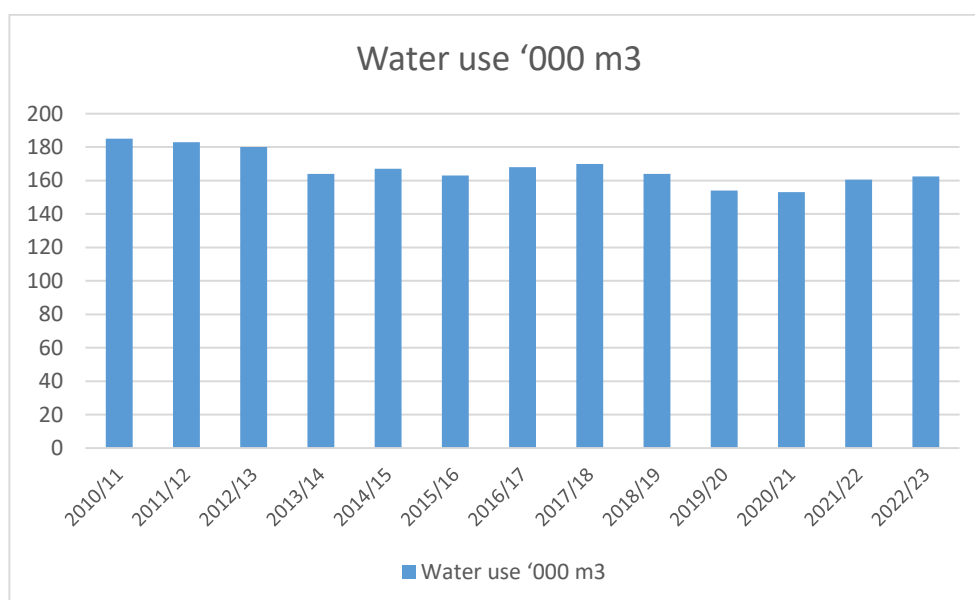
Above: Table of SDG KPIs (key performance indicators) relating to Carbon & Energy reduction

Water



Work has continued to improve water metering and monitoring on the main Cranfield Campus and to encourage the reporting of leaks, so they can be dealt with promptly. Several large leaks were identified on both the technical and residential sides over the last year. Some were linked to frost damage over the Christmas period and others were due to mechanical failures.

A number of urinals were also found to be flushing excessively and timers have been adjusted to reduce the amount of water used. A dedicated section on water saving is included in the Canvas Environmental Awareness Induction, and this has been rolled out to all our students. Water saving tips have also been promoted amongst our staff and student Green Teams. The university has published a Water Management Plan and a Water Management Policy Statement on its website. These give details of the approaches it is taking to reduce potable water use.



Above: graph showing water usage in Cubic Meters from 2010/11 to 2022/23. The total usage has dropped slightly, although not significantly. **Note:** the water consumption figure for 2022/23 is estimated due the failure of the main supply meter.

	2020/21	2021/22	2022/23
Total water used (m3)	153,481	160,580	162,478
Staff & Students (FTE)*	4,241	4,671	4,726
Water use efficiency (m3/staff&student)**	36.2	34.4	34.4

Above: Table shows year on year comparison of water use and efficiency

*Includes Cranfield campus, excludes Shrivvenham. ** Excludes other Cranfield campus residents such as student partners and children and staff residing on site. The number for these in 2022/23 was 245.

Table of SDG KPIs relating to Water

The SDG indicators below are taken for the Times Higher Education (THE) Awards criteria. The measures are what the university is doing to meet that indicator.

THE	Indicator	Measures	Comments
6.2.1	Water consumption tracking	Water consumption reduction is key target;	Does not currently include water used by Cranfield University at Shrivenham as water metering and consumption is not under the University's control.
6.2.2	Water consumption per person	34.4 m3/person	162,478 m3 4,726 persons
6.3.1	Wastewater treatment	Wastewater is treated on site	
6.3.2	Preventing water system pollution	Procedures include Spill Prevention and Response, Discharge to Sinks and Drains:	Controlled through ISO 14001 certified environmental management system
6.3.3	Free drinking water provided	Drinking water fountains and filtered water dispensers	
6.3.4	Water conscious building standards	BREEAM assessment on new buildings Compliance with Building Regulations	University Design Standards being enhanced and developed.
6.3.5	Water conscious planting	Plantings are made at the appropriate time of year to avoid water stress	Guidance on suitable drought tolerant plants for the site is being developed
6.4.1	Water reuse policy	A water management policy has been developed and published	Options for water reuse and recycling are being explored
6.4.2	Water reuse measurement	None	This is still in the pilot stage
6.5.2	Promoting conscious water usage	Water conservation is promoted on campus	A project promoting efficient shower usage. Canvas Environmental Awareness module

Above: Table of SDG (Sustainable Development Goals) KPIs relating to water reduction, measures, and comments

Resources and Waste



The university is committed to putting the principles of the Circular Economy into practice by putting processes in place to:

- prevent materials from becoming waste in the first place
- ensure waste that is created is recycled, composted, or sent for anaerobic digestion and not sent to landfill or incineration*.

*Recyclable, compostable or digestible waste that ends up in the residual waste stream (waste sent for landfill or incineration with or without energy recovery) is defined as AVOIDABLE.

Avoidable Waste

The overarching target is to reach Zero Avoidable Waste by 2030. The starting point is to gather information on the materials ending up in the residual waste stream and use best management practices to apply the waste hierarchy to these materials: prevent, reduce, reuse, and recycle.

The audit of recycling and residual general waste bins around the different functional areas of the campus from residential to technical buildings has not happened this year due to contractor staff availability. However this requirement will be written into the new contract going forward to enable audit, analysis and action to take place in 23-24. Previous audit data has been used to calculate avoidable waste figure for 22-23. Of the 998 tonnes of waste produced, 47% was segregated on site and either reused, recycled, composted or sent for anaerobic digestion. Avoidable waste is 18% of total waste. Tonnages are summarised in the figure on the next page.

Total waste

Total waste produced by the Cranfield campus over 22-23 was less than the previous year.

	2021/22	2022/23
Total waste (tonnes)*	1,052	988**
Staff & Students (FTE)***	4,671	4,726
Waste per staff & student FTE (tonne/person)	0.23	0.21

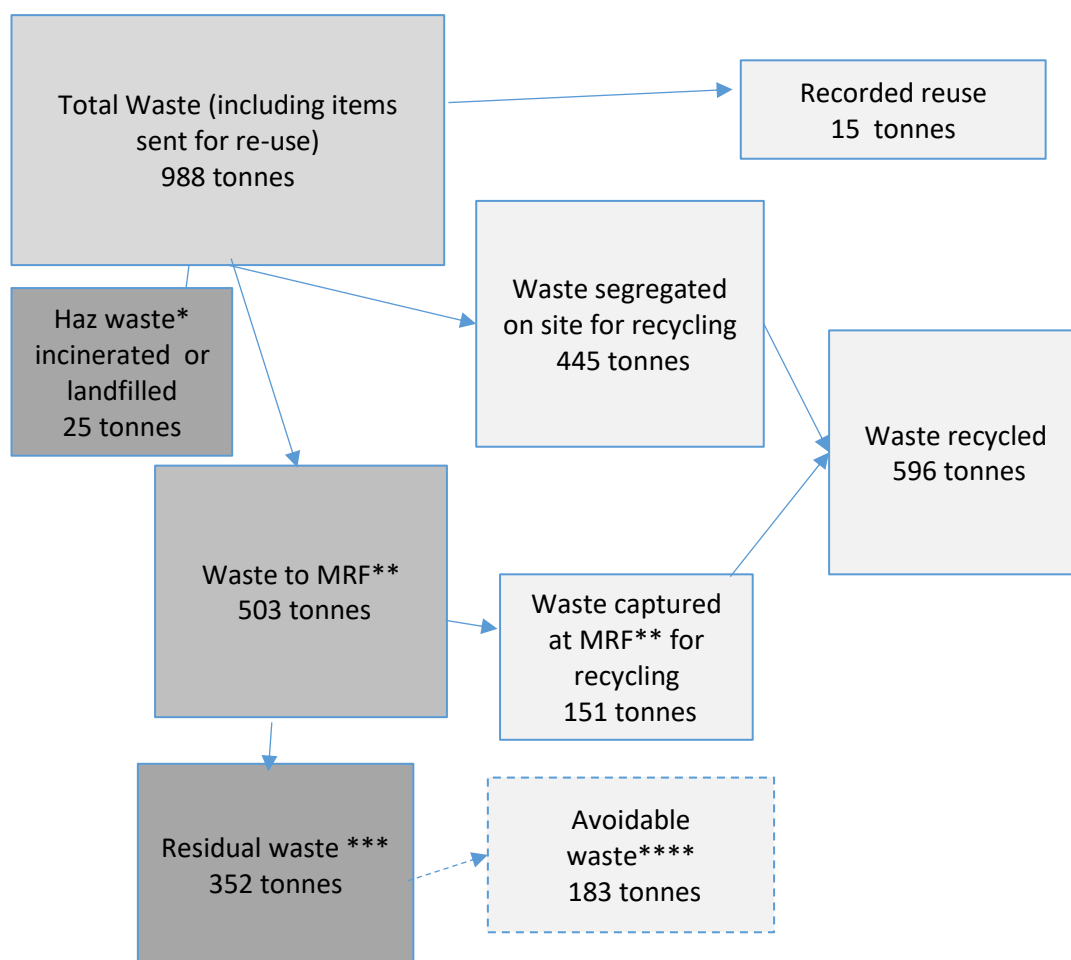
Above: Table showing total waste, number of staff and students, and waste per staff/students for years 2021/22 and 2022/23

*Cranfield campus waste only, not including construction waste from development sites.

**22-23 figures include for the first time tonnages from CCCL (85 tonnes). Future reports may amend previous year data to include CCCL estimate.

*** includes Cranfield and MKU, excludes Shrivenham. Excludes other Cranfield campus residents such as student partners and children and staff residing on site. The number for these in 2022/23 was 245.

Where the waste goes



Above: The diagram shows the breakdown of total waste generated on campus, and how it is managed. 445 tonnes of waste is segregated on site for recycling, and 503 tonnes of waste is sent to Cawley's Materials Recycling Facility (MRF). 183 tonnes of waste disposed of in general waste could have been recycled.

Notes: This data is from tonnage information provided by the University's waste contractor. It does not include construction waste from development sites. The avoidable waste figure is based on 2 audits representing 1% of the total residual waste. In future years further audits will be scheduled to gain confidence in the results.

*Haz waste – hazardous waste which is not recyclable. 5.9 tonnes biomass boiler ash landfilled and the remainder incinerated.

**MRF – Material Recycling Facility.

***Residual waste – waste which is sent for incineration with energy recovery and landfill (0.5 tonnes bulky waste landfilled and the remainder energy recovery).

****Avoidable waste – waste which could have been recycled.

Sustainable food and beverage policy

Developed by Sustainable Food working group the policy has been approved and commits to drive progress with aims such as reducing single use plastics and packaging, and operating catering services in accordance with the waste hierarchy.

Recording and monitoring of pre-consumer food waste from catering outlets

The University's Campus Services has placed reduction targets on food waste in an effort to reduce food being wasted during food preparation and service.

Food wastage (% revenue)

Area	Reduction Target 22/23	Achieved	Reduction Target 23/24
Conference Centre	2.5%	1.92%	1.75%
Mitchell Hall	3.0%	2.79%	2.5%
Cranberries	1.0%	1.27%	1.25%
Overall	2.5%	2.28%	2.0%

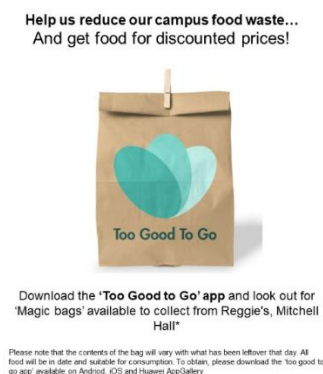
Above: The table shows Campus Service's food waste reduction targets per centre with progress made

Spotlight on disposables

The University's Cranfield Management Development Centre (CMDC) has removed the bottled water from bedrooms, and guests are encouraged to use the tap water which has been certified as potable. This has removed an average of 20,000 bottles from use annually in the CMDC. Mitchell Hall and CMDC operations between them have removed approximately 220,000 disposable cups and 51,000 lids from use in favour of reusable cups.

Note: these figures are based on usage at the height of disposable usage which was adversely affected by the covid pandemic

The student Green Team worked closely with staff to promote the reduction of disposable cup use and the use of 'Too good to go' as a scheme to reduce food waste. Efforts to continue reductions in disposable single use plastics are ongoing, this includes take away cutlery being replaced with stainless steel loan cutlery in catered student rooms.



Reuse of resources

The university's objective to increase the amount of items reused has seen steady progress, made possible by the university's relationship with re-use organisations, Reyooz, Milton Keynes Play Association (MKPA) and Unigreenscheme. These are items such as furniture and equipment which would otherwise have been sent for disposal.

The 22-23 student moveout campaign saw a continued arrangement with the British Heart Foundation's 'Pack for Good' campaign and The NEED Project. The donations provide much needed items for the charity shops and families in need in the local area.



Above: diagram showing total donations and money raised for British Heart Foundation in 2022 following the end of year student moveout. This shows that 5 tonnes of items were diverted from general waste and sent to British Heart Foundation shops for resale.

Procurement of resources

We are working to strengthen our procurement processes to include circular economy principles and sustainability requirements at each procurement stage. One example is our new furniture contract with PRS Office Furniture. They provide a five step approach to sustainable furniture provision: sourcing, fit for purpose, lifespan, delaying end of life through reuse, and recycling.

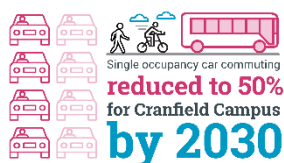
Table of SDG KPIs relating to Resources & Waste

The SDG indicators below are taken for the Times Higher Education (THE) Awards criteria. The measures are what the university is doing to meet that indicator.

THE	Indicator	Measures	Comments
12.2.1	Ethical sourcing policy	Promoting Fair Trade	Sustainable Food and Beverage policy adopted
12.2.3	Hazardous waste disposal policy	Procedures in place handling and disposal of hazardous waste	Hazardous waste procedure adopted
12.2.4	Disposal to Landfill policy	Target to monitor what goes to landfill/incineration and what can be recycled	Waste Code of Practice adopted
12.2.5	Minimisation of plastic	Single use plastics promotion	Waste Code of Practice adopted
12.2.6	Minimisation of disposable items	Single use plastics policy	Waste Code of Practice adopted
12.2.7	Extending disposal policies to supply chain	Currently ask suppliers for their environmental policies	This is being developed and incorporated within procurement processes
12.2.8	Extending minimisation policies to supply chain	Currently ask suppliers for their environmental policies	This is being developed and incorporated within procurement processes
12.3.1	Waste tracking Amount of waste generated and recycled across the university	Waste and recycling figures made available on web site. Whole university / partial coverage	Figures in annual environmental report. Does not currently include Shrivenham site as waste management is not under the control of Cranfield University. Does not include COTEC. Aiming to include COTEC 23/24
12.3.2	Amount of waste generated (tonnes)	tonnes	
12.3.2	Amount of waste recycled	tonnes	This figure includes tonnage sent for energy recovery , which is not included in the figures published on page 13
12.3.2	Amount sent to landfill	tonnes	
12.4.1	Sustainability Report	SDG reporting on web site: https://www.cranfield.ac.uk/sustainable-development-goals . Also report to EAUC for SDG Accord annually.	

Above: Table of SDG (Sustainable Development Goal) KPIs relating to Resources & Waste

Sustainable Commuting



Travel Survey

A travel survey in early 2023 confirms the trend seen in 2021 and the impact of working from home on the commute to Cranfield campus. There is a significant impact on the single occupancy car journeys and to a lesser extent the bus journeys.

Journeys/week	2011/12	2013/14	2015/16	2017/18	2021/22	2022/23
Car alone	70%	58%	59%	59%	35%	38%
Car share	13%	11%	13%	10%	5%	7%
Motorbike	1%	1%	1%	1%	0%	1%
Bus	7%	19%	13%	18%	14%	13%
Cycle	6%	8%	8%	7%	5%	4%
Walk	2%	3%	5%	3%	3%	2%
Other	1%	1%	2%	1%	5%	3%
Working at home *Avoided journeys					34%	29%

Above: Table shows percentages of staff and student travel modes from 2011/12 to 2022/23 according to travel survey data. Note that most staff travel to campus by 'car alone' if not working from home.

Uno Bus

The Uno bus service which connects the University to Bedford and Milton Keynes is subsidised by the university for staff and students to use. It is a public bus service and so the local community also benefit from a much more frequent and comprehensive service than anywhere else in rural Bedfordshire. Despite severe restrictions during the Covid pandemic, the service has bounced back and is busier than ever.

Uno set up a stand for welcome week to promote the bus service and provide the students with travel and ticketing information. Several meetings were held with student representatives throughout the year to answer queries and plan improvements to the service. Engagement with students has been ongoing through social media.

Cycling support and development

The cycle paths to the north and south of campus continue to provide a safer cycling and walking option for staff and students living in Cranfield village. The connectivity with National Cycle Route 51 also provides an option for those prepared to cycle from further afield.

Cycle Saviours continue to provide maintenance 'pop-up workshops' once a month along with the sale of reconditioned bikes. They offer training and employment in the form of an apprentice scheme to those not in school or employment. They salvage old bicycles and what cannot be refurbished is used for repairs or recycled.

In September and October 2022, Cycle Saviours held bicycle sales at Stafford Cripps. All students that attended were advised about road safety for cycling and walking particularly at night. Each student that attended was given a high visibility reflective vest and a leaflet about cycling at the university. Bicycles were also registered on the University cycle registration scheme established to keep track of bicycle owners.



Above: photos of Cycle Saviours carrying out repairs on bicycles and refurbished bicycles for sale

Table of SDG KPIs relating to Sustainable Transport

The SDG indicators below are taken for the Times Higher Education (THE) Awards criteria. The measures are what the university is doing to meet that indicator.

THE	Indicator	Measures	Comments
11.4.1	Sustainable commuting target	Travel plan and surveys; Target reduce single occupancy car commuting to 50% by 2030	Assuming working from home counts as avoided journeys then this target is already met
11.4.2	Sustainable commuting promotion	Support for local bus service, cycling repair workshops, membership of liftshare	The University has a budget which helps to subsidise bus travel and support cycling and car share
11.4.3	Allow remote working	University allows up to three days/week working from home	This has had a big impact on the daily commuting figures
11.4.6	Pedestrian priority on campus	Zebra crossings at all key crossing points	Next year traffic calming being introduced on College Road

Above: Table of SDG (Sustainable Development Goals) KPIs relating to Sustainable Transport

Green Spaces and Biodiversity



The Cranfield campus is a wildlife rich setting, providing opportunities for students, staff and visitors, to enjoy the benefits of experiencing biodiversity. As a landowner and a centre of learning the University has a responsibility to conserve protected species and 'practise what we teach'. Biodiversity will benefit from the new target of 'Net Environmental Gain including biodiversity to increase by 20% to maximise potential on site' by ensuring any development on site results in a positive impact on biodiversity. The masterplan for the University sets out areas for new buildings and also a wildlife corridor where new habitats can be established.

Areas have been targeted for biodiversity actions such as the brook, woodland and several grassland areas. The total biodiversity action area increases year on year with over 9 ha or 10% of the Cranfield Campus seeing some action to increase biodiversity including the expansion of "no mow" areas.



Above: photo of biodiversity flower plot near building 44. This is one of the many wildflower plots on campus.

Sustainability garden

The garden is an area set aside to showcase and develop sustainable gardening practices. Gardening Club, introduced in autumn 2021 has gone from strength to strength this year with active student involvement.



Above: photo of students enjoying the Sustainability Garden

Bee hives

The Grounds contractor Nurture Landscapes continue to maintain bee hives on site. They have held bee awareness days and a honey harvesting event. Honey sales are donated to charity.

Trees

In February 2023, we worked with Forest of Marston vale to plant over 320 trees and 800 hedging whips around Fedden house field as part of the 'Trees for Climate' scheme. Additionally, we worked with Earthwatch Europe to establish a 'Tiny (Miyawaki) Forest' on campus during March 2023. This accounts for over 600 trees and hedges planted into an area the size of a tennis court, and serves as a part of a nationwide and international project to plant trees to mitigate climate change and to improve biodiversity. A further 20 trees were planted on the main site as part of the 'Queens Green Canopy'. Once matured, trees planted should account for an total of 10,504 square meters area covered.



Above (top left clockwise): Photo of trees planed behind Fedden House for the 'trees for Climate scheme', tree planted for 'Queens Canopy' project, students surveying the Tiny (Miyawaki) Forest, and photo of the Tiny Forest after completion.

Table of SDG KPIs relating to green spaces and biodiversity

The SDG indicators below are taken for the Times Higher Education (THE) Awards criteria. The measures are what the university is doing to meet that indicator.

THE	Indicator	Measures	Comments
14.4.1	Water discharge guidelines and standards	The water treatment works has a discharge consent	Pollution monitoring of the main watercourse through campus is being developed
14.4.2	Minimisation of plastic plan	Single use plastics promotion	Waste Code of Practice
14.5.1	Minimising alteration of aquatic ecosystems	The main watercourse through campus is managed to enhance biodiversity as part of grounds maintenance	
14.5.2	Monitoring the health of aquatic ecosystems	Pollution monitoring of the main watercourse through campus is in place	This needs further development
15.2.1	Events about sustainable use of land	Regular biodiversity walks around campus	
15.2.2	Sustainably farmed food on campus	Sustainable Food and Beverage Policy. Vegetable and fruit production in sustainability garden	Garden only for demonstration and community engagement
15.2.3	Maintain and extend current ecosystems biodiversity	Target for 20% net environmental gain including biodiversity for new developments; Biodiversity Action Plan	Biodiversity Action Plan needs updating
15.3.1	Sustainable use, conservation, and restoration of land policy	This is covered in the Biodiversity Action Plan	Biodiversity Action Plan needs updating
15.3.2	Monitoring endangered species	This is covered in the Biodiversity Action Plan	Biodiversity Action Plan needs updating
15.3.3	Local biodiversity included in planning and development	Target for 20% net environmental gain including biodiversity for new developments	
15.3.4	Alien species impact reduction policy	This needs to be included in the Biodiversity Action Plan	Biodiversity Action Plan needs updating
15.4.1	Water discharge guidelines and standards	The water treatment works has a discharge consent	Pollution monitoring of the main watercourse through campus is being developed
15.4.2	Minimisation of plastic policy	Single use plastics promotion	Code of practice being developed
15.4.3	Hazardous waste disposal policy	Procedures in place handling and disposal of hazardous waste	Code of practice being developed

Above: Table of SDG (Sustainable Development Goals) KPIs relating to green spaces and biodiversity

Climate Adaptation



A strategy for Climate Adaptation has been developed and is awaiting University Executive approval.

