



CRANFIELD UNIVERSITY  
ROYAL CHARTER NUMBER 000151  
FINANCIAL STATEMENTS  
for the year ended 31st July, 2023

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**CRANFIELD UNIVERSITY**  
**HIGHLIGHTS REPORT**  
**FOR THE YEAR ENDED 31ST JULY, 2023**

**Summary and key highlights**

The Corporate Plan, Ambition 2027 was launched in August 2022. The plan outlines four areas of focus where 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 of focus don't stand alone. They are all connected and success will only happen when we work collaboratively to deliver all four. We know we are stronger when we work across our boundaries.

In the past year Cranfield University has demonstrated its growing commitment to becoming the UK's leading university for delivering sustainable futures. Sustainability has become a guiding principle to teaching and learning, research, partnerships and improving the University campus itself.

A changed context following the Covid-19 pandemic — accompanied by issues around energy costs, inflation, political instability and the impact of climate change — has emphasised the urgent need for social and environmental leadership and responsibility across national institutions.

Through its world-class research and teaching, Cranfield University has shown the ability and will to take a lead regionally, nationally and internationally: in areas of new technology, such as developing hydrogen as a zero-carbon fuel; by taking on active partnership roles with businesses large and small; and through initiating and growing networks in critical areas for collaboration such as defence and security, sustainable aviation, resilient food systems, and the transition to a circular economy.

**Key highlights in 2022/2023 include:**

- Cranfield is in the top 20% of universities in the world for its overall sustainability efforts. The 2023 Times Higher Education Impact Rankings placed Cranfield 32<sup>nd</sup> in the world, out of 1600 universities, for Sustainable Development Goal 17 – Partnerships for the Goals (focusing on cross-sector and cross-country partnerships in pursuit of the SDGs as a whole). This highlights the deep and valuable connections Cranfield has with industry, academic partners, governments and leading bodies to drive environmental impact.
- The University received a £3 million donation from Green Future Investments Ltd (GFIL) to develop the next generation of leaders committed to creating a sustainable planet, and support research and business initiatives focused on tackling climate change and achieving net zero.
- For the second year in succession, the University was named an Official Nominator for The Earthshot Prize – the world's most prestigious environmental award launched by the Prince of Wales in 2021 — looking for ambitious solutions to fix the world's biggest environmental problems.
- In the QS World University Rankings by Subject 2023, Cranfield University was ranked among the world's top universities for nine subjects: in the global top 30 for Engineering – Mechanical, Aeronautical & Manufacturing; the top 150 for 'Business and Management Studies'; and the top 200 for 'Environmental Sciences'.

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- The UK Office for Students recognised Cranfield as a world-leading specialist provider, endorsing its global reputation for high quality teaching, and the ongoing impact of our graduates on their professions and industries.
- Cranfield School of Management achieved the Small Business Charter Award 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.
- Her Royal Highness The Princess Royal officially opened a new 'flying classroom' as part of the National Flying Laboratory Centre, a specially adapted Saab 340B aircraft, which helps up to 1700 students gain invaluable flight test experience every year.

**Environmental and sustainability achievements**

As part of its strategy *Ambition 2027*, Cranfield University has embarked on a mission to become the UK's university for delivering sustainability: making the development and practical implementation of sustainable technologies the backbone to everything it does.

Examples of activities and progress in 2022/23 include the following:

- A £3 million donation from Green Future Investments Ltd (GFIL) to develop the next generation of leaders committed to creating a sustainable planet, and support research and business initiatives focused on tackling climate change and achieving net zero. A series of donations until 2025 will support students, staff, alumni and research projects focused on sustainability and green initiatives.
- The University launched its new search for innovations to help repair and regenerate the planet. For the second year in succession, the university was named an Official Nominator for The Earthshot Prize – the world's most prestigious environmental award launched by the Prince of Wales in 2021 — looking for ambitious solutions to fix the world's biggest environmental problems by 2030.
- The 2023 Times Higher Education Impact Rankings placed Cranfield in the top 20% of universities in the world for its overall sustainability efforts. The University is within the global top 40 in terms of activities to support the critical United Nations Sustainable Development Goal 17 – Partnerships for the Goals (focusing on cross-sector and cross-country partnerships in pursuit of the SDGs as a whole).
- Cranfield hosted a Hydrogen and Fuel Cell Showcase event with 250 delegates from more than 100 industries, including leaders from Airbus, Barclays, Heathrow Airport, Rolls-Royce, Siemens, BP and Reaction Engines; alongside academics from Bristol, Southampton, Coventry, Wolverhampton and Aston universities.
- The Global Aviation Summit 2022 was organised by Cranfield University and ATAG (the Air Transport Action Group that acts as a platform for the commercial aviation sector to work together on long-term sustainability issues). More than 100 invited professionals from around the world came together to draw together thinking on the aviation industry in terms of progress against the net zero 2050 targets, major achievements, barriers, lessons learned, and how the sector can best make further substantial and immediate progress.

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### HIGHLIGHTS REPORT

#### FOR THE YEAR ENDED 31ST JULY, 2023

- The University hosted the first CENTS (Circular Economy Network+ in Transportation Systems) International Conference. The CENTS network of member universities and industry, including Cranfield, came together to play its part in raising awareness of the critical importance of Circular Economy approaches to the transport sector, to help accelerate implementation and act as a showcase for what's happening in terms of research and industry projects.
- More than 3,000 trees were planted in Bedford as part of a Miyawaki forest project involving a partnership between Bedford Borough Council, Cranfield University, the Forest of Marston Vale, and Bedford Rotary Club. The project is part of the Department for Environment, Food and Rural Affairs 'funded Trees for Climate' initiative. Miyawaki forests absorb more carbon than conventional woodland schemes because they grow more quickly.
- Cranfield became a key academic signatory to a new strategy detailing how military aviation will contribute to the Government's 'Net Zero 50' goal. The Defence Aviation Net Zero Strategy outlines the steps necessary to meet the commitment to decarbonise Defence's aviation capability, whilst also mitigating potential risks to operational effectiveness that are likely to arise because of climate change.
- The University was awarded a Silver level accreditation from the British Hedgehog Preservation Society for completing additional work to make its campus even more hedgehog-friendly. The national Hedgehog Friendly Campus initiative encourages staff and students at universities to improve habitats for hedgehogs across campuses and raise awareness of hedgehog-friendly actions.
- Two wartime hangars at the University are being refurbished to improve their energy efficiency and carbon footprint. The project was made possible by an award through the Public Sector Decarbonisation Scheme, funded by the Department for Business, Energy, and Industrial Strategy, and supports the University's steps towards net zero.