Pollution Monitoring and Control



Cranfield Urban Observatory, with its campus-wide sensor network, is a key component of the Living Laboratory and facilitates research projects, securing links between the expertise, facilities and overall capabilities of our unique campus. As part of this, air, water, and soil sensors have been deployed across the Cranfield campus with the capability of monitoring a wide range of potential pollutants. Data is used both in teaching and learning and as a mechanism to monitor potential pollution on the Cranfield campus. Further analysis will produce baseline parameters from which we can work from in 23-24.

Community Involvement

2022-2023 was a great year for staff, student and local community engagement. At the start of the academic year, we hosted a popular evening bat walk and set up the Energy Champions network- a keen group of staff and research students who supported us on our mission to save energy on campus. This launched with a workshop session, and was followed up by fortnightly catch-ups. To aid the Energy Champions, a Systemslink online dashboard portal was set up for all to use.

During November, we hosted a variety of events for staff and students as part of our Green Week which included a popular talk on Hydrogen research and Development: H2@CU, a hedgehog themed raffle and cake sale event to raise money for Hedgehog Preservation Society, honey-harvesting taster events, and an off-campus Wildlife Trust conversation volunteering trip. Our enthusiastic Green Team led by Green Officer Louisa Winch, set up the first 'Clothes Swap' shop in the CSA in an effort to curb clothes waste on campus, and give to charity. Jars of honey from the Cranfield campus beehives were sold at the Christmas Fayre to raise money for the Need Project Bedford Food bank and raised over £1000.

The Miyawaki Tiny Forest was planted in February 2023 and is maintained by a group of voluntary tree keepers, who also carry out surveys. Earthwatch UK came back to campus in June to host a community open day. We continued throughout the year to engage staff and students in wildlife walks, litter picks, bee keeping experience events and Gardening Club, based within the expanding Sustainability Gardens. This year, a welcome addition to the

gardens was a bug house with an engraved plaque thanking the student Energy Champions based in Lanchester and Mitchell Hall for their efforts.

For the first time, the student Green Team organised a trip to the Grand Union canal in Cosgrove, Milton Keynes, to support Buckingham Canal Society with footpath clearance and painting as part of a wider project to restore the canal for people and wildlife. To top-up a successful year of engagement, our Green Officer Louisa Winch became a finalist for 'Student Sustainability Champion of the year' Green Gown Award. Overall, just under 1000 people were actively engaged throughout the year, and we saw many more hits via social media.

Total event engagement: 945 staff and students

Top events:

- Green Week 2022
- Tree planting (Fedden field, Tiny Forest)
- Clothes Swap Shop
- Bee keeping experience



Above: Students engaged in running a clothes swap shop at the CSA, and a raffle for 'Hedgehog Preservation Society' during Green Week 2022

Communications

There have been regular communications through social media and on the intranet. The following tables show the level of engagement:

Intranet	Hits
Average Intranet hits per month:	461

Social media followers	Followers
Instagram	862
Facebook	472
X	891

Top social media posts	Description	Hits
X	Snow picture of campus	2944
Facebook	Too good to go scheme launch	747
Instagram	'Too good to go' reel	2767

Above: Tables showing summary of staff and student engagement on the intranet and via social media.

Notes

1. **Dates:** Baseline and target years refers to the financial/academic year August to July (for example, for the Carbon target, the baseline year for carbon reporting is financial year 2005/2006 and the net zero target is to be achieved in academic year 2030/2031).
2. **Scope:** Tenants are included where it is not possible to distinguish between what is and is not a direct impact to the University as opposed to an impact of others operating on site. Examples include waste, car travel, some aspects of energy and water consumption and sewage discharges. As measurements and monitoring on site improve, this may become easier to distinguish. Additionally, the University is providing utility and other services to tenants and is in a position as landlord and service provider to influence their behaviour and assist in the reduction of their environmental impacts, whilst at the same time having an interest in minimising the risks to the University. The converse applies to the University's presence at Shrivenham. Here the University occupies space on a MOD site. For many of the targets it is not possible or appropriate to include this space as there is no operational control by the University (it is managed by MOD) and no data.
3. **Base Year Recalculation Policy:** Cranfield University will ensure that its greenhouse gas reporting is up to date, accurate and consistent with current Government guidance. In particular, when there are structural changes that have a significant effect on the baseline and the reported progress towards targets, the baseline and, if necessary, data for years in between will be recalculated.
Base year recalculation: It is important that progress is measured on a like for like basis. This means that any changes in calculation methodologies are applied to the previous figures as well as current figures.
Structural changes may include: mergers, acquisitions, and divestments; outsourcing and insourcing of relevant activities; changes in calculation methods or improvements in the accuracy of factors, such as emission, factors, or activity data that result in a significant impact on the base year figures; discovery of significant errors, or a number of cumulative errors that is collectively significant. The recalculation will be triggered and reported if the structural changes would result in a change of greater than 2% in the total baseline figure. At the same time any errors in the current year reporting greater than 2% will be amended and relevant reports updated, or notes attached explaining amendments.
4. **Changes to data:** Our carbon footprint is recalculated each year for all years in order to account for errors, changes to the scope and material changes to the conversion factors provided by DEFRA for company reporting purposes. They may not therefore compare directly with previous figures reported in the University Financial Statement. See also our baseline recalculation policy above. Note the figures exclude emissions for tenants on Cranfield Campus, Silsoe Campus, COTEC where these can be separately identified. University subsidiary companies are included. The same principle will apply to data for other targets.
5. **Water consumption and discharges figures:** These are for Cranfield Campus, including tenants. COTEC is included. Shrivenham data is not included. Discharges are taken as the average of the three consent targets.
6. **Waste figures:** These are for Cranfield Campus and include some, if not all, tenant waste. Note the key performance indicator for recycling is waste segregated on site. However, the waste contractor further segregates waste at their depot. This elevates the overall recycling performance, and it is this figure, which is reported in the HESA Estates Management Reporting.
7. **Academic expertise:** Wherever possible, the University is making use of its academic expertise and facilities to enhance its response to environmental improvement. The estate is also offering opportunities for research and teaching. Examples of this include audits carried out by students and the University laboratories to analyse local discharges. The new CHP unit is regularly used as a real life demonstration for teaching.
8. **Name:** The Energy and Environment Committee was previously known as the Committee for Energy and Environment (BEE).

Glossary

AIRC Aerospace Integration Research Centre; EEC Energy and Environment Committee; BOD Biochemical Oxygen Demand; BREEAM Building Research Establishment Environment Assessment Method; CHP Combined Heat and Power; COTEC Cranfield Ordnance Test and Evaluation Centre; CRC Carbon Reduction Commitment; DEFRA Department for Environmental Food, and Rural Affairs; EA Environment Agency; EAUC the Environmental Association for Universities and Colleges; GIS Geographical Information System; HESA Higher Education Statistics Agency; IMEC Intelligent Mobility Engineering Centre; LED Light Emitting Diode; MOD Ministry of Defence; OU Open University; PV Photovoltaic; SECR Streamlined Energy & Carbon Reporting, SHE Safety Health and Environment; SHEF Safety Health Environment and Fire; SUDS Sustainable Urban Drainage System.

Energy and Environment Committee

Members in 2022-3:

- Chair, Professor Chris Fogwill, Pro-Vice-Chancellor – School of Water, Energy & Environment
- Ian Sibbald, Director of Finance
- John Street, Director of Facilities
- Phil Longhurst, Director of Partnerships & Professor of Environment and Energy Technology
- Gareth Ellis, Head of Energy and Environment
- Christine Thompson, Corporate Planning Director
- Ginny Ford, Environment Advisor
- Ceri Dawson, Energy Advisor
- David Ford, Director of Information Services
- Geoff Say, Director of Finance and Operations CDS
- Stewart Elsmore, Director of Campus Services
- Rosina Watson, Head of Sustainable Business Group & Associate Professor of Sustainability
- Becky Shepherd, Environment Officer
- Louisa Winch, CSA Green Officer
- Abbi Legate, PA to Director of Energy (Committee Secretary)

Further information

For further information, please visit our environmental pages on the University Website:

<https://www.cranfield.ac.uk/about/our-sustainable-university>

or the University Intranet: <https://intranet.cranfield.ac.uk/EnergyEnvironment/Pages/default.aspx>

If you have any questions on any other topics outlined within this report or would like to provide us with any feedback, please contact the Energy and Environment Team at green@cranfield.ac.uk.



Annual Environmental Report 2022 / 2023

Energy and Environment Committee



Cover picture of group of volunteers who helped to plant Miyawaki Forest (see page 20)
Photo by Earthwatch UK

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Statement

Professor Chris Fogwill, Chair Energy and Environment Committee



Our vision is to be valued globally for tackling the real-world issues of today to deliver a sustainable future. We work in partnership with business, academia, governments, and other organisations to develop and deliver applied research and innovative science, technology, engineering and management.

Here, the Energy and Environment Committee (EEC) reports progress on our environmental targets. This is largely focused on the performance of our estate and facilities. Our academic contribution to sustainability is featured on the University website. Given the University undertakes world leading research and learning on sustainability and the environment it is important that we are reflecting this in our operations. Key performance indicators highlighted below and through the report are correlated with the Times Higher Education Impact Awards criteria giving an indication of the contribution to the UN Sustainable Development Goals (SDGs).

We remain indebted to our staff and students who contribute to our on-going improvements and to our Energy and Environment Team, Energy and Environment Committee and working group members who lead and coordinate our combined efforts. We are grateful for the on-going support of our contractors who help with the efficient running of the estate.

Key performance indicators

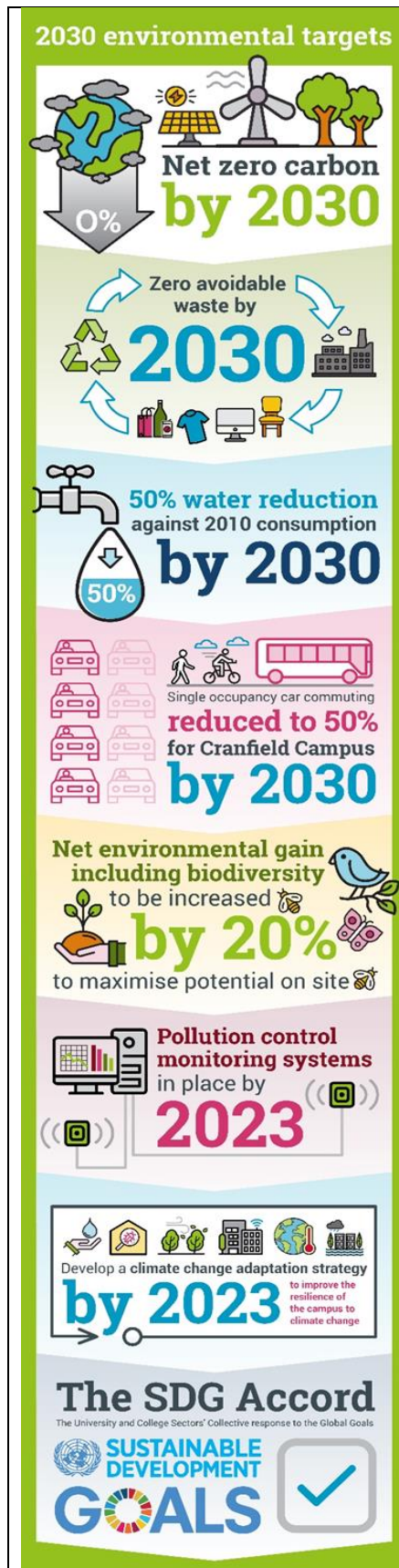
Issue	Description	Latest	Previous	SDG Contribution	Status	Comments
Carbon	Scope 1&2 emissions tCO2	9,532	9,612	THE – SDG* 13.4.1	A	1% reduction year on year
Carbon	Energy efficiency GJ/m2	0.82	0.90	THE - SDG 7.3	G	More efficient use of energy
Carbon	Renewable energy GWh	3,023	3,298	THE - SDG 13.2.3	A	Reduction in biomass output
Waste	Avoidable waste %	18%	18%	THE - SDG 12.2.4	A	Waste which could have been reduced, re-used or recycled
Waste	Total waste tonnes	988	1052	THE - SDG 12.3.2	G	Decrease despite including Conference Hotel for first time
Travel	Commuting alone by car %	38%	35%	THE - SDG 11.4.1	G	Continuing impact of working from home
Water	Water consumption m3/head	34.4	34.4	THE - SDG 6.2.2	R	No progress
Biodiversity	Biodiversity Action Areas ha	9.0	8.6	THE – SDG 15.2.3	G	In addition, 320 trees planted and additional hedging

Above: table shows key performance indicators for our environmental targets and progress, including SDG (Sustainable Development goal) contribution and comments.

* THE-SDG refers to the Times Higher Education Impact Awards Sustainable Development Goals categories.

Note: There are more indicators and objectives highlighted under each section in the report.

Environmental Targets



In 2020 the University Council committed to a new set of environmental targets. The strategy for delivering these targets can be found at:

<https://www.cranfield.ac.uk/about/our-sustainable-university/our-2030-environmental-targets>

The targets are to be achieved by academic year 2030/31. They include All Cranfield University activities including the activities of any subsidiaries including MK:U.

The aim of the Net Zero Carbon target is to reduce Scope 1 and 2 carbon emissions as quickly as possible through energy saving and renewable energy. Any remaining emissions will require other measures. The strategy for Scope 3 emissions is still being developed and these emissions will be included as deemed appropriate for the sector.

The Zero Avoidable Waste target aims to minimise waste ending up in landfill or going for incineration and embraces the application of circular economy principles.

The water reduction target aims to be consistent with best practice and future supply pressures in this part of the UK.

The sustainable commuting target continues to focus on promoting alternatives to the car. Walking, cycling and bus are the main options.

Biodiversity will benefit from the new target ensuring any development on site results in a net environmental gain. The masterplan for the University sets out areas for new buildings and also a wildlife corridor where new habitats can be established.

The application of sensors on campus through the Urban Observatory is helping with the monitoring of air, water and soil. This will be developed in the short term to set out new pollution control monitoring and targets.

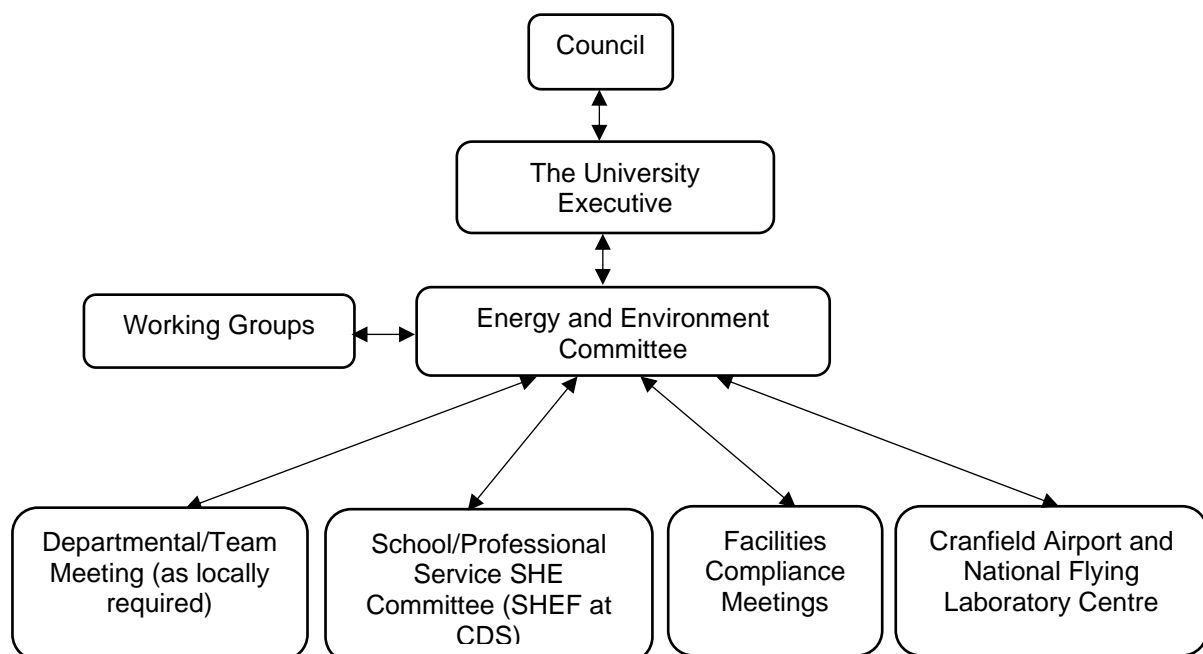
The risks of climate change impacts on the University are being investigated. This will be developed into a climate change strategy.

The University has signed the SDG Accord. This has led to more focus on the SDGs and how the university's contribution can be better communicated and developed.

Quality assurance

Governance

The Energy and Environment Committee (EEC) reports to the Cranfield Executive and Council on energy and environmental management issues. The priority of the Committee is to ensure Cranfield University demonstrates a leading capability in environmental performance by providing oversight and direction. The Committee is a sub-committee of the Executive and consists of senior managers from across the University along with student representation and members of the Energy and Environment Team. The Committee has working groups, with members drawn from operational and academic staff and students, to progress key environmental objectives. A dedicated Energy and Environment team facilitates delivery of the objectives and reports progress towards target to the Committee on a regular basis. The Committee aims to ensure a close relationship between EEC's environmental activities across the University and the teaching, learning and research taking place within the Themes on environmental best practice. The Governance structure is outlined below.



Above: Diagram shows governance structure for the Energy and Environment Committee

ISO 14001:2015

Cranfield University operates a university wide environmental management system. The system provides a framework for managing our environmental impacts, risks, and opportunities, for setting environmental objectives and establishing programmes to achieve them. The scope of the certification covers all University operations including Cranfield Defence and Security at the Shrivenham and COTEC sites.

A successful re-certification audit was carried out by BSI in May 2023. In a climate of continuous improvement, the reporting of all environmental incidents and near misses is encouraged.

ISO 50001:2018

Cranfield University operates a university wide Energy Management System, which provides a framework for managing our energy use. The scope of the certification covers all University operations on the Cranfield campus, Cranfield Defence and Security at the COTEC site and MK:U at Bouverie House. Recertification was achieved in July 2021, with surveillance audits taking place in July 2022 and July 2023.

Scope of reporting

The environmental targets on page 4 encompass activities taking place on the Cranfield Campus, including subsidiary companies and tenants on site (*see Notes section near end of document*). The University's operation at the Cranfield Ordnance Test & Evaluation Centre (COTEC) is included. The University is not directly involved in the management of Shrivenham Campus, so the University activities there do not contribute to the key performance indicators such as carbon emission in this report (*see Notes section near end of document*).

Other reporting

In line with the Higher Education Statistics Association (HESA) requirements, the University submits environmental data as part of the annual estate management reporting statistics. This data attempts to exclude tenant data and differs slightly from the data that appears in this report. Under the new Streamlined Energy and Carbon Reporting (SECR) rules, which replaced the Carbon Reduction Commitment (CRC) Energy Efficiency scheme in 2020, the University reports its annual carbon emissions in the University's annual Finance report. That data includes all primary energy use by the University Group, all imported electricity use and all fuel put into University owned vehicles or private or hire vehicles used for Business Travel.

Data submitted to HESA is also used by the '*People and planet University League*' (a student-led, People and Planet voluntary league table of University environmental performance). In People and Planet's University League, comparisons are made per student or per m² total floor area. Cranfield is a wholly Postgraduate University undertaking industrial scale research. This makes environmental impacts per student or per m² appear high. This annual report focuses on how the environmental performance of the University is improving over time. The University is also participating in the THE (Times Higher Education) Impact Awards. The contribution of the environmental management of the university estate to the SDGs in line with the THE criteria is highlighted in this report.

Base year recalculation policy

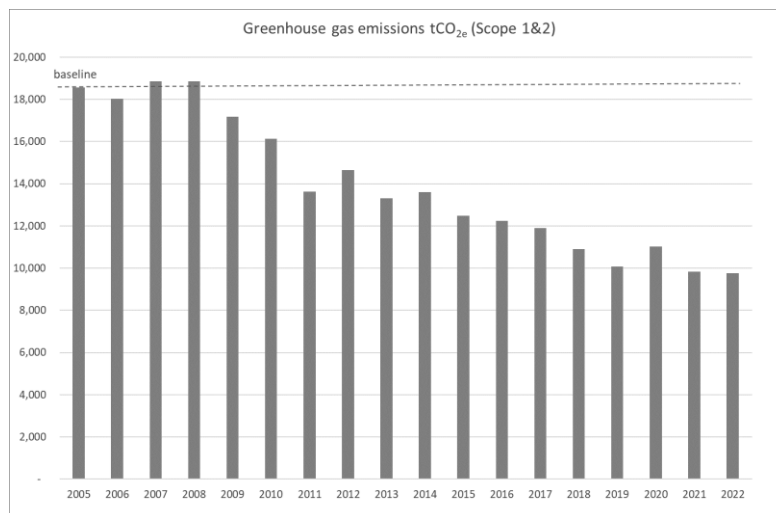
Our base year figures for reporting are reviewed from time to time to ensure like for like reporting. (*see Notes section near end of document*).

Carbon and Energy



Progress

Current Scope 1 and 2 emissions are 9,532 tonnes CO₂. A small reduction compared with the previous year at 9,612 tonnes. Recent investments in renewable energy and energy efficiency infrastructure have yet to take effect. These potentially add up to emissions savings of over 3,000 tonnes of CO₂ and will become apparent over the next two years as the new systems bed in and are optimised. The measures include replacing gas boilers with air source heat pumps, adding buildings to the campus district heating system, improved heating and ventilation controls, insulation, LED lighting, solar photovoltaic installations, and a large battery.



Above: Graph showing the amount of greenhouse gas emissions in tonnes of carbon dioxide equivalent scope 1 and 2, from 2005 to 2022. Graph shows a downwards decrease in emissions with time.

Note: Year 2005 runs from August 2005 to July 2006, etc.

Energy trends and efficiency

Total energy used has decreased for a second year, although the longer-term trend is slightly up. Nevertheless, the overall energy efficiency continues to improve with less energy used per building floor area. Renewable energy generation remains high with the enlargement of the solar farm and increased operation of the biomass boiler. The University does not currently purchase “green” electricity as typically green electricity offered on the UK market does not provide additionality. The University is however exploring Power Purchase Agreements for new renewable energy electricity which does provide new capacity.

	2019/20	2020/21	2021/22	2022/23
Total energy used (kWh)	44,841,986	50,176,963	48,022,909	44,050,024
Renewable energy generated/used (kWh)	2,138,441	2,236,208	3,297,839	3,022,661

Above: table shows total energy used in kWh and renewable energy generated/used in kWh, year on year, from 2019/20 to 2022/23. Renewable energy generated has increased with time.

	2019/20	2020/21	2021/22	2022/23
Total energy used (GJ)	161,431	180,637	172,882	158,580
Floor area (m2)	169,005	185,856	192,495	193,201
Energy efficiency (GJ/m2)	0.96	0.97	0.90	0.82

Above: table shows total energy used in GJ, total floor area in m², and energy efficiency per floor area in m² from 2019/20 to 2022/23 showing an increase in energy efficiency per m² with time.

Scope 3 emissions

The measurement of Scope 3 emissions relies largely on third party data based on spend and there is a lag in obtaining and verifying realistic information. As soon as figures are available this report will be updated.

The University has established a Scope 3 working group to develop our reporting, guided by the Standardised Carbon Emissions Framework (SCEF) established in December 2022 by the Environmental Association for Universities and Colleges (EAUC) the environmental and sustainability champion within Further and Higher Education in the UK and Ireland.

Infrastructure

In early 2022 an £11 Million bid to Public Sector Decarbonisation Scheme secured funding for the insulation of the two large aircraft hangars, further improvements to the district heating with an additional air source heat pump and an additional solar PV array. This has now been largely delivered and complements the district heating project undertaken in 2021/22. The two projects combined are projected to save 3,000 tCO₂.

A further £4 Million bid to Public Sector Decarbonisation Scheme has secured funding for further improvements to the district heating adding a large heat store and extending the network to the residential estate. Detailed planning for this project is underway and installation will proceed in 2024.



Above: photos of hangar 2 (building 84) insulation including cladding and improved hangar doors.



Above: photo of new solar farm installed on disused car park early 2023

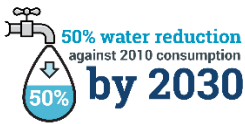
Table of SDG KPIs relating to Carbon & Energy

The SDG indicators below are taken for the Times Higher Education (THE) Awards criteria. The measures are what the university is doing to meet that indicator.

THE reference	Indicator	Measures	Comments
7.2.1	Energy and Efficient Renovation and Building	New buildings are assessed to the BREEAM standard	Key measures are being incorporated into University design guide / standards to address refurbishments / renovations
7.2.2	Plans to upgrade energy efficiency of buildings	These are set out in the annual Energy & Carbon Plan	See on website: https://www.cranfield.ac.uk/about/our-sustainable-university/carbon-and-energy-management
7.2.3	Carbon management and emission reduction process	This is set out in the annual Energy & Carbon Plan	See above
7.2.4	Plan to reduce energy consumption	This is set out in the annual Energy & Carbon Plan	See above
7.2.5	Energy wastage identification	This is set out in the annual Energy & Carbon Plan	See above
7.3.1	Energy use density- Total energy used per floor space	Ratio 0.82GJ/m ²	Energy used 158,580 GJ Floor space 193,201 m ²
13.2.1	Low carbon energy tracking	Solar 1.38 GWh Biomass 1.64 GWh	Renewable energy generated and used on site.
11.4.8	New build standards	New buildings are assessed to the BREEAM standard	
11.4.9	Building on brownfield sites	The University is using brownfield for new buildings	This is set out in the campus Masterplan
13.2.2	Total energy used	42,451,366 kWh	
13.2.3	Total energy used from low carbon sources	3,297,839 kWh	Note "Green Electricity" is not purchased as typically this does not provide additionality
13.3.2	Climate Action Plan	Energy & Carbon Plan on website	Climate adaptation strategy being developed
13.4.1	Commitment to carbon neutral university	Net zero carbon by 2030 target	Includes scope 3, but exact definition being developed
13.4.2	Carbon neutrality date	2030	

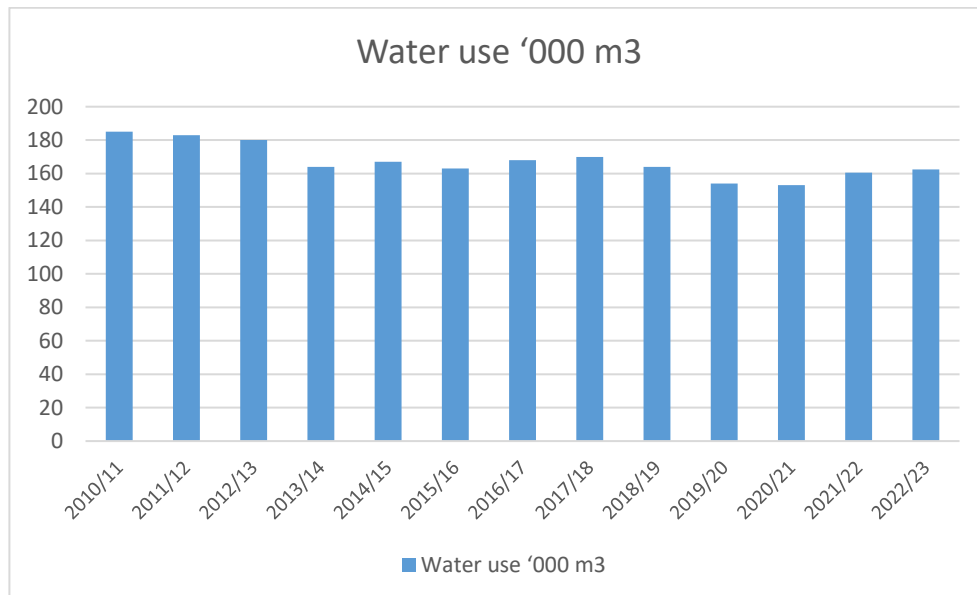
Above: Table of SDG KPIs (key performance indicators) relating to Carbon & Energy reduction

Water



Work has continued to improve water metering and monitoring on the main Cranfield Campus and to encourage the reporting of leaks, so they can be dealt with promptly. Several large leaks were identified on both the technical and residential sides over the last year. Some were linked to frost damage over the Christmas period and others were due to mechanical failures.

A number of urinals were also found to be flushing excessively and timers have been adjusted to reduce the amount of water used. A dedicated section on water saving is included in the Canvas Environmental Awareness Induction, and this has been rolled out to all our students. Water saving tips have also been promoted amongst our staff and student Green Teams. The university has published a Water Management Plan and a Water Management Policy Statement on its website. These give details of the approaches it is taking to reduce potable water use.



Above: graph showing water usage in Cubic Meters from 2010/11 to 2022/23. The total usage has dropped slightly, although not significantly. **Note:** the water consumption figure for 2022/23 is estimated due the failure of the main supply meter.

	2020/21	2021/22	2022/23
Total water used (m3)	153,481	160,580	162,478
Staff & Students (FTE)*	4,241	4,671	4,726
Water use efficiency (m3/staff&student)**	36.2	34.4	34.4

Above: Table shows year on year comparison of water use and efficiency

*Includes Cranfield campus, excludes Shrivvenham. ** Excludes other Cranfield campus residents such as student partners and children and staff residing on site. The number for these in 2022/23 was 245.

Table of SDG KPIs relating to Water

The SDG indicators below are taken for the Times Higher Education (THE) Awards criteria. The measures are what the university is doing to meet that indicator.

THE	Indicator	Measures	Comments
6.2.1	Water consumption tracking	Water consumption reduction is key target;	Does not currently include water used by Cranfield University at Shrivenham as water metering and consumption is not under the University's control.
6.2.2	Water consumption per person	34.4 m3/person	162,478 m3 4,726 persons
6.3.1	Wastewater treatment	Wastewater is treated on site	
6.3.2	Preventing water system pollution	Procedures include Spill Prevention and Response, Discharge to Sinks and Drains:	Controlled through ISO 14001 certified environmental management system
6.3.3	Free drinking water provided	Drinking water fountains and filtered water dispensers	
6.3.4	Water conscious building standards	BREEAM assessment on new buildings Compliance with Building Regulations	University Design Standards being enhanced and developed.
6.3.5	Water conscious planting	Plantings are made at the appropriate time of year to avoid water stress	Guidance on suitable drought tolerant plants for the site is being developed
6.4.1	Water reuse policy	A water management policy has been developed and published	Options for water reuse and recycling are being explored
6.4.2	Water reuse measurement	None	This is still in the pilot stage
6.5.2	Promoting conscious water usage	Water conservation is promoted on campus	A project promoting efficient shower usage. Canvas Environmental Awareness module

Above: Table of SDG (Sustainable Development Goals) KPIs relating to water reduction, measures, and comments

Resources and Waste



The university is committed to putting the principles of the Circular Economy into practice by putting processes in place to:

- prevent materials from becoming waste in the first place
- ensure waste that is created is recycled, composted, or sent for anaerobic digestion and not sent to landfill or incineration*.

*Recyclable, compostable or digestible waste that ends up in the residual waste stream (waste sent for landfill or incineration with or without energy recovery) is defined as AVOIDABLE.

Avoidable Waste

The overarching target is to reach Zero Avoidable Waste by 2030. The starting point is to gather information on the materials ending up in the residual waste stream and use best management practices to apply the waste hierarchy to these materials: prevent, reduce, reuse, and recycle.

The audit of recycling and residual general waste bins around the different functional areas of the campus from residential to technical buildings has not happened this year due to contractor staff availability. However this requirement will be written into the new contract going forward to enable audit, analysis and action to take place in 23-24. Previous audit data has been used to calculate avoidable waste figure for 22-23. Of the 998 tonnes of waste produced, 47% was segregated on site and either reused, recycled, composted or sent for anaerobic digestion. Avoidable waste is 18% of total waste. Tonnages are summarised in the figure on the next page.

Total waste

Total waste produced by the Cranfield campus over 22-23 was less than the previous year.

	2021/22	2022/23
Total waste (tonnes)*	1,052	988**
Staff & Students (FTE)***	4,671	4,726
Waste per staff & student FTE (tonne/person)	0.23	0.21

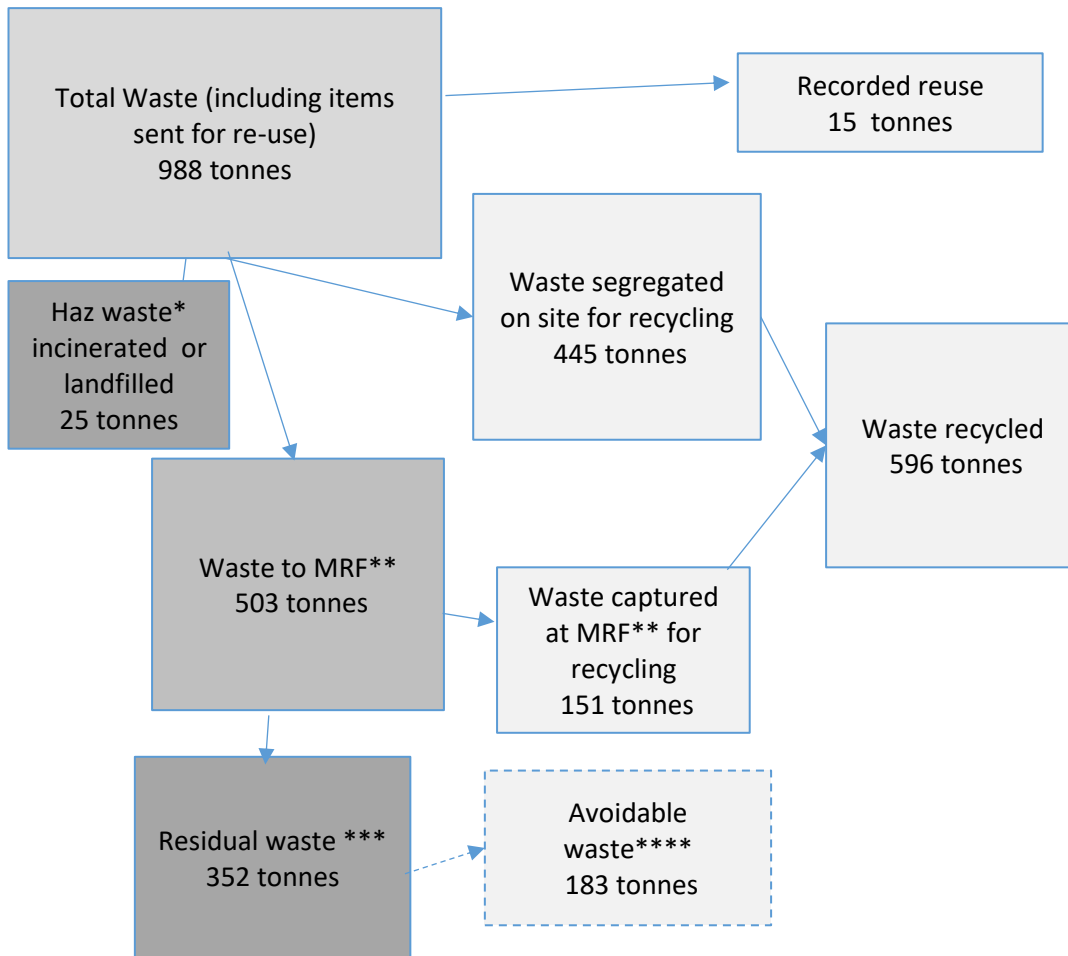
Above: Table showing total waste, number of staff and students, and waste per staff/students for years 2021/22 and 2022/23

*Cranfield campus waste only, not including construction waste from development sites.

**22-23 figures include for the first time tonnages from CCCL (85 tonnes). Future reports may amend previous year data to include CCCL estimate.

*** includes Cranfield and MKU, excludes Shrivenham. Excludes other Cranfield campus residents such as student partners and children and staff residing on site. The number for these in 2022/23 was 245.

Where the waste goes



Above: The diagram shows the breakdown of total waste generated on campus, and how it is managed. 445 tonnes of waste is segregated on site for recycling, and 503 tonnes of waste is sent to Cawley's Materials Recycling Facility (MRF). 183 tonnes of waste disposed of in general waste could have been recycled.

Notes: This data is from tonnage information provided by the University's waste contractor. It does not include construction waste from development sites. The avoidable waste figure is based on 2 audits representing 1% of the total residual waste. In future years further audits will be scheduled to gain confidence in the results.

*Haz waste – hazardous waste which is not recyclable. 5.9 tonnes biomass boiler ash landfilled and the remainder incinerated.

**MRF – Material Recycling Facility.

***Residual waste – waste which is sent for incineration with energy recovery and landfill (0.5 tonnes bulky waste landfilled and the remainder energy recovery).

****Avoidable waste – waste which could have been recycled.

Sustainable food and beverage policy

Developed by Sustainable Food working group the policy has been approved and commits to drive progress with aims such as reducing single use plastics and packaging, and operating catering services in accordance with the waste hierarchy.

Recording and monitoring of pre-consumer food waste from catering outlets

The University's Campus Services has placed reduction targets on food waste in an effort to reduce food being wasted during food preparation and service.

Food wastage (% revenue)

Area	Reduction Target 22/23	Achieved	Reduction Target 23/24
Conference Centre	2.5%	1.92%	1.75%
Mitchell Hall	3.0%	2.79%	2.5%
Cranberries	1.0%	1.27%	1.25%
Overall	2.5%	2.28%	2.0%

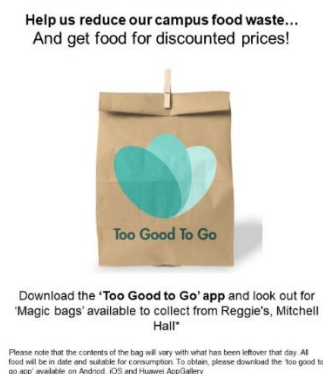
Above: The table shows Campus Service's food waste reduction targets per centre with progress made

Spotlight on disposables

The University's Cranfield Management Development Centre (CMDC) has removed the bottled water from bedrooms, and guests are encouraged to use the tap water which has been certified as potable. This has removed an average of 20,000 bottles from use annually in the CMDC. Mitchell Hall and CMDC operations between them have removed approximately 220,000 disposable cups and 51,000 lids from use in favour of reusable cups.

Note: these figures are based on usage at the height of disposable usage which was adversely affected by the covid pandemic

The student Green Team worked closely with staff to promote the reduction of disposable cup use and the use of 'Too good to go' as a scheme to reduce food waste. Efforts to continue reductions in disposable single use plastics are ongoing, this includes take away cutlery being replaced with stainless steel loan cutlery in catered student rooms.



Reuse of resources

The university's objective to increase the amount of items reused has seen steady progress, made possible by the university's relationship with re-use organisations, Reyooz, Milton Keynes Play Association (MKPA) and Unigreenscheme. These are items such as furniture and equipment which would otherwise have been sent for disposal.

The 22-23 student moveout campaign saw a continued arrangement with the British Heart Foundation's 'Pack for Good' campaign and The NEED Project. The donations provide much needed items for the charity shops and families in need in the local area.



Above: diagram showing total donations and money raised for British Heart Foundation in 2022 following the end of year student moveout. This shows that 5 tonnes of items were diverted from general waste and sent to British Heart Foundation shops for resale.

Procurement of resources

We are working to strengthen our procurement processes to include circular economy principles and sustainability requirements at each procurement stage. One example is our new furniture contract with PRS Office Furniture. They provide a five step approach to sustainable furniture provision: sourcing, fit for purpose, lifespan, delaying end of life through reuse, and recycling.

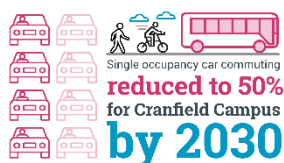
Table of SDG KPIs relating to Resources & Waste

The SDG indicators below are taken for the Times Higher Education (THE) Awards criteria. The measures are what the university is doing to meet that indicator.

THE	Indicator	Measures	Comments
12.2.1	Ethical sourcing policy	Promoting Fair Trade	Sustainable Food and Beverage policy adopted
12.2.3	Hazardous waste disposal policy	Procedures in place handling and disposal of hazardous waste	Hazardous waste procedure adopted
12.2.4	Disposal to Landfill policy	Target to monitor what goes to landfill/incineration and what can be recycled	Waste Code of Practice adopted
12.2.5	Minimisation of plastic	Single use plastics promotion	Waste Code of Practice adopted
12.2.6	Minimisation of disposable items	Single use plastics policy	Waste Code of Practice adopted
12.2.7	Extending disposal policies to supply chain	Currently ask suppliers for their environmental policies	This is being developed and incorporated within procurement processes
12.2.8	Extending minimisation policies to supply chain	Currently ask suppliers for their environmental policies	This is being developed and incorporated within procurement processes
12.3.1	Waste tracking Amount of waste generated and recycled across the university	Waste and recycling figures made available on web site. Whole university / partial coverage	Figures in annual environmental report. Does not currently include Shrivenham site as waste management is not under the control of Cranfield University. Does not include COTEC. Aiming to include COTEC 23/24
12.3.2	Amount of waste generated (tonnes)	tonnes	
12.3.2	Amount of waste recycled	tonnes	This figure includes tonnage sent for energy recovery , which is not included in the figures published on page 13
12.3.2	Amount sent to landfill	tonnes	
12.4.1	Sustainability Report	SDG reporting on web site: https://www.cranfield.ac.uk/sustainable-development-goals . Also report to EAUC for SDG Accord annually.	

Above: Table of SDG (Sustainable Development Goal) KPIs relating to Resources & Waste

Sustainable Commuting



Travel Survey

A travel survey in early 2023 confirms the trend seen in 2021 and the impact of working from home on the commute to Cranfield campus. There is a significant impact on the single occupancy car journeys and to a lesser extent the bus journeys.

Journeys/week	2011/12	2013/14	2015/16	2017/18	2021/22	2022/23
Car alone	70%	58%	59%	59%	35%	38%
Car share	13%	11%	13%	10%	5%	7%
Motorbike	1%	1%	1%	1%	0%	1%
Bus	7%	19%	13%	18%	14%	13%
Cycle	6%	8%	8%	7%	5%	4%
Walk	2%	3%	5%	3%	3%	2%
Other	1%	1%	2%	1%	5%	3%
Working at home *Avoided journeys					34%	29%

Above: Table shows percentages of staff and student travel modes from 2011/12 to 2022/23 according to travel survey data. Note that most staff travel to campus by 'car alone' if not working from home.

Uno Bus

The Uno bus service which connects the University to Bedford and Milton Keynes is subsidised by the university for staff and students to use. It is a public bus service and so the local community also benefit from a much more frequent and comprehensive service than anywhere else in rural Bedfordshire. Despite severe restrictions during the Covid pandemic, the service has bounced back and is busier than ever.

Uno set up a stand for welcome week to promote the bus service and provide the students with travel and ticketing information. Several meetings were held with student representatives throughout the year to answer queries and plan improvements to the service. Engagement with students has been ongoing through social media.

Cycling support and development

The cycle paths to the north and south of campus continue to provide a safer cycling and walking option for staff and students living in Cranfield village. The connectivity with National Cycle Route 51 also provides an option for those prepared to cycle from further afield.

Cycle Saviours continue to provide maintenance 'pop-up workshops' once a month along with the sale of reconditioned bikes. They offer training and employment in the form of an apprentice scheme to those not in school or employment. They salvage old bicycles and what cannot be refurbished is used for repairs or recycled.

In September and October 2022, Cycle Saviours held bicycle sales at Stafford Cripps. All students that attended were advised about road safety for cycling and walking particularly at night. Each student that attended was given a high visibility reflective vest and a leaflet about cycling at the university. Bicycles were also registered on the University cycle registration scheme established to keep track of bicycle owners.



Above: photos of Cycle Saviours carrying out repairs on bicycles and refurbished bicycles for sale

Table of SDG KPIs relating to Sustainable Transport

The SDG indicators below are taken for the Times Higher Education (THE) Awards criteria. The measures are what the university is doing to meet that indicator.

THE	Indicator	Measures	Comments
11.4.1	Sustainable commuting target	Travel plan and surveys; Target reduce single occupancy car commuting to 50% by 2030	Assuming working from home counts as avoided journeys then this target is already met
11.4.2	Sustainable commuting promotion	Support for local bus service, cycling repair workshops, membership of liftshare	The University has a budget which helps to subsidise bus travel and support cycling and car share
11.4.3	Allow remote working	University allows up to three days/week working from home	This has had a big impact on the daily commuting figures
11.4.6	Pedestrian priority on campus	Zebra crossings at all key crossing points	Next year traffic calming being introduced on College Road

Above: Table of SDG (Sustainable Development Goals) KPIs relating to Sustainable Transport

Green Spaces and Biodiversity



The Cranfield campus is a wildlife rich setting, providing opportunities for students, staff and visitors, to enjoy the benefits of experiencing biodiversity. As a landowner and a centre of learning the University has a responsibility to conserve protected species and 'practise what we teach'. Biodiversity will benefit from the new target of 'Net Environmental Gain including biodiversity to increase by 20% to maximise potential on site' by ensuring any development on site results in a positive impact on biodiversity. The masterplan for the University sets out areas for new buildings and also a wildlife corridor where new habitats can be established.