#### Employer of choice

- Cranfield has been recognised for its excellence as a family-friendly employer — providing flexible and family-friendly policies and practices that specifically support parents and carers —ranked as one of the Working Families Top 30 Employers for 2022. Cranfield also created a new maternity policy which now offers 22 weeks leave on full pay. Maternity, family-friendly and flexible working policies play a significant part in attracting and retaining female talent, one of our key Equity, Diversity and Inclusion (EDI) objectives.
- Cranfield continues to follow-up on its commitment to implementing ten recommendations from the TALENT Commission report, strengthening the future of technical skills and staff in higher education and research. This includes taking a strategic approach to in-demand technical skills and plugging future skills gaps, addressing existing EDI challenges, costing technicians on grants and proposals consistently, broadening technical career pathways and expanding technician job families, making it easier to attract the best talent to create a diverse technical workforce.
- Flexible and hybrid working arrangements have continued to be supported and respected, making sure wellbeing and a commitment to equality, diversity and inclusion is at the heart of Cranfield as a workplace.
- The People and Culture team, Student Advice Centre and Cranfield Students 'Association have continued to provide specific support to members of the University community affected by the conflict between Russia and Ukraine.

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### HIGHLIGHTS REPORT

#### FOR THE YEAR ENDED 31ST JULY, 2023

- University academics were awarded a £30,000 grant from the Royal Academy of Engineering (RAEng) to initiate a series of school outreach events across the Milton Keynes area, introducing year 5 and 6 pupils to materials engineering and its importance in delivering solutions to global challenges around sustainability, green energy, better transport and improved healthcare.
- Supporting the EDI strategy and Ambition 2027, groups have been set up in Schools to progress local action plans and initiatives. Staff networks have continued to grow in number and representation and Cranfield now has networks for gender, disability, LGBTQ+ and parents and carers.
- Cranfield has reduced its gender pay gap year-on-year. In 2021-22 the mean pay gap reduced from 22.2% to 21.0% and our median from 18.7% to 18.4%.
- For the first time, Cranfield reported its ethnicity pay gap. The median ethnicity pay gap at 31 March 2022 was 6.3%, which means the middle hourly salary rate for minority ethnic staff was 6.3% lower than the equivalent for white staff.

#### Partner of choice

Cranfield works as a convenor for real-world collaborations with industry leaders, realising the economic and social value of new technologies:

- Royal HaskoningDHV and Cranfield University have agreed a strategic relationship charter to co-create solutions that address the global water crisis and deliver sustainable and resilient water futures. Particular opportunities have been identified in Sustainable Wastewater Treatment and Water Quality Management (such as reducing greenhouse gas emissions from wastewater treatment processes, removal of micropollutants from water supply, wastewater epidemiology, and combatting emerging pollutants); Net Zero and the Circular Economy (emissions-free treatment, fuel and heat decarbonisation and resource recovery through green technologies at the heart of the collaboration).
- Cranfield University joined with Green Space Industries (GSI), and Levidian Nanosystems to collaborate in producing the world's first graphene-infused natural rubber aerospace balloon. The Malaysian Rubber Council (MRC) is coordinating the cooperation with GSI, commercialising the aerospace balloon concept with Cranfield as the research and development partner (providing a unique technology for 3D printing of rubber products), and climate technology company Levidian as the supplier of sustainable "green" graphene for the project.
- Cranfield School of Management achieved the Small Business Charter Award 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.
- The Fédération Internationale de l'Automobile (FIA), the international governing body for Formula One and many other racing events, chose Cranfield as the partner for its first motorsport engineering scholarship. FIA is using the scholarship as a global talent search initiative, removing financial barriers for entry and making it possible for a talented young engineer from one of the FIA regions to obtain a Master's in Advanced Motorsport Engineering from Cranfield.
- The National Crime Agency (NCA) signed a Memorandum of Understanding with Cranfield to share expertise and collaborate on new technologies: developing future operational capabilities across the whole intelligence and law enforcement community around responses to serious crime and reducing the impact on the UK and its communities.

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- Students at the National University of Sciences & Technology (NUST) in Pakistan will benefit from Cranfield's expertise and facilities as collaboration is fostered across several academic and research domains (manufacturing, materials, energy, sustainability, rail and automotive engineering) as the result of a Memorandum of Understanding. The Memorandum was signed by the Rector of NUST, Engr Javed Mahmood Bukhari, a Cranfield alumnus.
- Santander has invested more than £1 million in apprenticeship levy funding for use by local businesses to upskill and reskill their staff via MK:U (Milton Keynes' new model digital and technical initiative with Cranfield).
- Nordic Aviation Capital (NAC) launched the NAC Women in Aviation Scholarship Fund with Cranfield, a scholarship to promote diversity and inspire a new generation of women in the business and engineering fields of aviation. Each year until 2025, two outstanding female candidates will be awarded the scholarship, one from the MSc in Air Transport Management (ATM) and one from the MSc in Aerospace Vehicle Design (AVD).
- The Chartered Society of Forensic Sciences (CSFS) and Cranfield Forensic Institute (CFI) are collaborating to recognise forensic specialists within the UK Armed Forces who deal with incidents involving hazardous materials.
- The University was granted Academic Partner status with The Institute of Cyber Digital Investigation Professionals (ICDIP), run through CIIsec (the Chartered Institute of Information Security), bringing recognition for its Digital Forensics MSc course.
- Cranfield academics contributed to a new policy briefing paper from the Royal Society, *Net Zero Aviation Fuels – resource requirements and environmental impacts*, which was presented to parliament. The report outlines a way forward for UK aviation in achieving decarbonization, with Cranfield's Dr Guy Gratton and Professor Pericles Pilidis leading the investigation into the role of aircraft design and operations in achieving net zero targets.

**Applied research powerhouse**

- In the QS World University Rankings by Subject 2023, Cranfield University was ranked among the world's top universities for nine subjects: in the global top 30 for Engineering – Mechanical, Aeronautical & Manufacturing; the top 150 for 'Business and Management Studies'; and the top 200 for 'Environmental Sciences'.
- The University is now an official member of the Compact Muon Solenoid (CMS) research group at the Large Hadron Collider at CERN in Switzerland. As an Associated Institute Cranfield is one of only a few select UK institutions involved in the research experiments at the largest particle physics laboratory in the world.
- Cranfield University and Cranfield Airport took on a leading role in the UK Research & Innovation's (UKRI's) Future Flight Challenge project to integrate drones into everyday life. Project Blueprint is spearheading the development of permanent 'drone zones', designated areas of airspace where drones and crewed aircraft can safely co-exist, allowing drones to become part of everyday life, undertaking tasks such as medical supply deliveries, or monitoring air quality in real-time.
- Cranfield and Nissan Technical Centre Europe (NTCE) Cranfield are collaborating on a Knowledge Transfer Partnership (KTP) to develop new features so battery electric vehicles can be easily connected to their surroundings. This technology is known as V2X (vehicle-to-everything). The two-year project, funded by Innovate UK, will transfer academic knowledge on V2X applications and integrate them into electric vehicle design.

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- Cranfield University will establish a new national centre for the research of waste derived fuels from the environment sector – following a £500,000 grant from the Wolfson Foundation. The National Environment Sector Decarbonisation Accelerator (NESDA) test facility will be the first of its kind dedicated to developing synthetic fuels and zero carbon fuels from waste.