Areas have been targeted for biodiversity actions such as the brook, woodland and several grassland areas. The total biodiversity action area increases year on year with over 9 ha or 10% of the Cranfield Campus seeing some action to increase biodiversity including the expansion of "no mow" areas.



Above: photo of biodiversity flower plot near building 44. This is one of the many wildflower plots on campus.

Sustainability garden

The garden is an area set aside to showcase and develop sustainable gardening practices. Gardening Club, introduced in autumn 2021 has gone from strength to strength this year with active student involvement.



Above: photo of students enjoying the Sustainability Garden

Bee hives

The Grounds contractor Nurture Landscapes continue to maintain bee hives on site. They have held bee awareness days and a honey harvesting event. Honey sales are donated to charity.

Trees

In February 2023, we worked with Forest of Marston vale to plant over 320 trees and 800 hedging whips around Fedden house field as part of the 'Trees for Climate' scheme. Additionally, we worked with Earthwatch Europe to establish a 'Tiny (Miyawaki) Forest' on campus during March 2023. This accounts for over 600 trees and hedges planted into an area the size of a tennis court, and serves as a part of a nationwide and international project to plant trees to mitigate climate change and to improve biodiversity. A further 20 trees were planted on the main site as part of the 'Queens Green Canopy'. Once matured, trees planted should account for an total of 10,504 square meters area covered.



Above (top left clockwise): Photo of trees planed behind Fedden House for the 'trees for Climate scheme', tree planted for 'Queens Canopy' project, students surveying the Tiny (Miyawaki) Forest, and photo of the Tiny Forest after completion.

Table of SDG KPIs relating to green spaces and biodiversity

The SDG indicators below are taken for the Times Higher Education (THE) Awards criteria. The measures are what the university is doing to meet that indicator.

THE	Indicator	Measures	Comments
14.4.1	Water discharge guidelines and standards	The water treatment works has a discharge consent	Pollution monitoring of the main watercourse through campus is being developed
14.4.2	Minimisation of plastic plan	Single use plastics promotion	Waste Code of Practice
14.5.1	Minimising alteration of aquatic ecosystems	The main watercourse through campus is managed to enhance biodiversity as part of grounds maintenance	
14.5.2	Monitoring the health of aquatic ecosystems	Pollution monitoring of the main watercourse through campus is in place	This needs further development
15.2.1	Events about sustainable use of land	Regular biodiversity walks around campus	
15.2.2	Sustainably farmed food on campus	Sustainable Food and Beverage Policy. Vegetable and fruit production in sustainability garden	Garden only for demonstration and community engagement
15.2.3	Maintain and extend current ecosystems biodiversity	Target for 20% net environmental gain including biodiversity for new developments; Biodiversity Action Plan	Biodiversity Action Plan needs updating
15.3.1	Sustainable use, conservation, and restoration of land policy	This is covered in the Biodiversity Action Plan	Biodiversity Action Plan needs updating
15.3.2	Monitoring endangered species	This is covered in the Biodiversity Action Plan	Biodiversity Action Plan needs updating
15.3.3	Local biodiversity included in planning and development	Target for 20% net environmental gain including biodiversity for new developments	
15.3.4	Alien species impact reduction policy	This needs to be included in the Biodiversity Action Plan	Biodiversity Action Plan needs updating
15.4.1	Water discharge guidelines and standards	The water treatment works has a discharge consent	Pollution monitoring of the main watercourse through campus is being developed
15.4.2	Minimisation of plastic policy	Single use plastics promotion	Code of practice being developed
15.4.3	Hazardous waste disposal policy	Procedures in place handling and disposal of hazardous waste	Code of practice being developed

Above: Table of SDG (Sustainable Development Goals) KPIs relating to green spaces and biodiversity

Climate Adaptation



A strategy for Climate Adaptation has been developed and is awaiting University Executive approval.

Pollution Monitoring and Control



Cranfield Urban Observatory, with its campus-wide sensor network, is a key component of the Living Laboratory and facilitates research projects, securing links between the expertise, facilities and overall capabilities of our unique campus. As part of this, air, water, and soil sensors have been deployed across the Cranfield campus with the capability of monitoring a wide range of potential pollutants. Data is used both in teaching and learning and as a mechanism to monitor potential pollution on the Cranfield campus. Further analysis will produce baseline parameters from which we can work from in 23-24.

Community Involvement

2022-2023 was a great year for staff, student and local community engagement. At the start of the academic year, we hosted a popular evening bat walk and set up the Energy Champions network- a keen group of staff and research students who supported us on our mission to save energy on campus. This launched with a workshop session, and was followed up by fortnightly catch-ups. To aid the Energy Champions, a Systemslink online dashboard portal was set up for all to use.

During November, we hosted a variety of events for staff and students as part of our Green Week which included a popular talk on Hydrogen research and Development: H2@CU, a hedgehog themed raffle and cake sale event to raise money for Hedgehog Preservation Society, honey-harvesting taster events, and an off-campus Wildlife Trust conversation volunteering trip. Our enthusiastic Green Team led by Green Officer Louisa Winch, set up the first 'Clothes Swap' shop in the CSA in an effort to curb clothes waste on campus, and give to charity. Jars of honey from the Cranfield campus beehives were sold at the Christmas Fayre to raise money for the Need Project Bedford Food bank and raised over £1000.

The Miyawaki Tiny Forest was planted in February 2023 and is maintained by a group of voluntary tree keepers, who also carry out surveys. Earthwatch UK came back to campus in June to host a community open day. We continued throughout the year to engage staff and students in wildlife walks, litter picks, bee keeping experience events and Gardening Club, based within the expanding Sustainability Gardens. This year, a welcome addition to the

gardens was a bug house with an engraved plaque thanking the student Energy Champions based in Lanchester and Mitchell Hall for their efforts.

For the first time, the student Green Team organised a trip to the Grand Union canal in Cosgrove, Milton Keynes, to support Buckingham Canal Society with footpath clearance and painting as part of a wider project to restore the canal for people and wildlife. To top-up a successful year of engagement, our Green Officer Louisa Winch became a finalist for 'Student Sustainability Champion of the year' Green Gown Award. Overall, just under 1000 people were actively engaged throughout the year, and we saw many more hits via social media.

Total event engagement: 945 staff and students

Top events:

- Green Week 2022
- Tree planting (Fedden field, Tiny Forest)
- Clothes Swap Shop
- Bee keeping experience



Above: Students engaged in running a clothes swap shop at the CSA, and a raffle for 'Hedgehog Preservation Society' during Green Week 2022

Communications

There have been regular communications through social media and on the intranet. The following tables show the level of engagement:

Intranet	Hits
Average Intranet hits per month:	461

Social media followers	Followers
Instagram	862
Facebook	472
X	891

Top social media posts	Description	Hits
X	Snow picture of campus	2944
Facebook	Too good to go scheme launch	747
Instagram	'Too good to go' reel	2767

Above: Tables showing summary of staff and student engagement on the intranet and via social media.

Notes

1. **Dates:** Baseline and target years refers to the financial/academic year August to July (for example, for the Carbon target, the baseline year for carbon reporting is financial year 2005/2006 and the net zero target is to be achieved in academic year 2030/2031).
2. **Scope:** Tenants are included where it is not possible to distinguish between what is and is not a direct impact to the University as opposed to an impact of others operating on site. Examples include waste, car travel, some aspects of energy and water consumption and sewage discharges. As measurements and monitoring on site improve, this may become easier to distinguish. Additionally, the University is providing utility and other services to tenants and is in a position as landlord and service provider to influence their behaviour and assist in the reduction of their environmental impacts, whilst at the same time having an interest in minimising the risks to the University. The converse applies to the University's presence at Shrivenham. Here the University occupies space on a MOD site. For many of the targets it is not possible or appropriate to include this space as there is no operational control by the University (it is managed by MOD) and no data.
3. **Base Year Recalculation Policy:** Cranfield University will ensure that its greenhouse gas reporting is up to date, accurate and consistent with current Government guidance. In particular, when there are structural changes that have a significant effect on the baseline and the reported progress towards targets, the baseline and, if necessary, data for years in between will be recalculated.
Base year recalculation: It is important that progress is measured on a like for like basis. This means that any changes in calculation methodologies are applied to the previous figures as well as current figures.
Structural changes may include: mergers, acquisitions, and divestments; outsourcing and insourcing of relevant activities; changes in calculation methods or improvements in the accuracy of factors, such as emission, factors, or activity data that result in a significant impact on the base year figures; discovery of significant errors, or a number of cumulative errors that is collectively significant. The recalculation will be triggered and reported if the structural changes would result in a change of greater than 2% in the total baseline figure. At the same time any errors in the current year reporting greater than 2% will be amended and relevant reports updated, or notes attached explaining amendments.
4. **Changes to data:** Our carbon footprint is recalculated each year for all years in order to account for errors, changes to the scope and material changes to the conversion factors provided by DEFRA for company reporting purposes. They may not therefore compare directly with previous figures reported in the University Financial Statement. See also our baseline recalculation policy above. Note the figures exclude emissions for tenants on Cranfield Campus, Silsoe Campus, COTEC where these can be separately identified. University subsidiary companies are included. The same principle will apply to data for other targets.
5. **Water consumption and discharges figures:** These are for Cranfield Campus, including tenants. COTEC is included. Shrivenham data is not included. Discharges are taken as the average of the three consent targets.
6. **Waste figures:** These are for Cranfield Campus and include some, if not all, tenant waste. Note the key performance indicator for recycling is waste segregated on site. However, the waste contractor further segregates waste at their depot. This elevates the overall recycling performance, and it is this figure, which is reported in the HESA Estates Management Reporting.
7. **Academic expertise:** Wherever possible, the University is making use of its academic expertise and facilities to enhance its response to environmental improvement. The estate is also offering opportunities for research and teaching. Examples of this include audits carried out by students and the University laboratories to analyse local discharges. The new CHP unit is regularly used as a real life demonstration for teaching.
8. **Name:** The Energy and Environment Committee was previously known as the Committee for Energy and Environment (BEE).

Glossary

AIRC Aerospace Integration Research Centre; EEC Energy and Environment Committee; BOD Biochemical Oxygen Demand; BREEAM Building Research Establishment Environment Assessment Method; CHP Combined Heat and Power; COTEC Cranfield Ordnance Test and Evaluation Centre; CRC Carbon Reduction Commitment; DEFRA Department for Environmental Food, and Rural Affairs; EA Environment Agency; EAUC the Environmental Association for Universities and Colleges; GIS Geographical Information System; HESA Higher Education Statistics Agency; IMEC Intelligent Mobility Engineering Centre; LED Light Emitting Diode; MOD Ministry of Defence; OU Open University; PV Photovoltaic; SECR Streamlined Energy & Carbon Reporting, SHE Safety Health and Environment; SHEF Safety Health Environment and Fire; SUDS Sustainable Urban Drainage System.

Energy and Environment Committee

Members in 2022-3:

- Chair, Professor Chris Fogwill, Pro-Vice-Chancellor – School of Water, Energy & Environment
- Ian Sibbald, Director of Finance
- John Street, Director of Facilities
- Phil Longhurst, Director of Partnerships & Professor of Environment and Energy Technology
- Gareth Ellis, Head of Energy and Environment
- Christine Thompson, Corporate Planning Director
- Ginny Ford, Environment Advisor
- Ceri Dawson, Energy Advisor
- David Ford, Director of Information Services
- Geoff Say, Director of Finance and Operations CDS
- Stewart Elsmore, Director of Campus Services
- Rosina Watson, Head of Sustainable Business Group & Associate Professor of Sustainability
- Becky Shepherd, Environment Officer
- Louisa Winch, CSA Green Officer
- Abbi Legate, PA to Director of Energy (Committee Secretary)

Further information

For further information, please visit our environmental pages on the University Website:

<https://www.cranfield.ac.uk/about/our-sustainable-university>

or the University Intranet: <https://intranet.cranfield.ac.uk/EnergyEnvironment/Pages/default.aspx>

If you have any questions on any other topics outlined within this report or would like to provide us with any feedback, please contact the Energy and Environment Team at green@cranfield.ac.uk.

Water Management Plan 2023

Executive Summary

This water management plan reviews the current performance against the University target to reduce water consumption and sets out a plan for water management for the current year and up to 2025. The University environmental target for water is to reduce Cranfield University Estate water consumption by 50% by the end of 2030 from a 2010 baseline by floor area.

A number of large steps have been made towards reducing consumption, such as improving our pipe work, resolving leaks, finding alternatives to tap water for irrigation, reducing flows in some urinals and encouraging behaviour change. Unfortunately, our ability to properly quantify our progress is currently hampered by constraints in metering and monitoring.

There are significant opportunities for improving water efficiency and reducing water consumption within the university estate even though the main campus continues to grow. To achieve our target, however, significant financial investment in the installation of a robust metering and monitoring system and water saving technologies is essential. The relationship with third party users of our network and with Anglian Water needs further clarification and an effective leak detection system needs to be established.

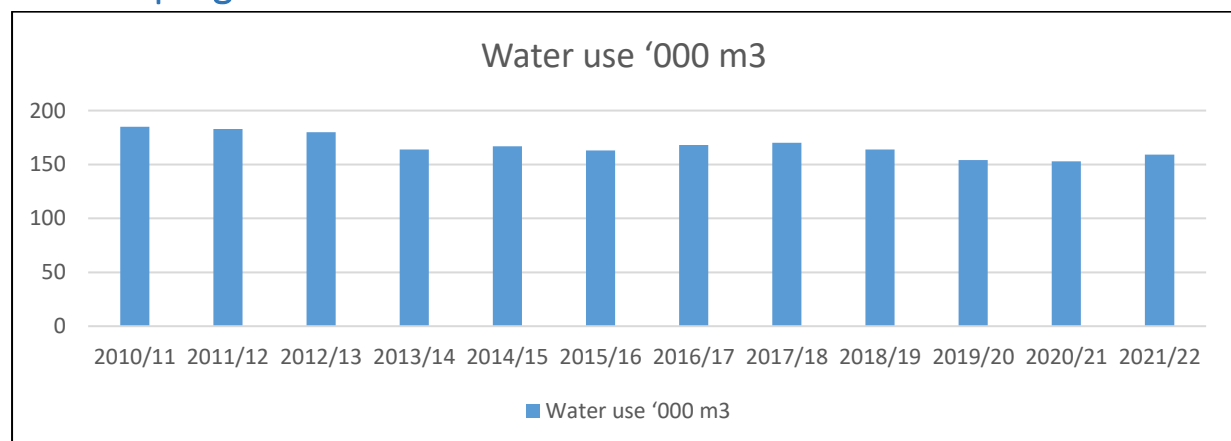
Objectives

1. Encourage better use of water through behaviour change campaigns.
2. Improve efficiency of water usage, reducing wastage.
3. Improve metering, data collection and analysis to provide targeted action.
4. Reduce water leakage.
5. Find alternatives to tap water where appropriate.

Scope

The objective for saving water covers Cranfield University campus and also COTEC. It does not include operations on the Shrivenham campus.

Current progress



Whilst the general trend in consumption is down, there are some concerns about the accuracy of the data. There are issues with the reliability of Anglian Water meters registering the supply to the Cranfield Campus. The consumption figures in the graph above are based on our own internal meters, which have also had issues. So, there is a certain amount of estimation in the most recent numbers which could be as much as a 10% underestimate. There are also outstanding metering issues with tenants and third parties on our network some of which are charged for water use by the University and some by Anglian Water. The accuracy of what can be attributed to the University use of water is affected to a degree.

Work is underway to resolve issues with the main supply meter for the site and to transfer all the Medway Court meters to our account. Medway 2 and Medway 4 have now been transferred to us. Work is also underway to add the new fire station meter to our account. Action has been taken to prevent a local road sweeping company from filling their tanks using our private supply and investigations are underway as to how best to resolve the issues with third parties connected to our network.

Issues and time delays encountered with our service provider press home the importance for us to have a robust metering and monitoring system for our private network. If we are unable to measure how much water is being used on our sites and where, then we are unable to determine if we've met our target, or to monitor the effectiveness of changes we implement. A good monitoring system will also aid in identification of water saving opportunities. Work is currently underway to develop a metering and monitoring strategy and discussions have taken place with some potential service providers.

A large investment was made in 2012/13 in the Cranfield Campus water pipe network. This reduced leaks and had a noticeable impact on consumption of water on the campus. The increase in 2017 coincides with a very hot, dry summer. During this period there was a greater use of irrigation and the pond at Martell House was topped up with mains water on a regular basis.

There have been several consecutive hot summers where irrigation of trees has been necessary, including the relocated orchard and the trees along the northern cycle path. Mains water was used on a regular basis for this, however, in summer 2022, enabling works were undertaken to facilitate the use of collected rainwater from B54 and treated water from the sewerage works. These alternative water sources will be used from 2023 onwards.

In the hot summers of 2020/21 and 2021/22, as an emergency measure, mains cold water was run over air conditioning cooling units on the main Cranfield site, to try and prevent breakdowns and spaces such as the server room in B52 from overheating. A significant quantity of water may have been wasted and potential alternatives need to be explored.

There were several big leaks up at 2 Medway Court in 2022. If we had automatic metering and monitoring in place with trigger limits, the leaks would have been detected much more swiftly. A large leak in the pump room behind B44 knocked out the power to one of our key water meters for several months. This was restored in late January 2023. There were a number of additional leaks in buildings across the campus shortly before Christmas 2022, due to frost damage. Improvements in pipe lagging and loft insulation are being explored.

Trial of prototype “Waterfall” meters in 4 buildings on the tech site between December 2021 and November 2022 has shown that substantial water savings could be made if we employed smart monitoring in our buildings and acted on findings. In B44, which has just one urinal, the Waterfall meter helped us detect and stop unnecessary usage equating to 4.7 m³ / month.

Work is ongoing with Heather Smith in SWEE and a PhD student to pilot shower time indicators. Results so far indicate that behaviour change is challenging with the university’s population dynamics and there should be greater emphasis on implementing physical changes.

Additional metering is being installed on the downstream side of our buffer tanks, so we will be able to better understand usage on site.

A Canvas module has been produced for students and researchers, which includes a section on ways to save water through behaviour change.

Several large halls of residence, including a laundry, and new technical buildings have come on-line since the target was set. These will have had a knock-on impact on site demand for water.



- a) Relocated orchard which required irrigation.
- b) Recent issue with fire hydrant being left open by road sweeper near Medway Court – fortunately, not on our network!
- c) Signage on building cooling systems explaining that water is deliberately being run over them to aid cooling.

Action Plan

Task	Description	Who	When
Water supply	Review option to change supplier	GE/CD	Ongoing
Water supply	Tender for new water supplier	CD/GE	July 2024
Water supply	Repair main incomer to the Cranfield site and restore AMR for this meter	CD	Ongoing
Water supply	Transfer remaining Medway Court meters to our account	CD	Ongoing
Water supply	Transfer new fire station to our account	CD	Ongoing
Water supply	Seek to resolve issues with private connections	CD	Ongoing
Water supply	Update water main plan for Cranfield campus, as this was last done in 2017	CD/BS/PM	Jul 2023
Targeting and monitoring	Review the levels and fill routines in main water tank, when suitable data available. This may help with maximum demand charges	GE	Sep 2023
Targeting and monitoring	Install new water meter for supply to main tank	PM/MR	May 2023
Targeting and monitoring	Develop metering strategy and seek funds to resource implementation	GE/CD	Ongoing
Targeting and monitoring	Review meter numbering and organisation in SystemsLink database	BS/CD	May 2023
Targeting and monitoring	Monitor zonal meters on monthly basis and establish targets for each zone	GE/MB	Ongoing
Targeting and monitoring	Procure new AMR for Zone meters	GE/CD	Jun 2023
Targeting and monitoring	Review requirements for building metering	CD	Jun 2023
Targeting and monitoring	Identify heavy users with the aid of FMs and existing meter records and install additional metering where appropriate	CD	Aug 2023
Targeting and monitoring	Procure AMR for building meters	GE/CD	Sep 2023
Targeting and monitoring	Establish targets for existing meters and buildings where possible	GE	Sep 2023

Targeting and monitoring	Develop plan to introduce AMR to tenant meters	GE/CD	Sep 2023
Targeting and monitoring	Review system for monitoring for leaks and update once AMR available	GE	Jul 2023
Water saving	Develop promotional messages for saving water	BS	May 2023
Water saving	Conduct a survey of existing water saving devices / equipment currently in use on the estate	CD/BS	Ongoing
Water saving	Explore alternatives to mains water for keeping building cooling equipment operational in hot summers	MR/CD	May 2023
Water saving within buildings	Conduct a survey of toilet and bathroom facilities across the estate, with a view to converting to dual flush toilets and potentially, waterless urinals. Also consider fitting of aeration taps.	CD/Facilities Managers/Residential Services	Sep 2023
Water saving within buildings	Develop guidance in CU design guide for use of water saving technologies	CD	Jul 2023
Water saving within buildings	Work with technical teams to identify water saving opportunities in labs	CD	Sep 2024
Water saving - grounds	Develop guidance in CU Design Guide for Future plantings to be more drought resistant and done at the most appropriate time of the year	GE	Jul 2023
Water saving - grounds	Ensure grounds contractors prioritise use of rainwater and treated wastewater for irrigation	GE/KB	May 2023
Water saving - grounds	Identify buildings where meaningful rainwater harvesting can be installed – relatively low cost, close to point of use, easy to access.	GE/KB	May 2024
Water saving - grounds	Investigate rainwater options for Cayley lodge, Conference Hotel gardens and Martell pond	CD/GE/SS	May 2023
Secure funding	Develop list of potential projects with costs and then business case for implementation. Include funding for maintenance	CD	Sep 2023

As part of a long-term water use strategy for the university, it would be good to explore the possibility of aiming for “water neutrality” in new builds on site. i.e any new addition to our footprint would not add to our potable water consumption. If the new build required potable water, this could be off-set by a reduction in other buildings within the estate.

To achieve this ambitious target, benchmarking would be essential, and metering is fundamental to this. The target would also call for even stronger collaborations with our research community and drive innovation and feasibility projects in which our students could be actively involved.


Technologies such as package treatment plants could be explored as a means of facilitating re-use of water within buildings, for toilet flushing and laundry, or for activities outside such as irrigation, window cleaning and bus washing. As houses are re-furbished, we could implement water efficiency measures, including flow restrictors once boilers have been replaced with heat pumps.

Recommendations

1. It is essential that an invest to save fund be established for water saving measures and campaigns.
2. The relationship with other users of our network and with Anglian Water needs further clarification.
3. An effective leak detection system and strategy needs to be established.