#### Distinctive Cranfield learners

- The UK Office for Students recognised Cranfield as a world-leading specialist provider, endorsing its global reputation for high quality teaching, and the ongoing impact of our graduates on their professions and industries.
- Her Royal Highness The Princess Royal officially opened the National Flying Laboratory Centre's new 'flying classroom' at Cranfield, a specially adapted Saab 340B aircraft which helps up to 1700 students gain invaluable flight test experience every year.
- Cranfield was placed 8th in the UK for the Employability of its graduates in The Center for World University Rankings (CWUR) 2023.
- Responding to changes in how people learn and work, Cranfield School of Management launched a new offering for world-class teaching in bite-sized modules to anyone across the globe. The Global Online Stackable Programmes provide modules that can be 'stacked' to cover personal interests and built to any level of learning — from four-hour 'Bronze' Cranfield Digital Certificates which require no qualifications for entry, up to Silver, Gold, and postgraduate awards.
- The high quality and standard of apprenticeship provision by Cranfield School of Management has been recognised by City and Guilds/Institute of Leadership and Management (ILM) end-point assessment (EPA) award. Cranfield's apprentices have achieved first attempt pass rates of 98% and 100% success overall, with over 80% achieving merit or distinction.
- For the second year running, Cranfield won funding for the British Council's Women in STEM (Science, Technology, Engineering and Mathematics) Scholarship programme, helping to address the underrepresentation of women in STEM and increase opportunities for women to advance in the field.
- More than 270 students in cross-discipline teams took part in the Cranfield Colworth Innovation Challenge, culminating in a final round where they pitched their solutions to real-world challenges around tackling climate change, reducing waste and increase efficiency in the food and drink sector to industry executives from the industry partners.
- The annual \$5,000 aviation scholarship for women, funded by the International Aviation Women's Association (IAWA), was awarded to Eléna Galigny de Bonneval, studying for an MSc in Aerospace Manufacturing.
- Cranfield announced a partnership with Dassault Systèmes on the 3DEXPERIENCE Edu Centre of Excellence. The campus facility will provide experiential, initial and lifelong learning via the 3DEXPERIENCE platform, combining virtual learning with real-life projects. From September 2023, Cranfield will deliver courses and curricula designed in collaboration with aerospace employers, preparing students, technicians, engineers and innovators with the knowledge and know-how to thrive in the aerospace industry's transformation journey toward digitalisation and sustainability.

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- Cranfield School of Management partnered with leading European business school ESCP (École Supérieure de Commerce de Paris) to offer Full-time MBA students a month at the Madrid or Turin ESCP campuses, expanding their insights into global business practices.

**2022/2023 highlights: recognition of the expertise of the University's staff; key appointments and academic awards, and research developments.**

#### Recognition of expertise

Cranfield is a specialist hub for some of the best STEM and business and management talent from around the world. Examples of formal recognition of people's achievements over the year include the following:

- Professor Karen Holford, Chief Executive and Vice-Chancellor of Cranfield University became the new Chair of the Midlands Innovation Board. She will act as Chair for the collaborative research and innovation partnership until 2025, working closely with board members and the core Midlands Innovation team to provide strategic leadership and direction on collaborative research priorities and opportunities for the region.
- Professor Sir Iain Gray CBE, Director of Aerospace at Cranfield University, was recognised in the King's Birthday Honours 2023: appointed Knight Bachelor for services to the aerospace industry.
- Professor Lynette Ryals OBE, CEO of MK:U and Pro-Vice-Chancellor of Cranfield University was appointed to the Oxford to Cambridge Partnership as a Non-Executive Director on the Partnership Board.
- Professor Chris Fogwill was appointed Non-Executive Private Sector Board Director of the South East Midlands Local Enterprise Partnership (SEMLEP). The Pro-Vice Chancellor and Head of School for Water, Energy and the Environment, is one of four new board members helping SEMLEP drive sustainable economic growth in the region.
- Dr Jacqueline Hannam, Senior Lecturer in Pedology, became the President of the British Society of Soil Science (BSSS), an international organisation and charity committed to the study of soil.
- Emma Parry, Professor of Human Resource Management, Head of the Changing World of Work Group and Director of Academic Development at Cranfield, became the Chair of the British Academy of Management (BAM). BAM is the leading authority in the academic field of management in the UK.
- Dr Jane Hodgkinson and Dr Rachael Hazael were highly commended as finalists, finishing in the top 100 of the prestigious 2023 Top 50 Women in Engineering (WE50) awards.
- Dr Rachael Hazael, Senior Lecturer in Advanced Protective Materials at Cranfield Forensic Institute, was shortlisted in the Innovation and Creativity Award category of the 2022 Women in Defence UK Awards for her research into the response of materials to impact and blast events within both security and defence contexts.
- Dr Yifan Zhao, Reader in Data Science at Cranfield University, received an Industrial Fellowship from The Royal Academy of Engineering. In partnership with civil engineering company BAM Nuttall, the Fellowship is being used to use artificial intelligence (AI) and a digital twin of construction machinery to help improve energy efficiency in the sector.



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- Dr Luofeng Huang, a Lecturer in Mechanical Engineering known for his work on floating solar farms, was named in the prestigious Forbes 30 under 30 list in the Science & Healthcare category for 2023.
- Dr Zaheer Nasar, Lecturer in Atmospheric Aerosols, was recognised in UPSIGN's list of 75 notable British Pakistani academics, trainers and teachers, as part of celebrations for the 75th anniversary of Pakistan's independence. Dr Nasar was recognised for his impactful research in a wide range of areas including environment and health, air quality, and environmental policy.
- Professor Sue Vinnicombe was named one of the UK's Top 50 gender equity trailblazers in the 2023 Trailblazer50 list, compiled by WeAreTheCity.

**Key appointments and academic awards**

- Heather Goldstraw was appointed Director of Defence at Cranfield. She joined from the UK Ministry of Defence (MOD) where was Director of the Defence College for Military Capability Integration (DCMCI), leading on technical and acquisition education at the Defence Academy of the United Kingdom.
- Dr Annette Southgate joined Cranfield as Director of Security, in a secondment from the Foreign, Commonwealth and Development Office where was Deputy Director Business Development.
- Anita Mendiratta, a globally recognised expert on Tourism and Development, joined as a Visiting Professor. Anita runs her own Global Management Consultancy business; she is a Special Advisor to the Secretary General of United Nations World Tourism Organisation (UNWTO), a Strategic Advisor to CNN International and provides support to the World Bank, WTTC, IATA and ATAG on tourism issues.
- Dr Christoph Mazur, a leader in the future of low-carbon energy and sustainability, joined Cranfield as a Visiting Professor. Over the past decade, Christoph has built a wide portfolio of experience, working with Imperial College London (with the Grantham Institute and Energy Futures Lab), the Energy Systems Catapult, UK Parliament, Daimler Buses North America, Climate-KIC, ENGIE/EQUANS and Microsoft.
- Anna Smallwood was appointed as Professor and Head of the Centre for Air Transport Management. A senior leader in the aviation industry, Anna joined the TUI group in 2008 and was Head of Risk, Safety & Compliance for the UK operation, Thomson Airways, before becoming Head of Fleet Programme Management in 2012. In this role, she was responsible for the delivery of the Boeing 787 Dreamliner Entry-Into-Service (EIS) project – with Thomson Airways becoming the first UK operator of this advanced technology aircraft.
- Cranfield awarded honorary degrees to distinguished leaders in the worlds of engineering, technology, business and environment: Professor Rosie Hails MBE FRSB, Nature and Science Director at the National Trust, Andrew Haines, Chief Executive, Network Rail and Great British Railways Transition Lead, Dr Hayaatun Sillem CBE, Chief Executive Officer at Royal Academy of Engineering and Queen Elizabeth Prize for Engineering Foundation, Grenville Turner, property and technology entrepreneur, and Lieutenant General Tom Copinger-Symes CBE, Deputy Commander UK Strategic Command, UK Defence.

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**Research developments**

The University's industry-focused research continues to deliver new and practical solutions for addressing the world's challenges, particularly around the environment and sustainability. Some examples include:

- The Bio-HyPER project was awarded £250,000 funding by the Department for Business, Energy and Industrial Strategy (BEIS) through the Net Zero Innovation Portfolio (NZIP) as part of its Hydrogen BECCS (bioenergy with carbon capture and storage) Innovation Programme. Bio-HyPER is enabling researchers to carry out a feasibility study into how biomass – organic products such as wood, grasses or used brewery hops — can be used to generate hydrogen while capturing CO<sub>2</sub> emissions at the same time. The work makes use of the HyPER (Bulk Hydrogen Production by Sorbent Enhanced Steam Reforming) hydrogen production pilot plant on campus.
- The University was awarded over £0.5 million by The Henry Royce Institute for a range of manufacturing projects, including three initiatives focused on how materials respond to hydrogen, which could help accelerate the adoption of hydrogen-fuelled engines and assist industries with reaching net zero carbon emissions. As a consequence, Cranfield's specialist facilities in the Surface Engineering and Precision Centre (SEPC) are set to advance understanding of how materials behave and react with hydrogen, paving the way for wider use of this clean fuel.
- Cranfield became part of the OMENZ project (Optimising Miscanthus Establishment through improved mechanisation and data capture to meet net zero targets), aimed at improving the cultivation of the bioenergy crop Miscanthus, a perennial grass plant which is commonly established by planting root components called rhizomes. The project is led by Miscanthus specialist Terravesta alongside Cranfield, Crop Health and Protection (CHAP), Energene Seeds Ltd, Liverpool John Moores University, TJSS Ltd, University of Lincoln, and Ystumtec Ltd.
- Cranfield research is helping to develop a new generation of battery technologies needed for a future of sustainable electric transport. The work on lithium-sulfur batteries is part of a major new £29 million UK research programme into energy storage funded by The Faraday Institution.
- Research by Cranfield for the Woodland Trust set out how agroforestry – farming with trees – could be pivotal in helping the agricultural sector reach net zero by 2050: how farm businesses can implement practices to reduce their greenhouse gas emissions, which may typically amount to around two to four tonnes of carbon dioxide equivalent per hectare per year on arable and grassland farms respectively.
- Modelling as part of Project NAPKIN (New Aviation Propulsion Knowledge Innovation Network) alongside major aerospace manufacturers, UK airports and academic institutions, showed that passengers could be flying between UK regions on planes with zero carbon emissions within the next 20 years. Researchers in the Centre for Air Transport Management and the Safety and Accident Investigation Centre at Cranfield concluded that the first hydrogen-powered flights are likely to happen as soon as 2026.
- Cranfield became part of a European-wide research collaboration to standardise the technological approach to Capture, Utilisation, and Storage (CCUS): saving companies time when estimating the cost of their plans to address carbon emissions. The four-year £500,000 project involves institutions from more than 21 countries.

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- The HyPER project, testing innovative hydrogen production technology that substantially reduces greenhouse gas emissions, won a Hydrogen Award 2023 (Hydrogen Research and Innovation), a scheme set up to recognise outstanding research and innovation in hydrogen at universities across the UK and at the British Geological Survey.
- A major research report into the impact of the flexible furlough scheme was launched at an event in Parliament. Researchers looked at the experiences of firms using this option and urged government and employers to invest in an expansion of part-time working.
- A Cranfield-designed instrument capable of remotely analysing molecules from the air in Antarctica started to be used as part of the British Antarctic Survey (BAS)-led Southern Ocean Clouds project (which also involves the University of East Anglia, the University of Exeter, and the University of Manchester). The iDirac is unique in that unlike commercial alternatives it can operate autonomously for long periods of time. In addition to saving up to £500,000 – the cost of a similar commercial device – the Cranfield designed device has the advantage of being able to run remotely on rugged terrain for months on end, better helping scientists understand future changes in our climate.
- A report by Cranfield researchers for the Financial Reporting Council (FRC), examined the barriers to senior leadership for people from minority ethnic groups in FTSE 100 and FTSE 250 companies. Findings highlighted that while there are still significant challenges to be addressed, the impetus for change has been taken seriously across the spectrum of principal stakeholders, including senior managers, executive leaders, board chairs and executive search consultants.
- World-leading research from Cranfield is being used to help the United Nations (UN) develop an artificial intelligence system that supports the monitoring of illicit opium production in Afghanistan (where 80% of the world's illicit opium crops are grown).
- The Cranfield Female FTSE Board Report 2022 supported by EY, highlighted how the number of women on FTSE 100 boards had continued to rise (40%), but also raised concerns over the lack of progress of women into key executive roles — suggesting increases have been driven by boards appointing female Non-Executive Directors (NEDs) to comply with targets.
- A Cranfield-led project is excavating a fortress site in southern Georgia, aiming to uncover why communities in this area were so resilient at the end of the Bronze Age.
- A new multi-million pound antenna, radar and wireless communications facility, developed in partnership with Milton Keynes City Council was opened up. The research laboratory, based at MK:U, the new model university for Milton Keynes, will help businesses in the region test and develop new radio frequency products, with expected applications in aerospace, healthcare, space and mobile telecommunications.
- An international group of scientists, clinicians and interested parties led by Professor David Cullen at Cranfield released a green paper highlighting the biological and commercial risks of human conception in space. The paper urged an open discussion of these issues amongst the growing space tourism sector and wider communities.
- Research by Dr Lisa Briggs, Visiting Researcher at the British Museum and 75th Anniversary Research Fellow at Cranfield, found evidence for what is believed to be the earliest known evidence of wine drinking in the Americas. Forty ceramic shards from an olive jar found on a small Caribbean island were examined in the first study to have used molecular analysis techniques – Gas Chromatography and Mass Spectrometry — to investigate 15th century pottery from the Puerto Rico region.

**CRANFIELD UNIVERSITY**  
**STRATEGIC REPORT**  
**FOR THE YEAR ENDED 31ST JULY, 2023**

Cranfield University is a research intensive, postgraduate university. The activities of the University include teaching, research, design and development work in the themes of Aerospace, Defence and Security, Energy and Sustainability, Environment and Agrifood, Management, Manufacturing and Materials, Transport Systems and Water. Operations are primarily carried out on campus at Cranfield in Bedfordshire and the Defence Academy of the United Kingdom at Shrivenham in Oxfordshire. The University is an exempt charity subject to the Charities Act 2011.