Document Control

Document title	Water Management Plan
Document number	CU-SHE-PLAN-05
Version number	1.1
Originator name/document owner	Ceri Dawson – Energy Advisor
Professional Service Unit/Department	Facilities/Energy and Environment Team
Implementation/effective date	March 2023
Date of last review and version number	June 2019 (2019/2020) V1
Date of this version	March 2023
Date of next review	March 2024
Standards reference	
Signature	
Name	Professor Phil Longhurst
Title	Professor of Environment and Energy Technology and Chair of Energy & Environment Committee

Document Review			
Version	Amendment	By	Date
1	Initial draft version of original Water Management Plan	Gareth Ellis and Angus Murchie	June 2019
1.1	New format as Water Management Plan	Ceri Dawson and Gareth Ellis	March 2023

Public Media

Title: Water Management Webpage

Description: Water Management Webpage

Date: 21/10/2024

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Author: Cranfield
University

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Published Date: 31/12/20
23

URL:
• [https://www.cranfield.ac.uk/
our-sustainable-university/
water-management](https://www.cranfield.ac.uk/our-sustainable-university/water-management)



Buildings/real estate

Statement

Title: Annual Environmental Report 2022/2023

Description: Annual Environmental Report 2022/2023

Date: 21/10/2024

Language: British English

Sharing Rights: Public

Relevant Stakeholders:
Cranfield University

Purpose: University



Employee equity, diversity, inclusion



Annual Environmental Report 2022 / 2023

Energy and Environment Committee



Cover picture of group of volunteers who helped to plant Miyawaki Forest (see page 20)
Photo by Earthwatch UK

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Statement

Professor Chris Fogwill, Chair Energy and Environment Committee



Our vision is to be valued globally for tackling the real-world issues of today to deliver a sustainable future. We work in partnership with business, academia, governments, and other organisations to develop and deliver applied research and innovative science, technology, engineering and management.

Here, the Energy and Environment Committee (EEC) reports progress on our environmental targets. This is largely focused on the performance of our estate and facilities. Our academic contribution to sustainability is featured on the University website. Given the University undertakes world leading research and learning on sustainability and the environment it is important that we are reflecting this in our operations. Key performance indicators highlighted below and through the report are correlated with the Times Higher Education Impact Awards criteria giving an indication of the contribution to the UN Sustainable Development Goals (SDGs).

We remain indebted to our staff and students who contribute to our on-going improvements and to our Energy and Environment Team, Energy and Environment Committee and working group members who lead and coordinate our combined efforts. We are grateful for the on-going support of our contractors who help with the efficient running of the estate.

Key performance indicators

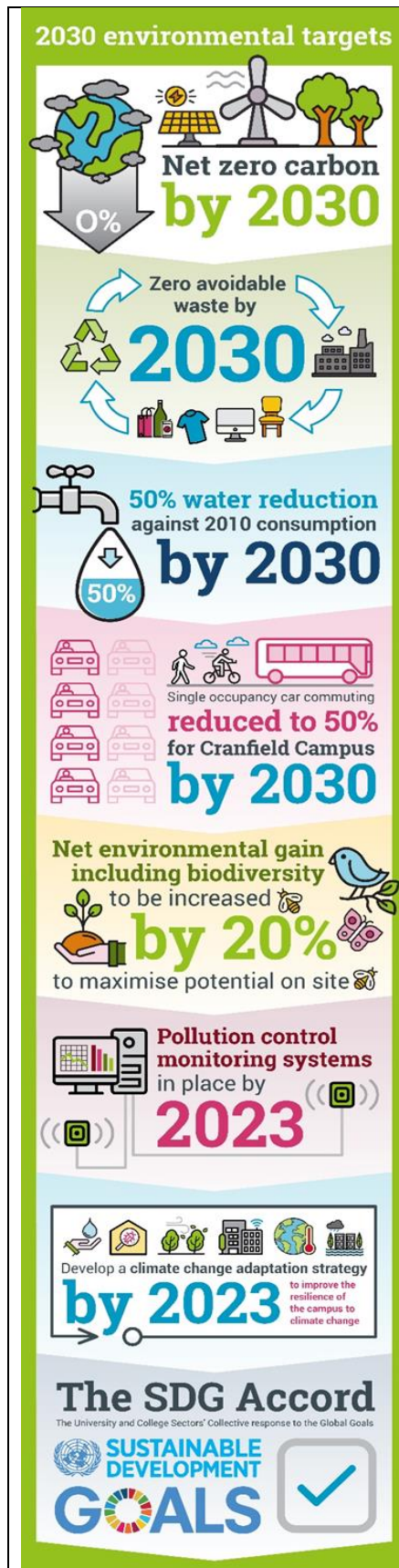
Issue	Description	Latest	Previous	SDG Contribution	Status	Comments
Carbon	Scope 1&2 emissions tCO2	9,532	9,612	THE – SDG* 13.4.1	A	1% reduction year on year
Carbon	Energy efficiency GJ/m2	0.82	0.90	THE - SDG 7.3	G	More efficient use of energy
Carbon	Renewable energy GWh	3,023	3,298	THE - SDG 13.2.3	A	Reduction in biomass output
Waste	Avoidable waste %	18%	18%	THE - SDG 12.2.4	A	Waste which could have been reduced, re-used or recycled
Waste	Total waste tonnes	988	1052	THE - SDG 12.3.2	G	Decrease despite including Conference Hotel for first time
Travel	Commuting alone by car %	38%	35%	THE - SDG 11.4.1	G	Continuing impact of working from home
Water	Water consumption m3/head	34.4	34.4	THE - SDG 6.2.2	R	No progress
Biodiversity	Biodiversity Action Areas ha	9.0	8.6	THE – SDG 15.2.3	G	In addition, 320 trees planted and additional hedging

Above: table shows key performance indicators for our environmental targets and progress, including SDG (Sustainable Development goal) contribution and comments.

* THE-SDG refers to the Times Higher Education Impact Awards Sustainable Development Goals categories.

Note: There are more indicators and objectives highlighted under each section in the report.

Environmental Targets



In 2020 the University Council committed to a new set of environmental targets. The strategy for delivering these targets can be found at:

<https://www.cranfield.ac.uk/about/our-sustainable-university/our-2030-environmental-targets>

The targets are to be achieved by academic year 2030/31. They include All Cranfield University activities including the activities of any subsidiaries including MK:U.

The aim of the Net Zero Carbon target is to reduce Scope 1 and 2 carbon emissions as quickly as possible through energy saving and renewable energy. Any remaining emissions will require other measures. The strategy for Scope 3 emissions is still being developed and these emissions will be included as deemed appropriate for the sector.

The Zero Avoidable Waste target aims to minimise waste ending up in landfill or going for incineration and embraces the application of circular economy principles.

The water reduction target aims to be consistent with best practice and future supply pressures in this part of the UK.

The sustainable commuting target continues to focus on promoting alternatives to the car. Walking, cycling and bus are the main options.

Biodiversity will benefit from the new target ensuring any development on site results in a net environmental gain. The masterplan for the University sets out areas for new buildings and also a wildlife corridor where new habitats can be established.

The application of sensors on campus through the Urban Observatory is helping with the monitoring of air, water and soil. This will be developed in the short term to set out new pollution control monitoring and targets.

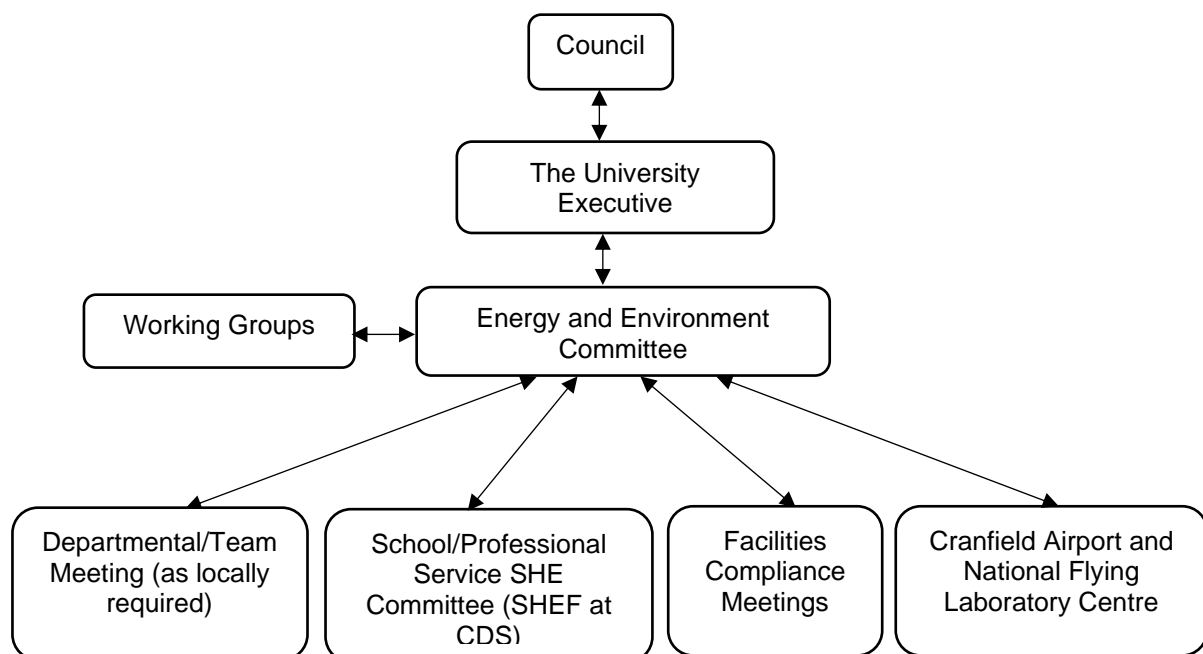
The risks of climate change impacts on the University are being investigated. This will be developed into a climate change strategy.

The University has signed the SDG Accord. This has led to more focus on the SDGs and how the university's contribution can be better communicated and developed.

Quality assurance

Governance

The Energy and Environment Committee (EEC) reports to the Cranfield Executive and Council on energy and environmental management issues. The priority of the Committee is to ensure Cranfield University demonstrates a leading capability in environmental performance by providing oversight and direction. The Committee is a sub-committee of the Executive and consists of senior managers from across the University along with student representation and members of the Energy and Environment Team. The Committee has working groups, with members drawn from operational and academic staff and students, to progress key environmental objectives. A dedicated Energy and Environment team facilitates delivery of the objectives and reports progress towards target to the Committee on a regular basis. The Committee aims to ensure a close relationship between EEC's environmental activities across the University and the teaching, learning and research taking place within the Themes on environmental best practice. The Governance structure is outlined below.



Above: Diagram shows governance structure for the Energy and Environment Committee

ISO 14001:2015

Cranfield University operates a university wide environmental management system. The system provides a framework for managing our environmental impacts, risks, and opportunities, for setting environmental objectives and establishing programmes to achieve them. The scope of the certification covers all University operations including Cranfield Defence and Security at the Shrivenham and COTEC sites.

A successful re-certification audit was carried out by BSI in May 2023. In a climate of continuous improvement, the reporting of all environmental incidents and near misses is encouraged.

ISO 50001:2018

Cranfield University operates a university wide Energy Management System, which provides a framework for managing our energy use. The scope of the certification covers all University operations on the Cranfield campus, Cranfield Defence and Security at the COTEC site and MK:U at Bouverie House. Recertification was achieved in July 2021, with surveillance audits taking place in July 2022 and July 2023.

Scope of reporting

The environmental targets on page 4 encompass activities taking place on the Cranfield Campus, including subsidiary companies and tenants on site (*see Notes section near end of document*). The University's operation at the Cranfield Ordnance Test & Evaluation Centre (COTEC) is included. The University is not directly involved in the management of Shrivenham Campus, so the University activities there do not contribute to the key performance indicators such as carbon emission in this report (*see Notes section near end of document*).

Other reporting

In line with the Higher Education Statistics Association (HESA) requirements, the University submits environmental data as part of the annual estate management reporting statistics. This data attempts to exclude tenant data and differs slightly from the data that appears in this report. Under the new Streamlined Energy and Carbon Reporting (SECR) rules, which replaced the Carbon Reduction Commitment (CRC) Energy Efficiency scheme in 2020, the University reports its annual carbon emissions in the University's annual Finance report. That data includes all primary energy use by the University Group, all imported electricity use and all fuel put into University owned vehicles or private or hire vehicles used for Business Travel.

Data submitted to HESA is also used by the '*People and planet University League*' (a student-led, People and Planet voluntary league table of University environmental performance). In People and Planet's University League, comparisons are made per student or per m² total floor area. Cranfield is a wholly Postgraduate University undertaking industrial scale research. This makes environmental impacts per student or per m² appear high. This annual report focuses on how the environmental performance of the University is improving over time. The University is also participating in the THE (Times Higher Education) Impact Awards. The contribution of the environmental management of the university estate to the SDGs in line with the THE criteria is highlighted in this report.

Base year recalculation policy

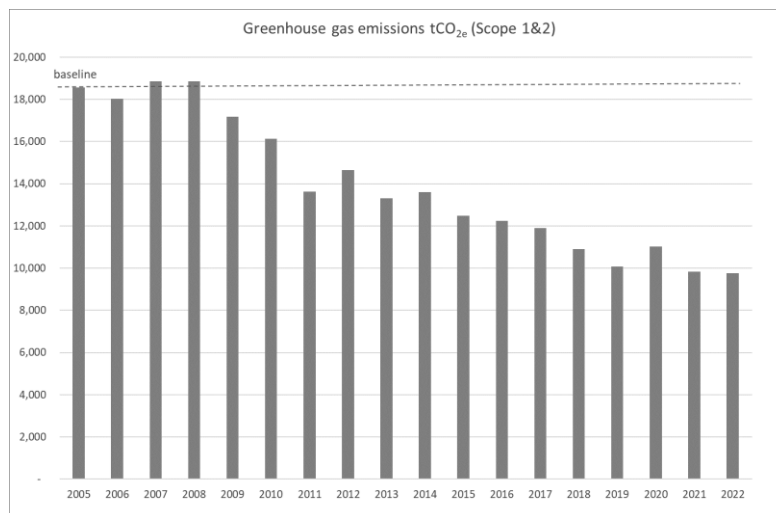
Our base year figures for reporting are reviewed from time to time to ensure like for like reporting. (*see Notes section near end of document*).

Carbon and Energy



Progress

Current Scope 1 and 2 emissions are 9,532 tonnes CO₂. A small reduction compared with the previous year at 9,612 tonnes. Recent investments in renewable energy and energy efficiency infrastructure have yet to take effect. These potentially add up to emissions savings of over 3,000 tonnes of CO₂ and will become apparent over the next two years as the new systems bed in and are optimised. The measures include replacing gas boilers with air source heat pumps, adding buildings to the campus district heating system, improved heating and ventilation controls, insulation, LED lighting, solar photovoltaic installations, and a large battery.



Above: Graph showing the amount of greenhouse gas emissions in tonnes of carbon dioxide equivalent scope 1 and 2, from 2005 to 2022. Graph shows a downwards decrease in emissions with time.

Note: Year 2005 runs from August 2005 to July 2006, etc.

Energy trends and efficiency

Total energy used has decreased for a second year, although the longer-term trend is slightly up. Nevertheless, the overall energy efficiency continues to improve with less energy used per building floor area. Renewable energy generation remains high with the enlargement of the solar farm and increased operation of the biomass boiler. The University does not currently purchase “green” electricity as typically green electricity offered on the UK market does not provide additionality. The University is however exploring Power Purchase Agreements for new renewable energy electricity which does provide new capacity.

	2019/20	2020/21	2021/22	2022/23
Total energy used (kWh)	44,841,986	50,176,963	48,022,909	44,050,024
Renewable energy generated/used (kWh)	2,138,441	2,236,208	3,297,839	3,022,661

Above: table shows total energy used in kWh and renewable energy generated/used in kWh, year on year, from 2019/20 to 2022/23. Renewable energy generated has increased with time.

	2019/20	2020/21	2021/22	2022/23
Total energy used (GJ)	161,431	180,637	172,882	158,580
Floor area (m2)	169,005	185,856	192,495	193,201
Energy efficiency (GJ/m2)	0.96	0.97	0.90	0.82

Above: table shows total energy used in GJ, total floor area in m², and energy efficiency per floor area in m² from 2019/20 to 2022/23 showing an increase in energy efficiency per m² with time.

Scope 3 emissions

The measurement of Scope 3 emissions relies largely on third party data based on spend and there is a lag in obtaining and verifying realistic information. As soon as figures are available this report will be updated.

The University has established a Scope 3 working group to develop our reporting, guided by the Standardised Carbon Emissions Framework (SCEF) established in December 2022 by the Environmental Association for Universities and Colleges (EAUC) the environmental and sustainability champion within Further and Higher Education in the UK and Ireland.

Infrastructure

In early 2022 an £11 Million bid to Public Sector Decarbonisation Scheme secured funding for the insulation of the two large aircraft hangars, further improvements to the district heating with an additional air source heat pump and an additional solar PV array. This has now been largely delivered and complements the district heating project undertaken in 2021/22. The two projects combined are projected to save 3,000 tCO₂.

A further £4 Million bid to Public Sector Decarbonisation Scheme has secured funding for further improvements to the district heating adding a large heat store and extending the network to the residential estate. Detailed planning for this project is underway and installation will proceed in 2024.



Above: photos of hangar 2 (building 84) insulation including cladding and improved hangar doors.



Above: photo of new solar farm installed on disused car park early 2023

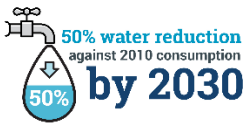
Table of SDG KPIs relating to Carbon & Energy

The SDG indicators below are taken for the Times Higher Education (THE) Awards criteria. The measures are what the university is doing to meet that indicator.

THE reference	Indicator	Measures	Comments
7.2.1	Energy and Efficient Renovation and Building	New buildings are assessed to the BREEAM standard	Key measures are being incorporated into University design guide / standards to address refurbishments / renovations
7.2.2	Plans to upgrade energy efficiency of buildings	These are set out in the annual Energy & Carbon Plan	See on website: https://www.cranfield.ac.uk/about/our-sustainable-university/carbon-and-energy-management
7.2.3	Carbon management and emission reduction process	This is set out in the annual Energy & Carbon Plan	See above
7.2.4	Plan to reduce energy consumption	This is set out in the annual Energy & Carbon Plan	See above
7.2.5	Energy wastage identification	This is set out in the annual Energy & Carbon Plan	See above
7.3.1	Energy use density- Total energy used per floor space	Ratio 0.82GJ/m ²	Energy used 158,580 GJ Floor space 193,201 m ²
13.2.1	Low carbon energy tracking	Solar 1.38 GWh Biomass 1.64 GWh	Renewable energy generated and used on site.
11.4.8	New build standards	New buildings are assessed to the BREEAM standard	
11.4.9	Building on brownfield sites	The University is using brownfield for new buildings	This is set out in the campus Masterplan
13.2.2	Total energy used	42,451,366 kWh	
13.2.3	Total energy used from low carbon sources	3,297,839 kWh	Note "Green Electricity" is not purchased as typically this does not provide additionality
13.3.2	Climate Action Plan	Energy & Carbon Plan on website	Climate adaptation strategy being developed
13.4.1	Commitment to carbon neutral university	Net zero carbon by 2030 target	Includes scope 3, but exact definition being developed
13.4.2	Carbon neutrality date	2030	

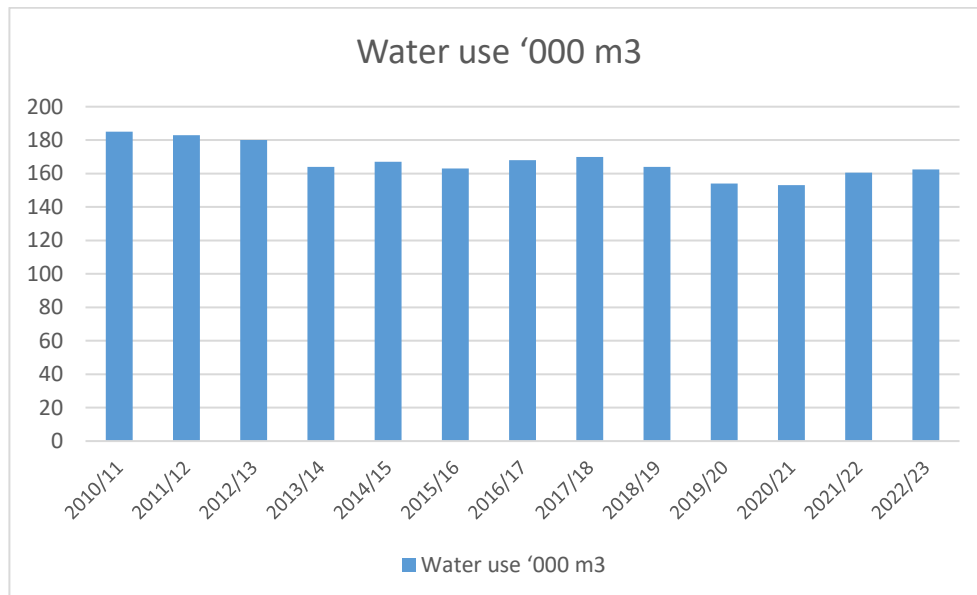
Above: Table of SDG KPIs (key performance indicators) relating to Carbon & Energy reduction

Water



Work has continued to improve water metering and monitoring on the main Cranfield Campus and to encourage the reporting of leaks, so they can be dealt with promptly. Several large leaks were identified on both the technical and residential sides over the last year. Some were linked to frost damage over the Christmas period and others were due to mechanical failures.

A number of urinals were also found to be flushing excessively and timers have been adjusted to reduce the amount of water used. A dedicated section on water saving is included in the Canvas Environmental Awareness Induction, and this has been rolled out to all our students. Water saving tips have also been promoted amongst our staff and student Green Teams. The university has published a Water Management Plan and a Water Management Policy Statement on its website. These give details of the approaches it is taking to reduce potable water use.



Above: graph showing water usage in Cubic Meters from 2010/11 to 2022/23. The total usage has dropped slightly, although not significantly. **Note:** the water consumption figure for 2022/23 is estimated due the failure of the main supply meter.

	2020/21	2021/22	2022/23
Total water used (m3)	153,481	160,580	162,478
Staff & Students (FTE)*	4,241	4,671	4,726
Water use efficiency (m3/staff&student)**	36.2	34.4	34.4

Above: Table shows year on year comparison of water use and efficiency

*Includes Cranfield campus, excludes Shrivvenham. ** Excludes other Cranfield campus residents such as student partners and children and staff residing on site. The number for these in 2022/23 was 245.

Table of SDG KPIs relating to Water

The SDG indicators below are taken for the Times Higher Education (THE) Awards criteria. The measures are what the university is doing to meet that indicator.