The financial statements comprise the consolidated results of the University and its subsidiaries. Subsidiary companies undertake activities which, for legal and commercial reasons, are more appropriately channelled through a limited company and include the development of activities emanating from Cranfield University.

Cranfield's vision is to be valued globally for tackling the real-world issues of today to deliver a sustainable future.

Cranfield'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.

Cranfield's distinctive expertise is in our deep understanding of technology and management and how these work together to benefit the world. The education portfolio is renowned for its relevance to business and industry. Cranfield is the largest UK provider of master's-level graduates in engineering and the flagship MBA, extensive world-class customised executive education and professional development programmes.

Cranfield's work informs government policy and leads the way in producing cutting edge new technologies and products in partnership with industry. The research and consultancy carried out for industry, government and business provides students with a real-world learning environment, allowing them to develop as professionals and then transfer their knowledge to the global economy. This has always been the 'Cranfield way' but it has never been more important than in today's world.

Cranfield's corporate plan is 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. The new corporate plan was launched at the beginning of the 2022/2023 academic year. Strategic priorities guiding the development of the plan – 'Ambition 2027' – include: being the organisation that people want to work for (employer of choice); putting Cranfield at the heart of a collaborative network (partner of choice); transformational research (creating the UK's applied research powerhouse); helping our learners to stand out from the crowd (distinctive Cranfield learners).

# CRANFIELD UNIVERSITY

## STRATEGIC REPORT

FOR THE YEAR ENDED 31ST JULY, 2023

(continued...)

### Key Performance Indicators (KPIs):-

The University benchmarks its performance against key indicators that measure whether it is on track to deliver the Corporate Plan which is identified as Ambition 2027.

Goal	Measure (indicator)	2021/22 base	2022/23 target	2022/23 Actual
Financial Growth	Operating Surplus - achieve an annual operating surplus of 7.5% of income by 2027	-1.89%	1.44%	1.20%
Partnership & Collaboration	Median of our annual invoiced income of our top 50 partners - achieve 25% increase in our base position before inflation by 2027	£400k	£440k	£440k
Sustainability	Times Higher Impact Rankings - achieve a 25% improvement in our base position by 2027	n/a	81.40%	81.40%
Reputation	Achieve a 25% median improvement across our four main QS subject rankings by 2027	Mean Average 134 <sup>th</sup>	127 <sup>th</sup>	153
People	Pulse staff survey - by 2027, 90% of staff say they are 'proud to work at Cranfield', from a baseline of 82%	82%	84%	84%
Student Outcomes	Achieve a 25% improvement in OfS student outcomes proposed measure of career progression by 2027	85.10%	85.90%	89.40%
Research & Innovation	Annual Excellence Scholarship Review programme - 45% of our publications to be world-leading (4*) by 2027	20%	25%	19%

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(continued...)

**Results for the year and position at year end**

Operating income for the year (excluding donations and endowments) increased by 9.6% as summarised below:-

	<b>2023</b>	<b>2022</b>
	£'000	£'000
Funding Council grants	23,699	21,239
Tuition fees and education contracts	94,843	87,640
Research grants and contracts	43,325	44,725
Other income	53,221	42,666
Investment income	212	97
	<hr/> 215,300 <hr/>	<hr/> 196,367 <hr/>

The total comprehensive gain for the year was £39,659,000 (2022 – £25,874,000) as reported on page 56. Of this comprehensive gain £44,944,000 related to a decrease in the University share of the scheme deficits in the defined benefit pension schemes. It is pleasing to report that the University's Corporate Plan surplus, which measures the underlying operating position has been assessed by management to be a surplus of £2,682,000 (2022 – deficit £3,736,000). This return to an operating surplus is as a result of increases in long course fees, professional development, residential income and other income offset by significant increases in utility costs. The reported management surplus was £414,000 lower than budgeted for the year.

The table on page 15 shows the reconciliation between the comprehensive gain and the underlying operating position. The adjustments relate to the removal of non-operating items that fall outside of management control. Included in the underlying position is the removal of one off donations in the year and the re-introduction of deferred capital grants which spreads the one off donations over the life of the assets that they have constructed as was required under the previous Statement of Recommended Accounting Practice.

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(continued...)

Results for the year and position at year end (continued)

**OPERATING SURPLUS/(DEFICIT) RECONCILIATION**

	2023		2022	
	£'000	£'000	£'000	£'000
Group comprehensive surplus		39,659		25,874
<b>Non 415i Adjustments</b>				
<b><i>Pensions</i></b>				
<i>LGPS</i>				
Add actuarial loss	(42,259)		(52,369)	
Add net interest charge on pension scheme	1,320		1,439	
Add additional deficit repayment	<u>1,641</u>		<u>1,603</u>	
		(39,298)		(49,327)
<i>USS</i>				
Add actuarial loss	(2,242)		28,327	
Add net interest charge on pension scheme	0		331	
Less other pension adjustments	<u>(1,762)</u>		<u>(1,264)</u>	
		(4,004)		27,394
<i>Other</i>				
Less donations	(3,176)		(3,458)	
Less permanent endowments	0		0	
Add deferred capital grants	9,786		8,243	
Add staff restructuring	74		180	
Less Foreign exchange (gain)/loss	344		(264)	
Add corporation tax	(703)		668	
Less revaluation reserve movement	<u>0</u>		<u>(13,797)</u>	
		6,325		(8,428)
<b>Operating surplus/(deficit)</b>		<u><b>2,682</b></u>		<u><b>(4,487)</b></u>
Cranfield Group Holdings Group deficit/(surplus)		0		751
<b>Corporate plan surplus/(deficit)</b>		<u><b>2,682</b></u>		<u><b>(3,736)</b></u>

Capital expenditure in the year amounted to £28,825,000 (2022 - £27,701,000). This continues to reflect Cranfield's success in winning and delivering a number of key infrastructure projects, including a Public Sector Decarbonisation Scheme for cladding two hangars and a Research Partnership Investment Fund green award for reducing emissions in and around the Airport.

# CRANFIELD UNIVERSITY

## STRATEGIC REPORT

FOR THE YEAR ENDED 31ST JULY, 2023

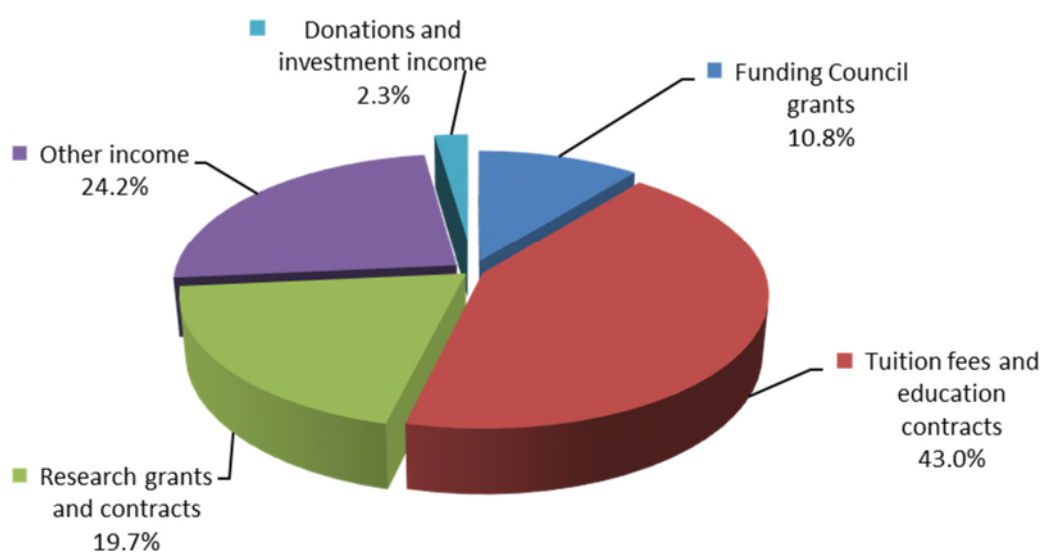
(continued...)

### Results for the year and position at year end *(continued...)*

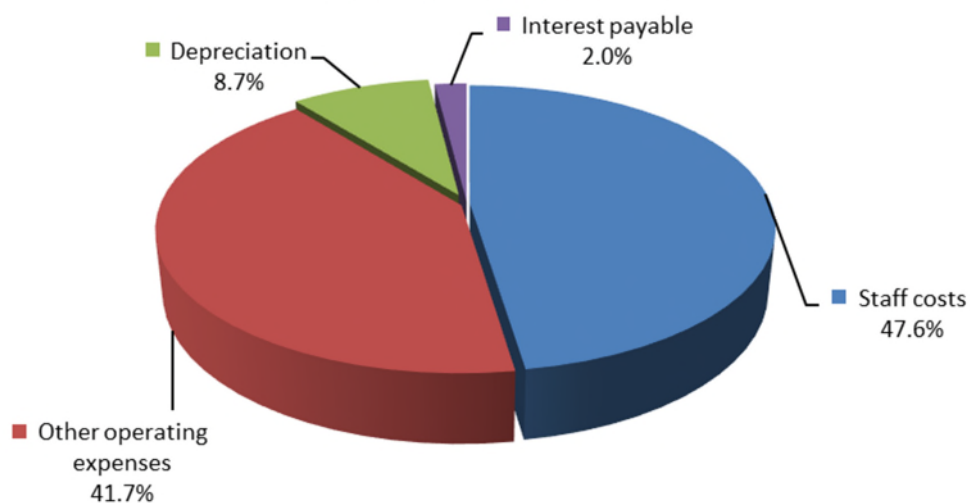
The statement of consolidated cash flow shows a decrease in cash of £14,014,000. Net cash inflows from operating activities were £12,032,000. The overall decrease in cash was mainly as a result of the £28,825,000 of capital additions during the year.

Consolidated total reserves increased by £39,659,000 (2022 – £25,874,000) as explained in the statement of changes in reserves on page 57.

### INCOME 2023



### EXPENDITURE 2023





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**Pensions**

The University implemented the provisions of FRS 102 in 2015 and therefore continues to take onto the consolidated balance sheet the actuarial valuation of the pension liability in respect of its share of the Bedfordshire County Council Pension Fund. It also has to recognise on balance sheet the obligation for its share of the University Superannuation Scheme (USS) deficit recovery plan. The USS has deficit recovery plans in place covering the period following each triennial valuation which include additional employer contributions to correct the shortfall in the scheme.

The total USS pension deficit across the sector has been calculated by the USS Actuaries. The University share of the deficit has been estimated through the use of the British Universities Finance Directors Group (BUFDG) calculator as at 31 July, 2023 and there is a net pension liability of £44,084,000 (2022 - £48,089,000) applicable to the University. Details are provided in Note 22.

The share of underlying assets and liabilities of the Local Government Pension Scheme (LGPS) is able to be identified as at 31st July, 2023 the scheme actuaries have identified that there is a net pension surplus of £1,115,000 (2022 deficit – £40,939,000) applicable to the University. The surplus has not been recognised in accordance with the Universities accounting policy. Details are provided in Note 22.

**Trading activities of subsidiaries**

The subsidiary companies are financially independent from the University and undertake certain teaching, research, residential and Airport activities for the University. A full list of subsidiaries is provided in note 12.

On the 11<sup>th</sup> August, 2022 Cranfield Aerospace Solutions Ltd issued further preference shares to Tawazun Strategic Development Fund and Motus Ventures generating an investment of £3,833,333. This reduces the Cranfield Group Holdings Limited investment in Cranfield Aerospace Solutions Limited to 23.98% on an undiluted basis and 16.89% of the shares on a fully diluted basis.

**Liquidity and borrowing**

The University has seen the total of its cash and cash equivalents decrease during the year from £14.1 million at 31 July 2022 to £4.9 million at 31 July 2023. This is primarily as a result of a £28.8 million spend on capital infrastructure during the year, £21.9 million of which was from third party funding. Correspondingly, University borrowings decreased by £1.5 million with the Salix loan now having been repaid. Unsecured borrowings at 31 July 2023 were £152.2 million compared to £153.7 million at 31 July 2022.

The University will ensure that an appropriate minimum cash level is maintained for working capital purposes.

**Payment of creditors**

It is the University's policy to obtain the optimum terms for all business and, thus, there is no single policy as to the terms used. The University looks to use small and local suppliers where appropriate and looks to pay them within two weeks of invoice wherever possible. In agreements negotiated with other suppliers, the University endeavours to include and abide by specific payment terms in accordance with best commercial practice.

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**Principal risks and uncertainties**

The University maintains a dynamic Major Risks Register with proactive controls and has a range of embedded measures and spread of risk ownership among the Senior Management Team focusing the overarching risk of not delivering the Corporate Plan, alongside 12 particular strategic risks. Currently the most important strategic risks as identified by the Major Risks Register are as follows :-

*Overarching*

- the underpinning corporate strategies and key performance indicators (as reported on page 13) included within the Corporate Plan – Ambition 2027 are not achieved;

*Strategic*

- adverse impact of external environment, increasingly including geopolitical matters, on income growth, cost base and financing including short term inflation pressures, particularly on staff and energy costs;
- current business model and organisational size impacts adversely on the University's ability to capitalise on major growth opportunities, providing excellent student experience and future investment;
- changing nature of education including government led changes to undergraduate, postgraduate, apprenticeships and "international matters".

The University mitigates these major risks by a range of interventions including the following which seek to mitigate the four risks noted above:-

- close monitoring of progress in all seven key performance indicator areas together with a clear Executive level of understanding of risk appetite for each area.
- close monitoring of all key areas of expenditure including interventions to reduce costs. The University continues to seek short term high margin income streams through specific project initiatives;
- progress delivery of strategic opportunities such as MK:U and the Marshall Air Park projects. Identify emerging high growth areas / partnerships and invest where appropriate;
- strong interaction with Universities UK, the Office for Students and Research England. Robust and timely market intelligence.