THE	Indicator	Measures	Comments
6.2.1	Water consumption tracking	Water consumption reduction is key target;	Does not currently include water used by Cranfield University at Shrivenham as water metering and consumption is not under the University's control.
6.2.2	Water consumption per person	34.4 m3/person	162,478 m3 4,726 persons
6.3.1	Wastewater treatment	Wastewater is treated on site	
6.3.2	Preventing water system pollution	Procedures include Spill Prevention and Response, Discharge to Sinks and Drains:	Controlled through ISO 14001 certified environmental management system
6.3.3	Free drinking water provided	Drinking water fountains and filtered water dispensers	
6.3.4	Water conscious building standards	BREEAM assessment on new buildings Compliance with Building Regulations	University Design Standards being enhanced and developed.
6.3.5	Water conscious planting	Plantings are made at the appropriate time of year to avoid water stress	Guidance on suitable drought tolerant plants for the site is being developed
6.4.1	Water reuse policy	A water management policy has been developed and published	Options for water reuse and recycling are being explored
6.4.2	Water reuse measurement	None	This is still in the pilot stage
6.5.2	Promoting conscious water usage	Water conservation is promoted on campus	A project promoting efficient shower usage. Canvas Environmental Awareness module

Above: Table of SDG (Sustainable Development Goals) KPIs relating to water reduction, measures, and comments

Resources and Waste



The university is committed to putting the principles of the Circular Economy into practice by putting processes in place to:

- prevent materials from becoming waste in the first place
- ensure waste that is created is recycled, composted, or sent for anaerobic digestion and not sent to landfill or incineration*.

*Recyclable, compostable or digestible waste that ends up in the residual waste stream (waste sent for landfill or incineration with or without energy recovery) is defined as AVOIDABLE.

Avoidable Waste

The overarching target is to reach Zero Avoidable Waste by 2030. The starting point is to gather information on the materials ending up in the residual waste stream and use best management practices to apply the waste hierarchy to these materials: prevent, reduce, reuse, and recycle.

The audit of recycling and residual general waste bins around the different functional areas of the campus from residential to technical buildings has not happened this year due to contractor staff availability. However this requirement will be written into the new contract going forward to enable audit, analysis and action to take place in 23-24. Previous audit data has been used to calculate avoidable waste figure for 22-23. Of the 998 tonnes of waste produced, 47% was segregated on site and either reused, recycled, composted or sent for anaerobic digestion. Avoidable waste is 18% of total waste. Tonnages are summarised in the figure on the next page.

Total waste

Total waste produced by the Cranfield campus over 22-23 was less than the previous year.

	2021/22	2022/23
Total waste (tonnes)*	1,052	988**
Staff & Students (FTE)***	4,671	4,726
Waste per staff & student FTE (tonne/person)	0.23	0.21

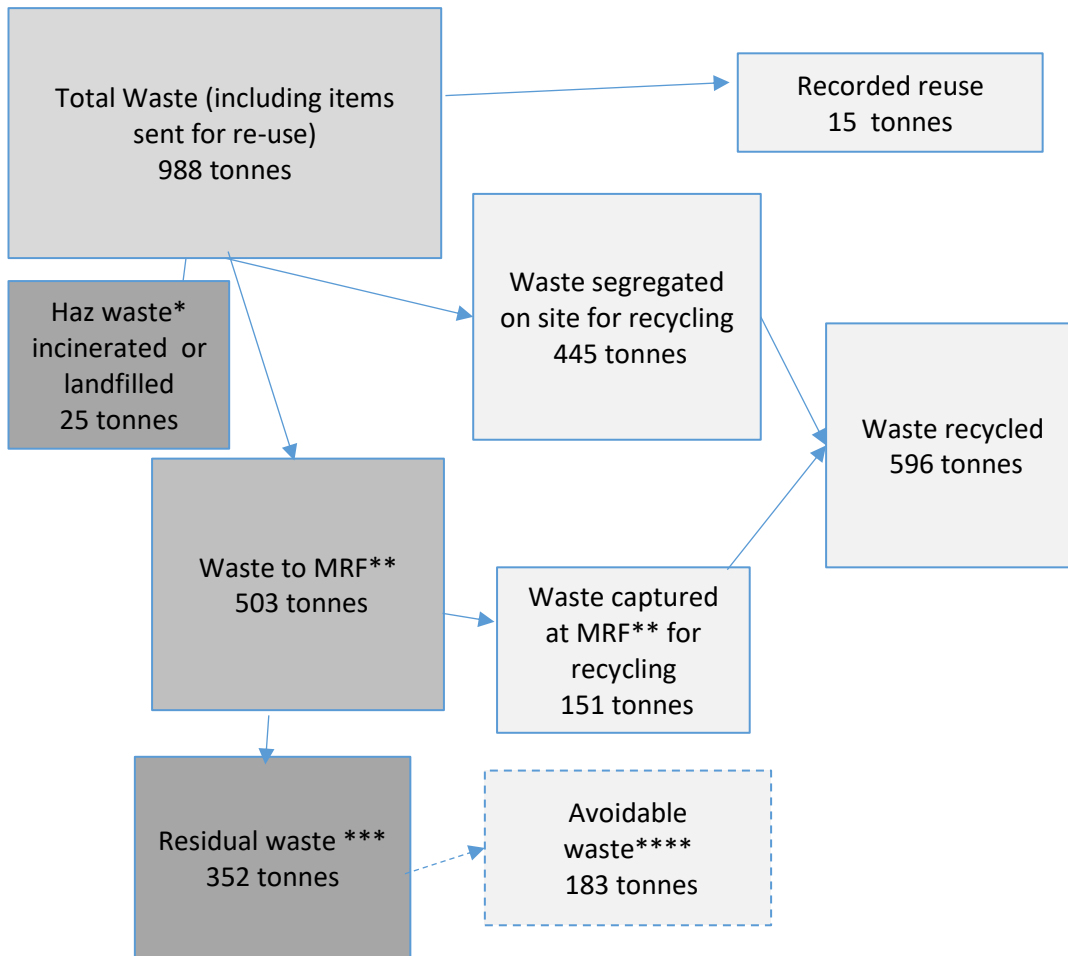
Above: Table showing total waste, number of staff and students, and waste per staff/students for years 2021/22 and 2022/23

*Cranfield campus waste only, not including construction waste from development sites.

**22-23 figures include for the first time tonnages from CCCL (85 tonnes). Future reports may amend previous year data to include CCCL estimate.

*** includes Cranfield and MKU, excludes Shrivenham. Excludes other Cranfield campus residents such as student partners and children and staff residing on site. The number for these in 2022/23 was 245.

Where the waste goes



Above: The diagram shows the breakdown of total waste generated on campus, and how it is managed. 445 tonnes of waste is segregated on site for recycling, and 503 tonnes of waste is sent to Cawley's Materials Recycling Facility (MRF). 183 tonnes of waste disposed of in general waste could have been recycled.

Notes: This data is from tonnage information provided by the University's waste contractor. It does not include construction waste from development sites. The avoidable waste figure is based on 2 audits representing 1% of the total residual waste. In future years further audits will be scheduled to gain confidence in the results.

*Haz waste – hazardous waste which is not recyclable. 5.9 tonnes biomass boiler ash landfilled and the remainder incinerated.

**MRF – Material Recycling Facility.

***Residual waste – waste which is sent for incineration with energy recovery and landfill (0.5 tonnes bulky waste landfilled and the remainder energy recovery).

****Avoidable waste – waste which could have been recycled.

Sustainable food and beverage policy

Developed by Sustainable Food working group the policy has been approved and commits to drive progress with aims such as reducing single use plastics and packaging, and operating catering services in accordance with the waste hierarchy.

Recording and monitoring of pre-consumer food waste from catering outlets

The University's Campus Services has placed reduction targets on food waste in an effort to reduce food being wasted during food preparation and service.

Food wastage (% revenue)

Area	Reduction Target 22/23	Achieved	Reduction Target 23/24
Conference Centre	2.5%	1.92%	1.75%
Mitchell Hall	3.0%	2.79%	2.5%
Cranberries	1.0%	1.27%	1.25%
Overall	2.5%	2.28%	2.0%

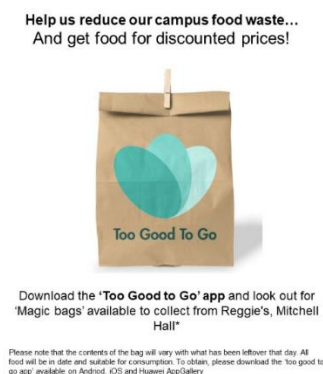
Above: The table shows Campus Service's food waste reduction targets per centre with progress made

Spotlight on disposables

The University's Cranfield Management Development Centre (CMDC) has removed the bottled water from bedrooms, and guests are encouraged to use the tap water which has been certified as potable. This has removed an average of 20,000 bottles from use annually in the CMDC. Mitchell Hall and CMDC operations between them have removed approximately 220,000 disposable cups and 51,000 lids from use in favour of reusable cups.

Note: these figures are based on usage at the height of disposable usage which was adversely affected by the covid pandemic

The student Green Team worked closely with staff to promote the reduction of disposable cup use and the use of 'Too good to go' as a scheme to reduce food waste. Efforts to continue reductions in disposable single use plastics are ongoing, this includes take away cutlery being replaced with stainless steel loan cutlery in catered student rooms.



Reuse of resources

The university's objective to increase the amount of items reused has seen steady progress, made possible by the university's relationship with re-use organisations, Reyooz, Milton Keynes Play Association (MKPA) and Unigreenscheme. These are items such as furniture and equipment which would otherwise have been sent for disposal.

The 22-23 student moveout campaign saw a continued arrangement with the British Heart Foundation's 'Pack for Good' campaign and The NEED Project. The donations provide much needed items for the charity shops and families in need in the local area.



Above: diagram showing total donations and money raised for British Heart Foundation in 2022 following the end of year student moveout. This shows that 5 tonnes of items were diverted from general waste and sent to British Heart Foundation shops for resale.

Procurement of resources

We are working to strengthen our procurement processes to include circular economy principles and sustainability requirements at each procurement stage. One example is our new furniture contract with PRS Office Furniture. They provide a five step approach to sustainable furniture provision: sourcing, fit for purpose, lifespan, delaying end of life through reuse, and recycling.

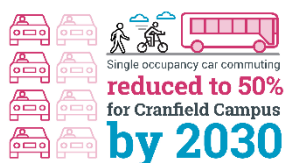
Table of SDG KPIs relating to Resources & Waste

The SDG indicators below are taken for the Times Higher Education (THE) Awards criteria. The measures are what the university is doing to meet that indicator.

THE	Indicator	Measures	Comments
12.2.1	Ethical sourcing policy	Promoting Fair Trade	Sustainable Food and Beverage policy adopted
12.2.3	Hazardous waste disposal policy	Procedures in place handling and disposal of hazardous waste	Hazardous waste procedure adopted
12.2.4	Disposal to Landfill policy	Target to monitor what goes to landfill/incineration and what can be recycled	Waste Code of Practice adopted
12.2.5	Minimisation of plastic	Single use plastics promotion	Waste Code of Practice adopted
12.2.6	Minimisation of disposable items	Single use plastics policy	Waste Code of Practice adopted
12.2.7	Extending disposal policies to supply chain	Currently ask suppliers for their environmental policies	This is being developed and incorporated within procurement processes
12.2.8	Extending minimisation policies to supply chain	Currently ask suppliers for their environmental policies	This is being developed and incorporated within procurement processes
12.3.1	Waste tracking Amount of waste generated and recycled across the university	Waste and recycling figures made available on web site. Whole university / partial coverage	Figures in annual environmental report. Does not currently include Shrivenham site as waste management is not under the control of Cranfield University. Does not include COTEC. Aiming to include COTEC 23/24
12.3.2	Amount of waste generated (tonnes)	tonnes	
12.3.2	Amount of waste recycled	tonnes	This figure includes tonnage sent for energy recovery , which is not included in the figures published on page 13
12.3.2	Amount sent to landfill	tonnes	
12.4.1	Sustainability Report	SDG reporting on web site: https://www.cranfield.ac.uk/sustainable-development-goals . Also report to EAUC for SDG Accord annually.	

Above: Table of SDG (Sustainable Development Goal) KPIs relating to Resources & Waste

Sustainable Commuting



Travel Survey

A travel survey in early 2023 confirms the trend seen in 2021 and the impact of working from home on the commute to Cranfield campus. There is a significant impact on the single occupancy car journeys and to a lesser extent the bus journeys.

Journeys/week	2011/12	2013/14	2015/16	2017/18	2021/22	2022/23
Car alone	70%	58%	59%	59%	35%	38%
Car share	13%	11%	13%	10%	5%	7%
Motorbike	1%	1%	1%	1%	0%	1%
Bus	7%	19%	13%	18%	14%	13%
Cycle	6%	8%	8%	7%	5%	4%
Walk	2%	3%	5%	3%	3%	2%
Other	1%	1%	2%	1%	5%	3%
Working at home *Avoided journeys					34%	29%

Above: Table shows percentages of staff and student travel modes from 2011/12 to 2022/23 according to travel survey data. Note that most staff travel to campus by 'car alone' if not working from home.

Uno Bus

The Uno bus service which connects the University to Bedford and Milton Keynes is subsidised by the university for staff and students to use. It is a public bus service and so the local community also benefit from a much more frequent and comprehensive service than anywhere else in rural Bedfordshire. Despite severe restrictions during the Covid pandemic, the service has bounced back and is busier than ever.

Uno set up a stand for welcome week to promote the bus service and provide the students with travel and ticketing information. Several meetings were held with student representatives throughout the year to answer queries and plan improvements to the service. Engagement with students has been ongoing through social media.

Cycling support and development

The cycle paths to the north and south of campus continue to provide a safer cycling and walking option for staff and students living in Cranfield village. The connectivity with National Cycle Route 51 also provides an option for those prepared to cycle from further afield.

Cycle Saviours continue to provide maintenance 'pop-up workshops' once a month along with the sale of reconditioned bikes. They offer training and employment in the form of an apprentice scheme to those not in school or employment. They salvage old bicycles and what cannot be refurbished is used for repairs or recycled.

In September and October 2022, Cycle Saviours held bicycle sales at Stafford Cripps. All students that attended were advised about road safety for cycling and walking particularly at night. Each student that attended was given a high visibility reflective vest and a leaflet about cycling at the university. Bicycles were also registered on the University cycle registration scheme established to keep track of bicycle owners.



Above: photos of Cycle Saviours carrying out repairs on bicycles and refurbished bicycles for sale

Table of SDG KPIs relating to Sustainable Transport

The SDG indicators below are taken for the Times Higher Education (THE) Awards criteria. The measures are what the university is doing to meet that indicator.

THE	Indicator	Measures	Comments
11.4.1	Sustainable commuting target	Travel plan and surveys; Target reduce single occupancy car commuting to 50% by 2030	Assuming working from home counts as avoided journeys then this target is already met
11.4.2	Sustainable commuting promotion	Support for local bus service, cycling repair workshops, membership of liftshare	The University has a budget which helps to subsidise bus travel and support cycling and car share
11.4.3	Allow remote working	University allows up to three days/week working from home	This has had a big impact on the daily commuting figures
11.4.6	Pedestrian priority on campus	Zebra crossings at all key crossing points	Next year traffic calming being introduced on College Road

Above: Table of SDG (Sustainable Development Goals) KPIs relating to Sustainable Transport

Green Spaces and Biodiversity



The Cranfield campus is a wildlife rich setting, providing opportunities for students, staff and visitors, to enjoy the benefits of experiencing biodiversity. As a landowner and a centre of learning the University has a responsibility to conserve protected species and 'practise what we teach'. Biodiversity will benefit from the new target of 'Net Environmental Gain including biodiversity to increase by 20% to maximise potential on site' by ensuring any development on site results in a positive impact on biodiversity. The masterplan for the University sets out areas for new buildings and also a wildlife corridor where new habitats can be established.

Areas have been targeted for biodiversity actions such as the brook, woodland and several grassland areas. The total biodiversity action area increases year on year with over 9 ha or 10% of the Cranfield Campus seeing some action to increase biodiversity including the expansion of "no mow" areas.



Above: photo of biodiversity flower plot near building 44. This is one of the many wildflower plots on campus.

Sustainability garden

The garden is an area set aside to showcase and develop sustainable gardening practices. Gardening Club, introduced in autumn 2021 has gone from strength to strength this year with active student involvement.



Above: photo of students enjoying the Sustainability Garden

Bee hives

The Grounds contractor Nurture Landscapes continue to maintain bee hives on site. They have held bee awareness days and a honey harvesting event. Honey sales are donated to charity.

Trees

In February 2023, we worked with Forest of Marston vale to plant over 320 trees and 800 hedging whips around Fedden house field as part of the 'Trees for Climate' scheme. Additionally, we worked with Earthwatch Europe to establish a 'Tiny (Miyawaki) Forest' on campus during March 2023. This accounts for over 600 trees and hedges planted into an area the size of a tennis court, and serves as a part of a nationwide and international project to plant trees to mitigate climate change and to improve biodiversity. A further 20 trees were planted on the main site as part of the 'Queens Green Canopy'. Once matured, trees planted should account for an total of 10,504 square meters area covered.



Above (top left clockwise): Photo of trees planed behind Fedden House for the 'trees for Climate scheme', tree planted for 'Queens Canopy' project, students surveying the Tiny (Miyawaki) Forest, and photo of the Tiny Forest after completion.

Table of SDG KPIs relating to green spaces and biodiversity

The SDG indicators below are taken for the Times Higher Education (THE) Awards criteria. The measures are what the university is doing to meet that indicator.

THE	Indicator	Measures	Comments
14.4.1	Water discharge guidelines and standards	The water treatment works has a discharge consent	Pollution monitoring of the main watercourse through campus is being developed
14.4.2	Minimisation of plastic plan	Single use plastics promotion	Waste Code of Practice
14.5.1	Minimising alteration of aquatic ecosystems	The main watercourse through campus is managed to enhance biodiversity as part of grounds maintenance	
14.5.2	Monitoring the health of aquatic ecosystems	Pollution monitoring of the main watercourse through campus is in place	This needs further development
15.2.1	Events about sustainable use of land	Regular biodiversity walks around campus	
15.2.2	Sustainably farmed food on campus	Sustainable Food and Beverage Policy. Vegetable and fruit production in sustainability garden	Garden only for demonstration and community engagement
15.2.3	Maintain and extend current ecosystems biodiversity	Target for 20% net environmental gain including biodiversity for new developments; Biodiversity Action Plan	Biodiversity Action Plan needs updating
15.3.1	Sustainable use, conservation, and restoration of land policy	This is covered in the Biodiversity Action Plan	Biodiversity Action Plan needs updating
15.3.2	Monitoring endangered species	This is covered in the Biodiversity Action Plan	Biodiversity Action Plan needs updating
15.3.3	Local biodiversity included in planning and development	Target for 20% net environmental gain including biodiversity for new developments	
15.3.4	Alien species impact reduction policy	This needs to be included in the Biodiversity Action Plan	Biodiversity Action Plan needs updating
15.4.1	Water discharge guidelines and standards	The water treatment works has a discharge consent	Pollution monitoring of the main watercourse through campus is being developed
15.4.2	Minimisation of plastic policy	Single use plastics promotion	Code of practice being developed
15.4.3	Hazardous waste disposal policy	Procedures in place handling and disposal of hazardous waste	Code of practice being developed

Above: Table of SDG (Sustainable Development Goals) KPIs relating to green spaces and biodiversity

Climate Adaptation



A strategy for Climate Adaptation has been developed and is awaiting University Executive approval.

Pollution Monitoring and Control



Cranfield Urban Observatory, with its campus-wide sensor network, is a key component of the Living Laboratory and facilitates research projects, securing links between the expertise, facilities and overall capabilities of our unique campus. As part of this, air, water, and soil sensors have been deployed across the Cranfield campus with the capability of monitoring a wide range of potential pollutants. Data is used both in teaching and learning and as a mechanism to monitor potential pollution on the Cranfield campus. Further analysis will produce baseline parameters from which we can work from in 23-24.

Community Involvement

2022-2023 was a great year for staff, student and local community engagement. At the start of the academic year, we hosted a popular evening bat walk and set up the Energy Champions network- a keen group of staff and research students who supported us on our mission to save energy on campus. This launched with a workshop session, and was followed up by fortnightly catch-ups. To aid the Energy Champions, a Systemslink online dashboard portal was set up for all to use.

During November, we hosted a variety of events for staff and students as part of our Green Week which included a popular talk on Hydrogen research and Development: H2@CU, a hedgehog themed raffle and cake sale event to raise money for Hedgehog Preservation Society, honey-harvesting taster events, and an off-campus Wildlife Trust conversation volunteering trip. Our enthusiastic Green Team led by Green Officer Louisa Winch, set up the first 'Clothes Swap' shop in the CSA in an effort to curb clothes waste on campus, and give to charity. Jars of honey from the Cranfield campus beehives were sold at the Christmas Fayre to raise money for the Need Project Bedford Food bank and raised over £1000.

The Miyawaki Tiny Forest was planted in February 2023 and is maintained by a group of voluntary tree keepers, who also carry out surveys. Earthwatch UK came back to campus in June to host a community open day. We continued throughout the year to engage staff and students in wildlife walks, litter picks, bee keeping experience events and Gardening Club, based within the expanding Sustainability Gardens. This year, a welcome addition to the

gardens was a bug house with an engraved plaque thanking the student Energy Champions based in Lanchester and Mitchell Hall for their efforts.

For the first time, the student Green Team organised a trip to the Grand Union canal in Cosgrove, Milton Keynes, to support Buckingham Canal Society with footpath clearance and painting as part of a wider project to restore the canal for people and wildlife. To top-up a successful year of engagement, our Green Officer Louisa Winch became a finalist for 'Student Sustainability Champion of the year' Green Gown Award. Overall, just under 1000 people were actively engaged throughout the year, and we saw many more hits via social media.

Total event engagement: 945 staff and students

Top events:

- Green Week 2022
- Tree planting (Fedden field, Tiny Forest)
- Clothes Swap Shop
- Bee keeping experience



Above: Students engaged in running a clothes swap shop at the CSA, and a raffle for 'Hedgehog Preservation Society' during Green Week 2022

Communications

There have been regular communications through social media and on the intranet. The following tables show the level of engagement:

Intranet	Hits
Average Intranet hits per month:	461

Social media followers	Followers
Instagram	862
Facebook	472
X	891

Top social media posts	Description	Hits
X	Snow picture of campus	2944
Facebook	Too good to go scheme launch	747
Instagram	'Too good to go' reel	2767

Above: Tables showing summary of staff and student engagement on the intranet and via social media.