During the year, following approval of the new Corporate Plan, Cranfield has been developing a clearer risk and resilience framework drawing on expert advice and emerging best practice to further strengthen its position. The Executive has spent time during 2022/23 exploring and understanding the University's risk appetite and detail work on clarification of impact categorization and scoring in relation to the Corporate Plan.

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**Public Benefit report**

The University is an exempt charity under the terms of the Charities Act 2011. The objects of the University are to:

- advance, disseminate and apply learning, knowledge and understanding with particular emphasis on the disciplines of the Sciences, Technology, Engineering and Management; and
- promote and encourage the transformation and application of that wisdom, knowledge and learning for the benefit of industry, the public services, and individuals and for the public benefit.

In reviewing the University's activities, Council has had due regard to the Charity Commission's guidance on the reporting of public benefit as amended in 2014.

Cranfield makes a significant contribution to many of the specific examples of charitable activities highlighted in section 3 of the 2011 Act. These include:

**the advancement of education;**

- Cranfield School of Management launched new Global Online Stackable Programmes, with entry-level modules open to all. The initiative recognises the increasing need for lifelong learning, structured around new flexible working styles.
- Cranfield launched the first 3DEXPERIENCE Edu Centre of Excellence in the UK with Dassault Systèmes Partners. This provides experiential, initial and lifelong learning to support the current and future aerospace workforce.
- A number of new scholarships were launched. The Fédération Internationale de l'Automobile (FIA), the international governing body for Formula One, launched its first engineering scholarship with Cranfield. It aims to remove financial barriers for entry and make it possible for a talented young engineer from one of the FIA regions to obtain a Master's in Advanced Motorsport Engineering from Cranfield. With support from Green Future Investments Limited, Cranfield launched 24 fully funded scholarships available to green businesses to cover course fees for its Ready for Net Zero Growth programme. Cranfield partnered with Global Clinical Supplies Group to launch a new scholarship, running for four years, for its Logistics and Supply Chain Management MSc.
- 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 was awarded the Small Business Charter Award. This 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.
- Over 1,000 apprentices are studying with Cranfield for a range of higher apprenticeship standards. Following an initial monitoring visit in October 2022, Ofsted inspectors highlighted Cranfield's high-quality curriculum, the support and expert staff that learners have access to, and the career progression that apprentices go on to achieve.

**the prevention or relief of poverty;**

- Cranfield research has demonstrated how a low-cost polymer can reduce wastage in fine bean harvests in Kenya. The innovation could lead to greater financial security for smallholder farmers.
- SAFAD, a charity run by students of Cranfield University, has sent over 340 Cranfield graduate and post-graduate volunteers to almost 40 countries since it was established in 1969. The volunteers work with local organisations to help develop sustainable livelihoods and relieve poverty.

# CRANFIELD UNIVERSITY

## STRATEGIC REPORT

FOR THE YEAR ENDED 31ST JULY, 2023

(continued...)

### **the advancement of health or the saving of lives;**

- Cranfield research into mental health services in rural areas found that urgent attention is needed to ensure the needs of farmers are properly met. It raised concerns around what the researchers call 'landscapes of support', with civil society organisations fighting to support farmers alongside primary mental healthcare services which are sometimes inaccessible and inadequately suited to rural communities.
- During COP27, as part of the Biotechnology and Biological Sciences Research Council series *Climate Change Bites*, Cranfield delivered a webinar focused on the food cold chain and reducing food waste. The 'No Time To Waste' webinar was hosted by Cranfield and chaired by BBC Future's William Park.

### **the advancement of citizenship or community development;**

- We consider the social, community and environmental consequences of all our activities. The University organises, sponsors and supports a variety of public engagement events in which staff are actively encouraged to participate.
- Many of our staff are engaged in a wide range of public engagement and outreach activities on an individual basis.
- Our worldwide community is a powerful professional network with students and learners from 177 countries. We have over 30 international alumni communities across the world, including China, India, Switzerland and Brazil.

### **the advancement of the arts, culture, heritage or science;**

- A team of researchers led by Cranfield University discovered what is believed to be the earliest evidence of wine drinking in the Americas, inside ceramic artefacts found on the Island of Mona in the Caribbean. These findings shed new light on the dietary changes and cultural exchanges in the Greater Antilles prior to and after European arrival.
- A Cranfield University-led project excavating a fortress site in southern Georgia aims to uncover why communities in this area were more resilient than in some other parts of the world at the end of the Bronze Age – a period of significant change, around 1200 BC.
- Thousands of photos of Cranfield University's early days in aviation will be digitised thanks to a grant provided by Archives Revealed, a partnership programme between The National Archives, The Pilgrim Trust and the Wolfson Foundation. Cranfield's grant means 20,000 of some 100,000 negatives will soon be available for the public to view on the university's website. Photos include aircraft of international significance during the early years of Cranfield.
- A team from Cranfield Forensic Institute assisted with the recovery and identification of U.S. Army Air Forces Staff Sgt. Edgar L. Mills, who was killed in action over Germany during the Second World War. This was conducted as part of the first collaboration with the U.S. Defense Prisoner of War/Missing in Action Accounting Agency (DPAA). Staff Sgt Mills was buried in Arlington National Cemetery on 4 May 2023.

### **the advancement of human rights, conflict resolution or reconciliation or the promotion of religious or racial harmony or equality and diversity;**

- A report by Cranfield experts, published by the Financial Reporting Council (FRC), examined the barriers to senior leadership for people from minority ethnic groups in FTSE 100 and FTSE 250 companies. The report showed that while there are still significant challenges to be addressed, the impetus for change has been taken seriously across the spectrum of principal stakeholders, including senior managers, executive leaders, board chairs and executive search consultants.
- Cranfield University and Regional & City Airports (RCA) launched a pioneering 360-degree video experience to help passengers with additional requirements prepare for their visits to airports. As one of the first examples of using this technology for this purpose in the aviation industry, the initiative has the potential to improve the experience for millions of passengers who face accessibility challenges when travelling by air in the UK.
- Experts from Cranfield School of Management joined leading business schools from Germany, the UK and the Netherlands to run a virtual Women in Leadership event, giving practical tips to help women navigate their careers into leadership positions.

## CRANFIELD UNIVERSITY

### STRATEGIC REPORT

FOR THE YEAR ENDED 31ST JULY, 2023

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#### **the advancement of environmental protection or improvement;**

- Cranfield University will receive a £3 million donation over the next three academic years to develop the next generation of leaders committed to creating a sustainable planet, and support research and business initiatives focused on tackling climate change and achieving net zero. The donation has been provided by Green Future Investments Ltd (GFIL), an organisation established to continue the environmental work and legacy of entrepreneur and ex-IBM engineer Brian Meredith.
- More than 3,000 trees were planted in Bedford as part of a Miyawaki forest project involving Cranfield University. Bedford had its first Miyawaki trees placed in the ground through a partnership between Bedford Borough Council, Cranfield University, the Forest of Marston Vale, and Bedford Rotary Club. The project is part of the Department for Environment, Food and Rural Affairs' funded Trees for Climate initiative.
- Cranfield University is part of a European-wide research collaboration geared towards designing a quick and effective simulation model for carbon capture technology. The project will seek to standardise the technological approach to Capture, Utilisation, and Storage (CCUS) - saving companies time when estimating the cost of their plans to address carbon emissions.