Notes

1. **Dates:** Baseline and target years refers to the financial/academic year August to July (for example, for the Carbon target, the baseline year for carbon reporting is financial year 2005/2006 and the net zero target is to be achieved in academic year 2030/2031).
2. **Scope:** Tenants are included where it is not possible to distinguish between what is and is not a direct impact to the University as opposed to an impact of others operating on site. Examples include waste, car travel, some aspects of energy and water consumption and sewage discharges. As measurements and monitoring on site improve, this may become easier to distinguish. Additionally, the University is providing utility and other services to tenants and is in a position as landlord and service provider to influence their behaviour and assist in the reduction of their environmental impacts, whilst at the same time having an interest in minimising the risks to the University. The converse applies to the University's presence at Shrivenham. Here the University occupies space on a MOD site. For many of the targets it is not possible or appropriate to include this space as there is no operational control by the University (it is managed by MOD) and no data.
3. **Base Year Recalculation Policy:** Cranfield University will ensure that its greenhouse gas reporting is up to date, accurate and consistent with current Government guidance. In particular, when there are structural changes that have a significant effect on the baseline and the reported progress towards targets, the baseline and, if necessary, data for years in between will be recalculated.
Base year recalculation: It is important that progress is measured on a like for like basis. This means that any changes in calculation methodologies are applied to the previous figures as well as current figures.
Structural changes may include: mergers, acquisitions, and divestments; outsourcing and insourcing of relevant activities; changes in calculation methods or improvements in the accuracy of factors, such as emission, factors, or activity data that result in a significant impact on the base year figures; discovery of significant errors, or a number of cumulative errors that is collectively significant. The recalculation will be triggered and reported if the structural changes would result in a change of greater than 2% in the total baseline figure. At the same time any errors in the current year reporting greater than 2% will be amended and relevant reports updated, or notes attached explaining amendments.
4. **Changes to data:** Our carbon footprint is recalculated each year for all years in order to account for errors, changes to the scope and material changes to the conversion factors provided by DEFRA for company reporting purposes. They may not therefore compare directly with previous figures reported in the University Financial Statement. See also our baseline recalculation policy above. Note the figures exclude emissions for tenants on Cranfield Campus, Silsoe Campus, COTEC where these can be separately identified. University subsidiary companies are included. The same principle will apply to data for other targets.
5. **Water consumption and discharges figures:** These are for Cranfield Campus, including tenants. COTEC is included. Shrivenham data is not included. Discharges are taken as the average of the three consent targets.
6. **Waste figures:** These are for Cranfield Campus and include some, if not all, tenant waste. Note the key performance indicator for recycling is waste segregated on site. However, the waste contractor further segregates waste at their depot. This elevates the overall recycling performance, and it is this figure, which is reported in the HESA Estates Management Reporting.
7. **Academic expertise:** Wherever possible, the University is making use of its academic expertise and facilities to enhance its response to environmental improvement. The estate is also offering opportunities for research and teaching. Examples of this include audits carried out by students and the University laboratories to analyse local discharges. The new CHP unit is regularly used as a real life demonstration for teaching.
8. **Name:** The Energy and Environment Committee was previously known as the Committee for Energy and Environment (BEE).

Glossary

AIRC Aerospace Integration Research Centre; EEC Energy and Environment Committee; BOD Biochemical Oxygen Demand; BREEAM Building Research Establishment Environment Assessment Method; CHP Combined Heat and Power; COTEC Cranfield Ordnance Test and Evaluation Centre; CRC Carbon Reduction Commitment; DEFRA Department for Environmental Food, and Rural Affairs; EA Environment Agency; EAUC the Environmental Association for Universities and Colleges; GIS Geographical Information System; HESA Higher Education Statistics Agency; IMEC Intelligent Mobility Engineering Centre; LED Light Emitting Diode; MOD Ministry of Defence; OU Open University; PV Photovoltaic; SECR Streamlined Energy & Carbon Reporting, SHE Safety Health and Environment; SHEF Safety Health Environment and Fire; SUDS Sustainable Urban Drainage System.

Energy and Environment Committee

Members in 2022-3:

- Chair, Professor Chris Fogwill, Pro-Vice-Chancellor – School of Water, Energy & Environment
- Ian Sibbald, Director of Finance
- John Street, Director of Facilities
- Phil Longhurst, Director of Partnerships & Professor of Environment and Energy Technology
- Gareth Ellis, Head of Energy and Environment
- Christine Thompson, Corporate Planning Director
- Ginny Ford, Environment Advisor
- Ceri Dawson, Energy Advisor
- David Ford, Director of Information Services
- Geoff Say, Director of Finance and Operations CDS
- Stewart Elsmore, Director of Campus Services
- Rosina Watson, Head of Sustainable Business Group & Associate Professor of Sustainability
- Becky Shepherd, Environment Officer
- Louisa Winch, CSA Green Officer
- Abbi Legate, PA to Director of Energy (Committee Secretary)

Further information

For further information, please visit our environmental pages on the University Website:

<https://www.cranfield.ac.uk/about/our-sustainable-university>

or the University Intranet: <https://intranet.cranfield.ac.uk/EnergyEnvironment/Pages/default.aspx>

If you have any questions on any other topics outlined within this report or would like to provide us with any feedback, please contact the Energy and Environment Team at green@cranfield.ac.uk.

Statement

Title: Equity, Diversity and Inclusion Report 2022/2023

Description: Equity, Diversity and Inclusion Report 2022/2023

Date: 21/10/2024

Language: British English

Sharing Rights: Public

Relevant Stakeholders:
Cranfield University

Purpose: University



Equity, Diversity and Inclusion Annual Report

August 2022 – July 2023

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Introduction

This Equity, Diversity and Inclusion (EDI) report provides an account of our staff data and actions for the period August 2022 - July 2023. It has been written in line with our statutory reporting to the Higher Education Statistics Agency (HESA) and to demonstrate compliance with the Public Sector Equality Duty and Equality Act (2010). This report also offers the opportunity to highlight Cranfield's ongoing progress and successes in EDI while acknowledging the challenges we continue to face.

This report covers the period 2022-2023. During this time, we [published our new EDI strategy - Making Change Happen, together with a video bringing it to life](#). As well as summarising our progress against our previous EDI strategy, we set four new strategic ambitions. By 2027 our ambitions are to be:

1. A diverse organisation that is more representative of our local and global communities and partners than we were in 2022.
2. An inclusive organisation where all our staff and students have a voice and feel safe (physically and psychologically) and respected, and where everyone can fulfil their own potential.
3. An organisation where EDI is strongly integrated across all our activities and everyone feels confident when talking about EDI matters.
4. An organisation that continues to take decisions and actions which are informed by our data.

This report for the period 2022-2023 therefore spans across our previous and our current strategies.

Our commitment to equity, diversity and building an inclusive culture is interwoven throughout our corporate plan, [Ambition 2027](#). The corporate plan was also launched during the reporting period and is supported by a number of enabling strategies and areas of focus, including "Applied Research Powerhouse", "Distinctive Cranfield Learner" and "Employer of Choice". All these elements reflect our EDI aspirations.

Overview 2022-2023

We regularly analyse our EDI data, not only to meet our statutory obligations, but to assist us with understanding our staff demographics. By understanding our staff data, we can tailor actions that, in turn, support our goal of being an Employer of Choice, in line with Ambition 2027.

In summary, over the period we have made positive progress against our four new EDI strategic ambitions (outlined above). The data in this report are presented in line with statutory requirements, by individual protected characteristics. We do also acknowledge that there are complexities and barriers experienced by people with intersecting identities in our workplace which will require further analysis.

The charts and tables provide a detailed account of our data. Some of our positive actions and successes during this period are summarised now.

Highlights

Gender

- Introduced a sector-leading enhanced maternity leave policy offering 22 weeks of paid leave at full pay.
- For the second year running we were recognised in the Top 30 Employers in the UK by the charity Working Families, reflecting our innovative, flexible and family-friendly policies and practices that support parents and carers.
- Our gender pay gap continues to reduce. In the relevant period, our mean pay gap reduced from 22.2% to 21.0% and our median from 18.7% to 18.4%. While this progress is positive, we recognise the need for ongoing improvement. For details, please refer to the [published report on our website](#).

Ethnicity

- Reported our ethnicity pay gap for the first time. While this is not currently a statutory requirement, it signals our commitment and provides a benchmark for us to make continued improvements. For details, please refer to the [published report on our website](#).
- Celebrated Black History Month by inviting Nels Abbey, a writer, media executive and corporate leadership & diversity consultant to join us and run a workshop.
- In January 2023, Cranfield's executive leadership team signed individual pledges supporting race equality as part of [Race Equality Matter's Big Promise](#).

Disability

- Members of our community who chose to share a disability, condition or impairment increased during the reporting period. Sharing rates have improved and at 7% are in line with the sector benchmark.
- Organised a series of events, blogs and speakers for Neurodiversity Celebration week in March 2023, and established a Neurodiversity working group.
- Launched a Digital Accessibility YouTube playlist with video guides to help staff and students produce accessible documents and presentations.

Sexual orientation

- Developed a new Sexual Orientation report on our EDI data dashboard, which helped to achieve an increase in the percentage of people who chose to share their LGBTQ+ status from 2% to 3%.

- Celebrated LGBTQ+ History Month by sharing information about Cranfield's LGBTQ+ community and what we can all do to promote an inclusive culture.
- During Pride 2023, our community members shared how they would be celebrating throughout the month, and their experiences of inclusivity at Cranfield.

Intersectionality

To support our communities and EDI agenda more broadly, recognising the intersectional challenges we face, we have taken additional actions, some of which are highlighted below:

- established a new University Executive Forum with a broader, more diverse membership to support the Chief Executive and Vice Chancellor and the Executive Team in the operation of the University, in particular the delivery of the corporate plan. The first forum included a session on inclusive, candidate centric recruitment practices;
- established a men's mental health community and support network as a forum to provide a space for male colleagues to open up, share their experiences and show they're not alone;
- ran Inclusive Leadership Development and Conscious Decision-making workshops which were well attended and positively received; and
- launched a [new report + support tool](#) which makes it easier for staff and students to seek support and report behaviours such as bullying, harassment and discrimination which are not acceptable and have no place at Cranfield.

Recruitment

Attraction, recruitment and selection continued to be a focus, and many initiatives were implemented in the year to enhance the candidate experience, and improve our practices, including:

- collaborated with local recruitment providers and attended careers fairs in our region to help us attract and recruit more diverse talent from our local community;
- launched a new in-house workshop, "The Art of Successful Recruitment" which has been well attended and positively received; and
- enhanced the inclusivity of our recruitment practices which included:
 - reviewing the "essential" criteria for a role to ensure we are not causing people to self-select out of applying;
 - promoting job opportunities through video content shared on social media;
 - writing our adverts in an engaging, candidate focused way, in plain, gender-neutral language; and
 - using assessments to evaluate candidates, not just relying on a single interview.

Student engagement

Throughout this period, we have been working more closely with our student community. This includes delivering a variety of EDI workshops and sessions to students, collaborating with the [Student Wellbeing and Disability Support team](#) to support students with their needs, and engaging with the Cranfield Students Association and [Cranfield Careers and Employability Service](#).

New Senior Academic Promotions Process

In 2022, we launched a new Senior Academic Promotions Process, after a comprehensive review. This involved consultation with colleagues and trade unions, and significant research into sector best practice to inform our new process. One of the key principles guiding this review was to ensure an inclusive process, where decision makers are aware of, and mitigate bias, and outcomes are subject to independent review.

The positive impact of our new process is reflected in the demographics data and analysis section of this report, and we hope to see further improvements in our data in the next reporting period.

We conducted an equality impact assessment (EIA) on the promotion candidates and their success rates which is summarised in Table 1. Please note, the number of candidates who chose to share if they are disabled or their sexual orientation was too low to be able to conduct analysis. Contract hours were evaluated, distinguishing between full time and part time staff. The EIA revealed that a higher proportion of staff working full-time hours were considered for promotion compared to those working part-time. This insight will inform our approach to the 2023-2024 promotions round.

Characteristic	% of eligible candidates considered	% Successful
Female	21%	79%
Male	15%	72%
White	17%	77%
Minority ethnic	19%	68%
Full time	19%	75%
Part time	2%	0%

Table 1 EIA - Senior Academic Promotions

Research Acceleration Fellowship

We introduced a Research Acceleration Fellowship to provide funding for additional time in support of personal research and research career development from January 2023-July 2023. We actively encouraged applications from researchers belonging to minoritised or underrepresented groups. We conducted an EIA of the applications and awarded fellowships, the results of which were:

- 27% of applicants were female, and 40% of the fellowships were awarded to women;
- 6% of applicants shared they are disabled, and 10% of fellowships were awarded to people who shared they are disabled;
- 6% of applicants shared their sexual orientation as being LGBTQ+ and 7% of fellowships were awarded to LGBTQ+ applicants; and
- 62% of applicants were from Black, Asian or minoritised ethnic groups and 42% of fellowships were awarded to Black, Asian and minoritised ethnic people.

The relatively small applicant numbers did not allow more detailed analysis to be conducted into individual characteristics, or intersecting identities.

Positive pulse survey results

We regularly carry out pulse surveys to ask our staff how they feel about working at Cranfield. This includes questions about Cranfield's progress on EDI and how they perceive Cranfield as an "employer of choice".

The survey results from January 2023 showed:

- 84% of staff agree they are proud to work at Cranfield from a baseline of 82% in 2022;
- 77% of staff agree they feel part of a supportive community from a baseline of 71% in 2022; and
- 63% of staff agree we are making progress on our EDI agenda from a baseline of 55% in 2022.

Staff networks

Our staff networks continue to gain momentum and have created active calendars of meetings and events. We have established a new parent and carers staff network, and are members of [Employers for Carers UK](#). We established a forum specifically to bring together our network chairs and to provide support in their roles and encourage intersectional sharing of perspectives and ideas. Our networks are supporting cultural change at Cranfield through fostering a wider understanding of the EDI agenda.

Data Analysis

In this section we provide a snapshot of our staff demographic data in a series of tables and charts, with brief commentary to help interpret the data.

Staff gender profile

When looking at the gender balance across the University, this is stable compared with the previous years – women now make up 48% of all University staff, a small increase from 47% last year.

The proportion of female staff increased within all schools and professional services units (PSUs), with the exception of the School of Aerospace Transport and Manufacturing (SATM) which remained the same as shown in Figure 1 below. It should be noted that while the percentage of female staff within SATM remained static, the actual number of female staff has increased.

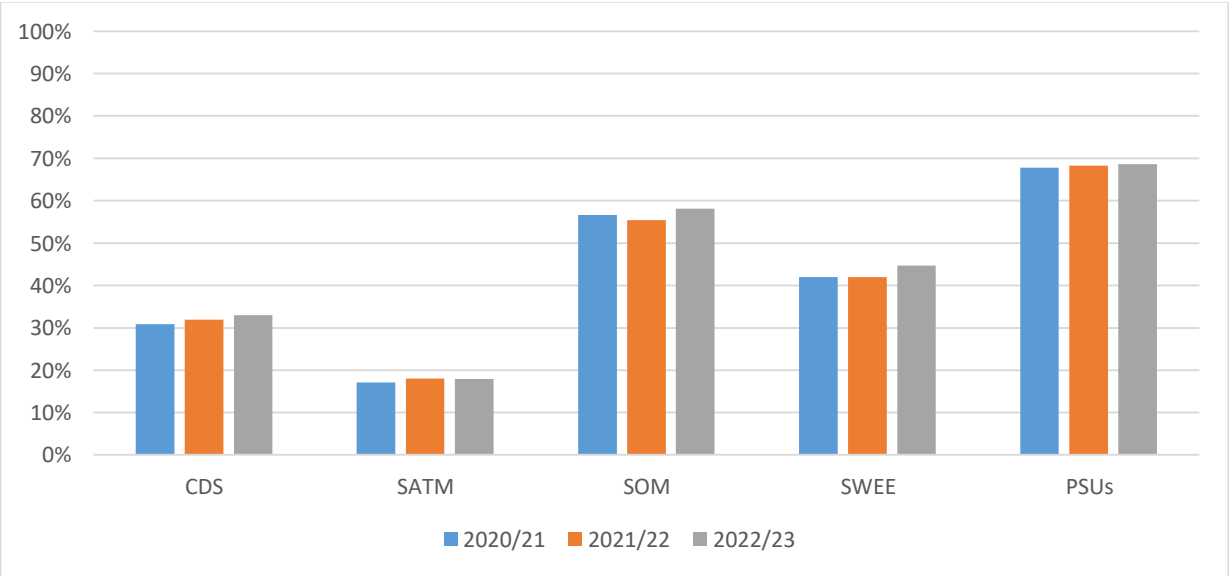


Figure 1 Female staff by School/Professional Support Units (PSUs)

As shown in Figure 2, when looking at gender representation by job family, it is pleasing to see the number of female academics has risen steadily over last three years, from 84 in 2021 to 103 in 2023. The number of female professors has also increased by three since last year.

We have seen a small rise in the number and percentage of female technicians compared to last year, another positive result.

Women continue to be the majority in business services roles. The apparent fall in the percentage of women within the operational job family this year is as a result of an increase in men in this job family, rather than a fall in the number of women employed in these roles.

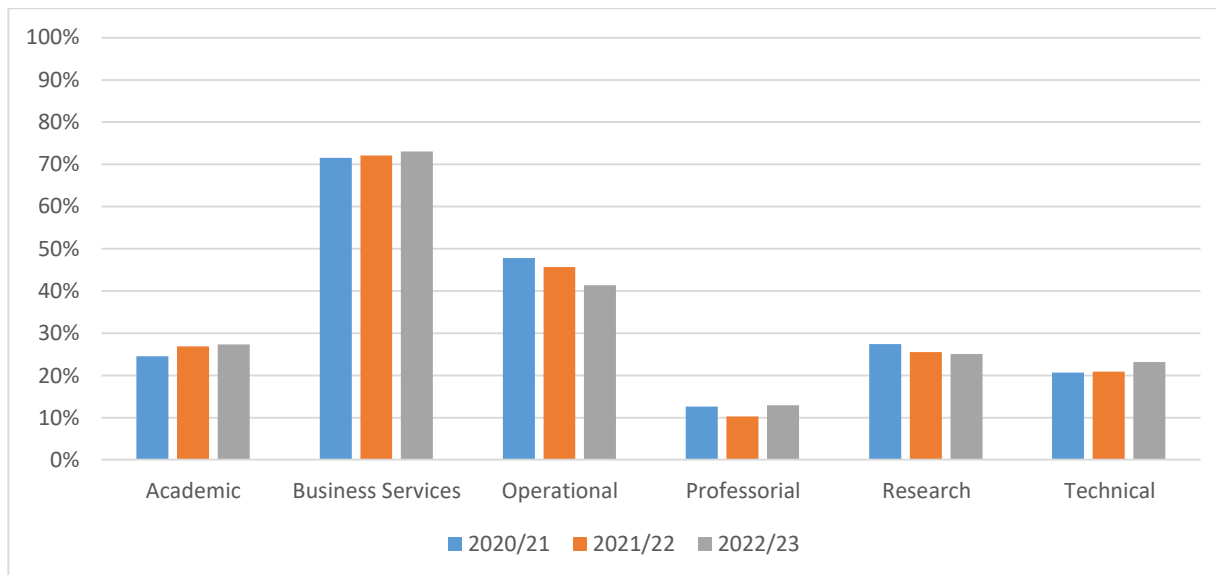


Figure 2 Female staff by job family

Gender representation on senior committees of the University

We improved representation on University senior committees in the reporting period, shown in Table 2. In 2023, the University established a new University Executive Forum with a broader, more diverse membership, replacing the previous Senior Management Team structure. Representation on Senate has also improved based on the previous reporting year, now with 20% female representation (Senate has authority delegated by Council to oversee the academic work of the University, assure academic quality and standards and regulate student affairs. Membership is predominantly made up of the Cranfield's professoriate).

Committee	2022 - 2023		2021- 2022	
	% Female	% Male	% Female	% Male
Council	53	47	50	50
University Executive	31	69	31	69
University Executive Forum*	43	57	28	72
Senate	20	80	13	87
* Created in 2023. Previous to this we had a Senior Management Team in place.				

Table 2 Gender representation on senior committees of the University

Staff ethnicity profile

Our staff nationality and ethnicity data for the period are shown in the tables and figures below. When looking at the ethnicity of our staff in Table 3, staff from a minority ethnic background represent 22% of all University staff, a rise of 3% from last year. This is explained by a

significant increase in the number of non-UK minority ethnic and an increase in UK minority ethnic staff. This increase in UK minority ethnic staff is very positive, as we continue to seek to become more representative of our local demographic*.

Frustratingly, we experienced a significant increase in the number of “undisclosed” ethnicity data amongst our staff. This is a direct result of changes to the ethnicity categories made by HESA which required staff to re-share their personal data with us. Significant efforts are being made to encourage re-sharing of this information.

*UK Census 2021 ethnic minority people: Milton Keynes – 28%, Bedford 24%, Shrivenham 9%, Swindon 18%.

	2020/21		2021/22		2022/23	
	Count	%	Count	%	Count	%
Non-UK Minority Ethnic	188	11%	197	12%	244	14%
Non-UK White	228	14%	231	14%	61	3%
UK - Minority Ethnic	118	7%	116	7%	136	8%
UK - White	1049	64%	1053	64%	434	25%
Undisclosed*	58	4%	56	3%	894	51%
University	1641	100%	1653	100%	1769	100%

Table 3 Staff nationality and ethnicity

There has been little change from last year in the specific ethnicities of UK minority ethnic staff. The changes to HESA categories for general ethnicity mean a direct comparison year on year is not made, but the current ethnicities are shown in Table 4.

Ethnicity	Count	%
Asian - Indian or Indian British	34	25%
Any other Asian background	16	12%
Asian - Chinese or Chinese British	15	11%
Asian - Pakistani or Pakistani British	13	10%
Any other ethnic background	12	9%
Black - African or African British	11	8%
Black - Caribbean or Caribbean British	9	7%
Mixed - White or White British and Asian or Asian British	7	5%
Any other Mixed or Multiple ethnic background	5	4%

Mixed - White or White British and Black Caribbean or Black Caribbean British	5	4%
Asian - Bangladeshi or Bangladeshi British	5	4%
Arab	3	2%
Mixed - White or White British and Black African or Black African British	1	1%

Table 4 UK ethnicity

Figures 3 and 4 show the ethnicity of our staff by school/PSU and by job family. These figures highlight the high percentage of 'Undisclosed' ethnicity that has resulted from recent changes to the ethnicity categories made by HESA which required us to seek the information anew from staff. Efforts are being made to encourage re-sharing of this information by all our staff.

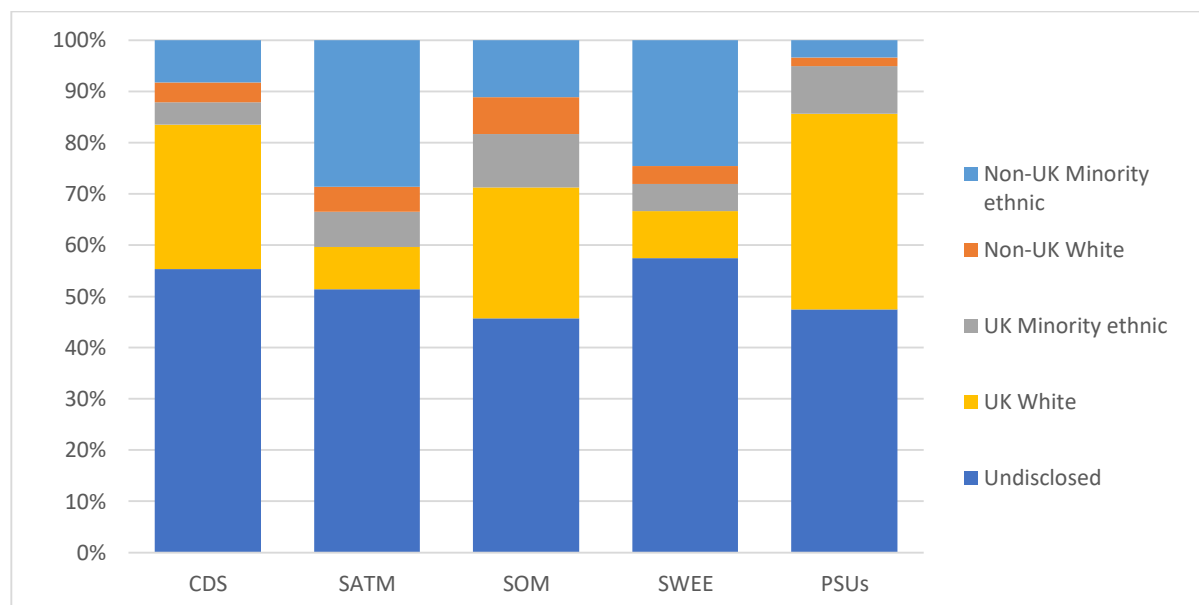


Figure 3 Ethnicity by School/PSUs

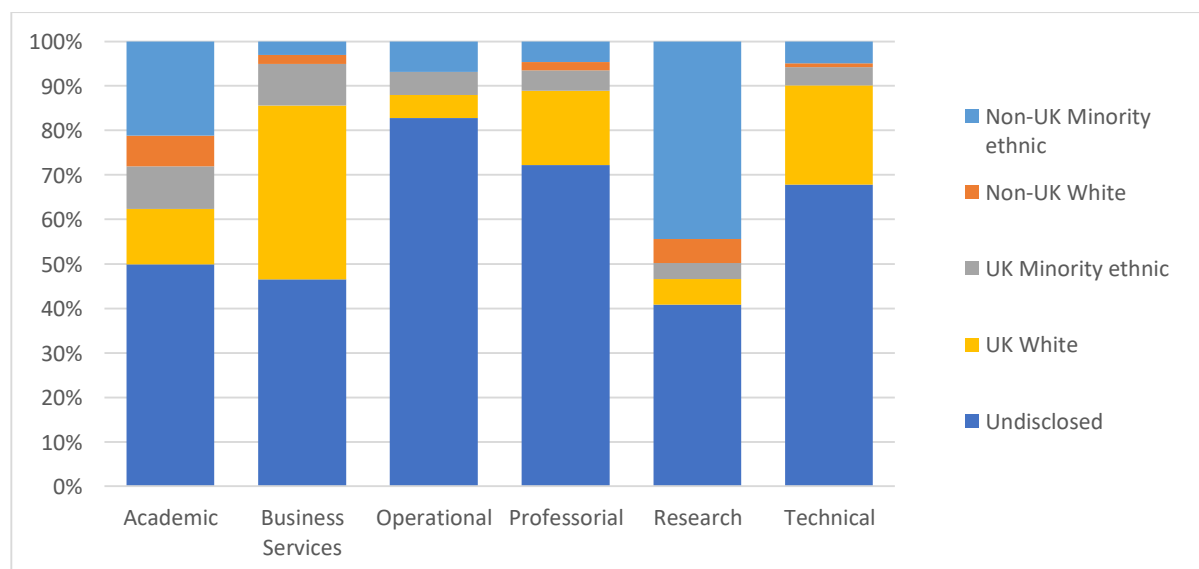


Figure 4 Ethnicity by job family

Staff disability profile

When analysing the staff disability data, we are very pleased that the percentage of staff sharing a disability, condition or impairment has increased from 5% to 7%, as shown in Table 5.

	2020/21		2021/22		2022/23	
	Count	%	Count	%	Count	%
No shared disability	1545	94%	1552	94%	1593	90%
Disability shared	71	4%	78	5%	126	7%
Undisclosed	25	2%	23	1%	50	3%

Table 5 Staff sharing a disability, condition or impairment

A further positive this year is a new option to share details of more than one disability, condition or impairment, making our data more inclusive and relevant. This is shown in Table 6.

The increase in sharing rates is particularly notable in the following areas:

- increase in long-term conditions, was 12 last year, now 30;
- increase in sharing of learning differences, was 14, now 25;
- increase in sharing mental health conditions, was 14, now 22; and
- increase in sharing hearing difficulties, was 4 now 12.

Disability, condition or impairment	Count	%
Long-term illness or health condition such as cancer, HIV, diabetes, chronic heart disease, or epilepsy	30	24%
Learning difference such as dyslexia, dyspraxia or AD(H)D	25	20%
Mental health condition, challenge or disorder, such as depression, schizophrenia or anxiety	22	17%
An impairment, health condition or learning difference not listed above	20	16%
D/deaf or have a hearing impairment	12	10%
Physical impairment (a condition that substantially limits one or more basic physical activities such as walking, climbing stairs, lifting or carrying)	11	9%
Two or more impairments and/or disabling medical conditions	3	2%

Social/communication conditions such as a speech and language impairment or an autistic spectrum condition	2	2%
Blind or have a visual impairment uncorrected by glasses	1	1%

Table 6 Disability, condition or impairment

Staff sexual orientation profile

The number of staff sharing their LGBTQ+ sexual orientation with us has increased, but remains relatively small as a percentage of our total staff. However, we are pleased to report a 36% increase in the number of people sharing they are LGBTQ+ during the six-month period after first publishing these numbers in a new data dashboard. This is a reflection of the work of our staff network, Q at Cranfield. This is shown Table 7.

	Count	%
Heterosexual	1331	75%
LGBTQ+	57	3%
Undisclosed	381	22%
University	1769	100%

Table 7 Sexual orientation

Staff age profile

There has been little change in the age profile of our staff compared with last year, as shown in Figure 5. We have seen a slight increase in the proportion of University staff under the age of 30. The percentage of staff over the age of 60 in our professorial and operational job families, shown in Table 8, is significant for our succession planning.

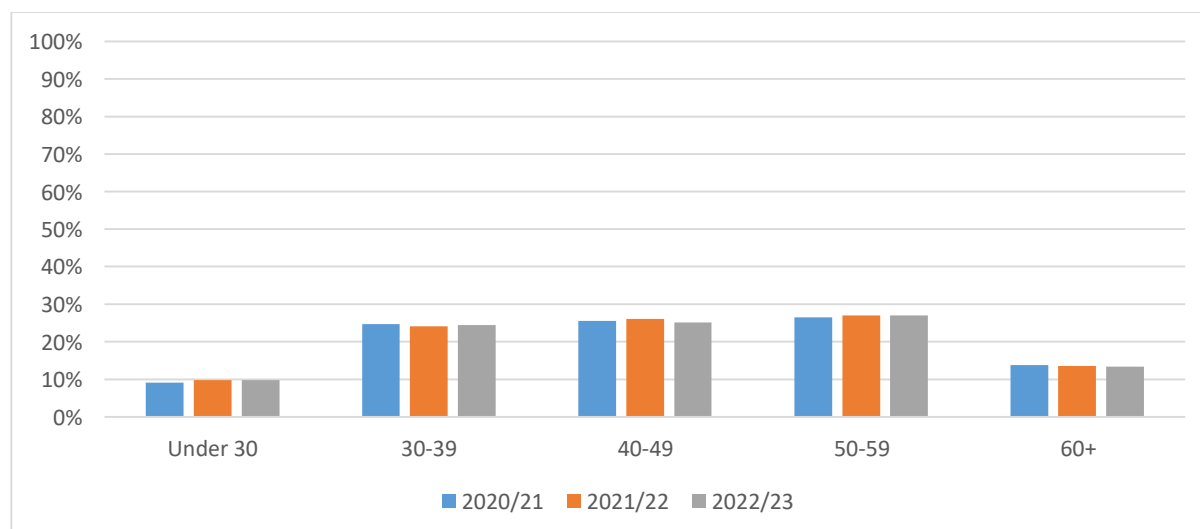


Figure 5 Age profile

	% age within job family						
	Academic	Business Services	Operational	Professorial	Research	Technical	University
< 30	1%	9%	10%	0%	23%	26%	10%
30-39	27%	21%	9%	1%	48%	16%	24%
40-49	35%	26%	22%	22%	17%	15%	25%
50-59	26%	33%	31%	38%	8%	24%	27%
60+	12%	12%	28%	39%	4%	19%	13%

Table 8 Staff age by job family

Staff recruitment data

The data presented in this section are summary results from analysing recruitment activity for the six-month period August 2022 to January 2023, covering the gender, ethnicity and disability of applicants. The data are presented to show our recruitment activity by job family.

Gender in recruitment data

Overall, women represented 41% of all applicants, and 58% of those hired, resulting in a higher overall success rate of 15% for female applicants compared to that of 7% for male applicants. This is an increase on the year 2021-2022, when overall 38% of all applicants were female.

These results were replicated across all job families except for technical and apprentice roles where the number of female applicants and those shortlisted was lower. Similar female success was seen in roles across the pay scales, including those at senior level.

As in previous years, male applicants continue to have a low success rate for business service roles, with men making up 37% of all applicants, but only 17% of those hired for these roles. The percentage of offers made to women remained stable compared to last year, at 53%. The data are provided in Table 9

Female					
Job Family	Applications	Shortlisted	Offered	Hired	Conversion Rate
Academic	31%	34%	37%	35%	6%
Professorial	40%	100%	100%	100%	50%
Research	19%	25%	29%	29%	14%
Business Services	63%	72%	83%	83%	16%
Operational	42%	55%	58%	58%	28%
Technical	23%	26%	14%	14%	10%
Apprentice	26%	10%	17%	17%	7%
All University	41%	53%	58%	58%	15%

Male					
Job Family	Applications	Shortlisted	Offered	Hired	Conversion Rate
Academic	69%	66%	63%	65%	5%
Professorial	60%	0%	0%	0%	0%
Research	81%	75%	71%	71%	8%
Business Services	37%	28%	17%	17%	6%
Operational	58%	45%	42%	42%	15%
Technical	77%	74%	86%	86%	18%
Apprentice	74%	90%	83%	83%	13%
All University	57%	46%	40%	40%	7%
Elected not to share	1%	1%	1%	2%	13%

Table 9 Recruitment activity by gender for August 2022 - January 2023

Ethnicity in recruitment data

Compared to the reporting period in 2021-2022, our recruitment data for ethnicity shows little change. UK white applicants continued to have the highest success rate across all roles with 21% of this group being successfully hired (compared to 19% last year), shown in Table 10. Non-UK ethnic minority applicants again had a low conversion rate of 4% (3% last year); non-UK white had a 11% conversion rate (9% last year), shown in Table 11.

Encouragingly, UK-ethnic applicants had a conversion rate of 11% this year which was up from 6% last year.

Overall, the conversion rates for minority ethnic staff have improved since the last reporting period, by 5% for UK ethnic applicants, and by 1% for non-UK ethnic applicants. This is evidenced in the overall increase in ethnic minority staff numbers this year.

As in previous years, ethnic minority applicants from outside the UK make up the largest proportion of all applicants at 47% in the reporting period. This is a slight decrease over previous years (around 50%) and may reflect changes in the immigration landscape in the UK in the previous period. Non-UK ethnic minority applicants had the lowest success rate in terms of being appointed across all job family roles. In particular, they had a low success rate for academic and research roles even though they comprised the majority of applicants for roles of this type. UK ethnic minority applicants were shown to have low success rates in academic, operational and apprentice roles.

Our focus for 2023 -2024 will continue to be on increasing candidate attraction and identifying and removing barriers in the recruitment process to improve hiring levels for minoritised ethnic candidates.

UK White					
Job Family	Applications	Shortlisted	Offered	Hired	Conversion Rate
Academic	10%	26%	37%	41%	22%
Professorial	60%	100%	100%	100%	33%
Research	5%	13%	19%	19%	35%
Business Services	50%	71%	77%	76%	19%
Operational	51%	80%	100%	100%	38%
Technical	32%	63%	67%	67%	33%
Apprentice	45%	76%	83%	83%	21%
All University	28%	52%	58%	58%	21%

Non-UK White					
Job Family	Applications	Shortlisted	Offered	Hired	Conversion Rate
Academic	17%	28%	42%	41%	13%
Professorial	20%	0%	0%	0%	0%
Research	12%	14%	21%	21%	16%
Business Services	8%	5%	3%	3%	5%
Operational	5%	3%	0%	0%	0%
Technical	16%	6%	0%	0%	0%
Apprentice	6%	5%	17%	17%	33%
All University	10%	9%	11%	11%	11%

Table 10 Recruitment activity by white or non white ethnicity for August 2022 - January 2023

UK Minority Ethnic					
Job Family	Applied	Shortlisted	Offered	Hired	Conversion Rate
Academic	9%	13%	5%	6%	4%
Professorial	0%	0%	0%	0%	
Research	3%	3%	4%	4%	15%
Business Services	15%	15%	14%	14%	12%
Operational	4%	3%	0%	0%	0%
Technical	5%	6%	17%	17%	50%
Apprentice	11%	14%	0%	0%	0%
All University	9%	11%	9%	9%	11%

	Non-UK Minority Ethnic				
Job Family	Applied	Shortlisted	Offered	Hired	Conversion Rate
Academic	64%	33%	16%	12%	1%
Professorial	20%	0%	0%	0%	0%
Research	80%	70%	55%	55%	6%
Business Services	27%	8%	7%	7%	3%
Operational	40%	13%	0%	0%	0%
Technical	46%	25%	17%	17%	6%
Apprentice	38%	5%	0%	0%	0%
All University	47%	24%	19%	19%	4%
Elected not to share	5%	4%	4%	4%	9%

Table 11 Recruitment activity by minoritised ethnicity for August 2022 - January 2023

Disability in recruitment data

The sharing rates among candidates who apply for posts at Cranfield remain relatively low as a percentage of candidates. We aim to improve our understanding of the candidate experience for disabled candidates, and therefore request people share their data with us, in line with our commitments as a Disability Confident Employer. Of those applicants who chose to share that they are disabled, 8% were successfully appointed, whereas 13% of applicants who did not share any disability-related information with us were appointed, as shown in Table 12. It is important to note that this lower success rate may be due to the fact that many applicants elect not to share their personal information until they have been offered a role. This analysis marks the first year we have published this form of analysis and serves as a benchmark for our ongoing progress. In addition, the changes to HESA codes in 2023, which have made the categories of data that we collect more inclusive, may further assist us with increasing sharing rates.

Shared Disability					
Job Family	Applications	Shortlisted	Offered	Hired	Conversion Rate
Academic	3%	7%	5%	6%	9%
Professorial	0%	0%	0%	0%	
Research	2%	4%	0%	0%	0%
Business Services	7%	9%	5%	5%	8%
Operational	7%	10%	0%	0%	0%
Technical	2%	5%	0%	0%	0%
Apprentice	6%	10%	17%	17%	33%
All University	5%	7%	3%	4%	8%

None Shared					
Job Family	Applied	Shortlisted	Offered	Hired	Conversion Rate
Academic	97%	93%	95%	94%	5%
Professorial	100%	100%	100%	100%	20%
Research	98%	96%	100%	100%	10%
Business Services	93%	91%	95%	95%	12%
Operational	93%	90%	100%	100%	22%
Technical	98%	95%	100%	100%	17%
Apprentice	94%	90%	83%	83%	10%
All University	94%	92%	95%	95%	11%
Elected not to share	1%	1%	1%	2%	13%

Table 12 Recruitment activity by disability for August 2022 - January 2023

Sexual orientation in recruitment data

Our data on sexual orientation of candidates during the recruitment process is currently too small to perform meaningful analysis. We maintain our commitment to encouraging applicants to share their sexual orientation with us during recruitment stages through our engagement with the LGBTQ+ community. We have demonstrated good progress with increasing sharing rates with our employees when they join us, and we will continue to promote this practice. In addition, the changes to HESA codes in 2023, which broaden the categories of data we collect for sexual orientation, may further aid us in this regard.

Staff voluntary turnover data

Voluntary turnover occurs when staff willingly leave an organisation, as opposed to leaving at the end of a fixed term contract or other reasons initiated by the employer.

At Cranfield, our voluntary turnover rate for the six-month period to January 2023 was 5% which when extrapolated to a full year, is in line with the previous EDI annual report when voluntary turnover was 11% for the full year. This slightly lower voluntary turnover rate could reflect a stabilising of the general recruitment climate in the UK following the peak during the 'Great Resignation' and 'Great Retirement' that affected the country as a whole in 2021-2022. This rate continues to be in line with the rest of the sector.

During the six-month period, women and men experienced similar turnover rates, with women having a voluntary turnover rate of 6% and men 5%. The primary reasons for leaving were similar for both men and women, with career prospects and retirement being the most common reasons provided, however some women also referred to 'work/life balance' as a contributing factor. This is an important trend that also reflects the broader UK trends and is being considered as part of our wellbeing initiatives.

Variations in turnover can be seen within different ethnic groups. UK ethnic minority staff had the highest voluntary turnover rate of all groups during the six-month period, at 7%. The ethnic groups of non-UK ethnic, UK white and non-UK white all had a voluntary turnover rate of 5%.

Sector Benchmarks

Referencing [HESA staff data](#) for the academic year 2021/22, and the latest [AdvanceHE staff statistical report](#) which looks at staff data for the academic year 2020/21, the tables below benchmark Cranfield's key staff demographic metrics against the wider HEI sector where comparisons are available. The HESA data is a year older than the Cranfield reported data, due to HESA reporting timelines.

The tables below also show our People strategy KPIs to benchmark our progress towards our goals for 2027.

Gender	Cranfield July 2023	Strategy KPI by 2027	HESA 2021/22	Advance HE 2020/21 (rounded)
Females as % of all staff	48%	-	55%	54%
Females as % of all academics	27%	35%	-	-
Females as % of all professors	13%	20%	30%	28%

Ethnicity	Cranfield July 2023	Strategy KPI by 2027	HESA 2021/22	Advance HE 2020/21 (rounded)
Ethnic staff as % of all staff	21%	-	16%	16%
UK Ethnic staff as a % of all staff	8%	12%	-	9%
Ethnic staff as % of all professors	9%	-	12%	11%
Black staff as a % of all professors	0%	-	1%	1%

Disability	Cranfield July 2023	Strategy KPI by 2027	HESA 2021/22	Advance HE 2020/21 (rounded)
Shared disability as % of all staff	7%	6%	7%	6%

Sexual Orientation	Cranfield July 2023	Strategy KPI by 2027	HESA 2021/22	Advance HE 2020/21 (rounded)
Staff sharing their LGBTQ+ status as a % of all staff	3%	-	-	4%

Making Change Happen 2023 – 2024

Cranfield has strong ambitions to continue our progress and make change happen as outlined in our new [EDI strategy](#). While this report demonstrates good progress in a number of key areas, we recognise there is still more we aim to achieve. We acknowledge the need to make firm commitments to take the necessary actions to enable us to achieve our aspirations. A summary of some of our operational actions for 2023-2024 is provided below.

Operational actions

We will continue our EDI work in recruitment, career development, wellbeing, pay and reward and retention. In addition, we have planned new operational actions for the period 2023-2024, including:

1. establishing an executive committee for EDI and Wellbeing to further strengthen leadership and governance;
2. commencing the pilot for small and specialist institutions for [AdvanceHE's Race Equality Charter](#) submission;
3. applying for recognition as a [Trailblazer by Race Equality Matters](#). The Trailblazer series spotlights forward-thinking organisations that are implementing impactful solutions to drive race equality;
4. re-establishing our [Athena Swan](#) self-assessment team for our Bronze level Charter re-submission;
5. expanding our outreach activities with local communities, including participation in job shows, and ongoing engagement with organisations such as Women Leaders UK.
6. implementing a working group to review our disability adjustments processes;
7. submitting evidence towards achieving [Disability Confident Leader](#) status under the Disability Confident Scheme, building on our current level 2 status, Disability Confident Employer;
8. developing an enhanced shared parental leave policy to remove a barrier that may disincentivise co-parents from returning to work;
9. reviewing our People KPIs for staff sharing rates which have made strong progress in the past 12 months and may be revised upwards if this trend continues; and
10. sustaining our momentum of engaging with students, by increased partnering with the Cranfield Students' Association, and collaboration with colleagues such as our [Student Wellbeing and Disability Support team](#) and [Careers and Employability Service](#).

1. Does the PRME Signatory Member disclose its performance on policies related to RME, including its successes and failures?



Yes, with limited transparency (e.g., only successes, internal channels)

Sharing Information to Advance Responsible Management at Cranfield School of Management (SoM)

Impact Purpose

To embed responsible management education (RME) throughout Cranfield's teaching, research, and operations.

Impact Statement

Cranfield SoM prioritises sustainability, sharing RME progress internally and externally. The Responsible and Sustainable Management Committee will enhance transparency and drive improvements, ensuring a more substantial commitment to ethical and sustainable practices across the school.

Overview

At Cranfield SoM, sustainability and responsible management are core values integrated into all aspects of its work. In previous years, the PRME (Principles for Responsible Management Education) statement in progress has been shared both internally, during all-school meetings, and externally, with a short version made accessible in addition to the full report, which is available on the university's website. In addition, the university publishes the [Annual Environmental Review](#) every year, which reports progress on Cranfield's environmental targets, especially focusing on the performance of its estate and facilities in terms of carbon, waste, water and biodiversity.

While successes are publicly shared, challenges and areas for improvement are discussed internally within the relevant committees. These committees are responsible for identifying opportunities and implementing enhancements.

Going forward, the responsibility of presenting the annual PRME report, as well as providing ongoing feedback on performance, will be led by Professor Stephanie Hussels, Chair and Executive lead of the Responsible and Sustainable Management Committee. This initiative aims to accelerate progress towards embedding responsible management education (RME) across all research, teaching, and outreach activities, thereby helping to shape organisational practices in alignment with sustainability goals.

This leadership and governance structure will support the continuous improvement of Cranfield SoM's commitment to responsible management education.

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