#### **the promotion of the efficiency of the armed forces of the Crown, or of the efficiency of the police, fire and rescue services or ambulance services;**

- The Chartered Society of Forensic Sciences (CSFS) and Cranfield Forensic Institute (CFI) are collaborating to recognise forensic specialists within the UK Armed Forces who deal with incidents involving hazardous materials. Cranfield University, through its partnership with the Ministry of Defence at the Defence Academy of the United Kingdom, launched the initiative to recognise specialist counter chemical, biological, radiological and nuclear (CBRN), and selected explosive ordnance disposal and search staff as professional level members of CSFS.
- Cranfield University is a key academic signatory to a new strategy detailing how military aviation will contribute to the Government's Net Zero 50 goal. The Defence Aviation Net Zero Strategy outlines the steps necessary to meet the commitment to decarbonise Defence's aviation capability, whilst also mitigating potential risks to operational effectiveness that are likely to arise because of climate change.
- Cranfield University and the National Crime Agency (NCA), which leads the UK's fight to cut serious and organised crime, have signed a Memorandum of Understanding to share expertise and collaborate on projects of mutual interest.

Cranfield'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.

Ambition 2027, our new Corporate Plan, was launched in 2022. Guided by our vision, mission, values, the UN Sustainable Development Goals and our sector-facing themes, the plan defines Cranfield University's ambitions for the next five years.

There are four areas of focus: to be an employer of choice; to be a partner of choice; to create the UK's applied research powerhouse; and to create distinctive Cranfield learners.

Our activities are undertaken in support of the University's aims, as referenced in our Charter, and the strategic direction, as outlined in our Corporate Plan, Ambition 2027.

Cranfield awards around 2,500 degrees each year, giving our graduates a learning experience which provides them with the opportunity to join some of our distinguished alumni as leaders in their fields. Over 5,800 people come to Cranfield each year to benefit from our executive and professional development programmes.

Our alumni include Warren East, former CEO of Rolls-Royce; John McFarlane, Chairman of Westpac and former Executive Chairman of Barclays; Omobola Johnson, Senior Partner at TLCom Capital LLP and former Minister for Communication Technology, Nigeria; Air Marshal Dame Susan Gray DBE CBE FREng, Engineer and Senior Royal

## CRANFIELD UNIVERSITY

### STRATEGIC REPORT

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(continued...)

Air Force Officer; Chris Hopson, Chief Strategy Officer, NHS England; Zak Hydari, Chief Executive of Rasmala Group, one of the largest managers of sharia-compliant funds in the world; Dr Clifford Braimah, Managing Director, Ghana Water Company, Dean of the School of Engineering, Tamale Technical University; Dr Sarah Quereshi, CEO at Aero Engine Craft, developing contrail-free aero-engines; Charan Sekhon MBE, Senior Environment Officer and EDI Project Coordinator, Environment Agency and Founder and Chairman, Social Education Voluntary Association (SEVA) Trust UK; Dr Winnie Byanyima, Executive Director, UNAIDS, former Executive Director, Oxfam International and former Director of Gender and Development, United Nations Development Programme; Aishah Ahmad, Deputy Governor, Central Bank of Nigeria; Neil Heslop, CEO, Charities Aid Foundation.

Throughout 2022/23, we have continued to develop new facilities and bolster our infrastructure to further enhance the delivery of our mission:

- Air source heat pumps have been installed, funded through the Phase 3a of the Public Sector Decarbonisation Scheme. The works included the full design and build of electrical and mechanical services installation of two combined 1MW air source heat pumps and a 1MW water source heat pump to provide renewable heat and reduced gas consumption to the campus heating system.
- A disused 4,000 square metre car park plot has been transformed into an innovative energy saving hub. The project installed a 900 kW ground-mounted solar plant, delivering CO<sub>2</sub> emission savings of an estimated 377,421 kg/year, aiding the University's goals to tackle climate change and take greater control of its energy independence.
- Two pre-WWII RAF hangars at Cranfield are undergoing a major refurbishment to improve their energy efficiency and carbon footprint. The work is being made possible by an award through the Public Sector Decarbonisation Scheme which is funded by the Department for Business, Energy and Industrial Strategy and delivered by Salix Finance. Once complete, the heating demand of the buildings will be reduced by 75 per cent and the carbon footprint reduced even further when connected to the district heating newly fitted with air source heat pumps, also funded through the project.
- Cranfield University will establish a new national centre for the research of waste derived fuels from the environment sector. The National Environment Sector Decarbonisation Accelerator (NESDA) test facility will be the first of its kind dedicated to developing synthetic fuels and zero carbon fuels from waste. These new fuels will help to decarbonise heating and transport, two challenging areas which must be addressed to achieve net zero.
- A new multi-million pound antenna, radar and wireless communications facility, operated by MK:U, the new model university for Milton Keynes being developed in partnership by Milton Keynes City Council and Cranfield University, has been opened. The cutting-edge research laboratory, with a team of experts in place, is set to help businesses in the region test and develop new radio frequency products, with expected applications in aerospace, healthcare, space and mobile telecommunications.

Work continues on the development of MK:U, a proposed new technical university in Milton Keynes led by Cranfield in partnership with Milton Keynes Council.

MK:U is partnering with Santander UK to develop the skills of the future for its workforce and for the local community in Milton Keynes. From 2023, Santander will invest over £1 million in apprenticeship levy funding for use by businesses to upskill and reskill their staff. The announcement is part of Santander UK's scholarships, skills and entrepreneurship programme which aims to help people access the educational opportunities and skills they need to fulfil their potential.

None of what we achieve as a University would be possible without the dedication and commitment of our staff to realising the ambitions of our institution:

- Cranfield achieved national award success with two engineers named in the top 100 of the prestigious 2023 Top 50 Women in Engineering Awards.

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(continued...)

- Dr Yifan Zhao, Reader in Data Science at Cranfield University, received an Industrial Fellowship from The Royal Academy of Engineering. Through the Fellowship, and in partnership with construction and civil engineering company BAM Nuttall, Dr Zhao will use artificial intelligence (AI) and a digital twin of construction machinery to help improve energy efficiency in the sector.
- Dr Rachael Hazael, Senior Lecturer in Advanced Protective Materials at Cranfield Forensic Institute, was shortlisted in the Innovation and Creativity Award category of the 2022 Women in Defence UK Awards. Dr Hazael's research focuses on the response of materials to impact and blast events within both security and defence contexts.
- Cranfield School of Management's Professor Emma Parry became the Chair of the British Academy of Management, the leading authority in the academic field of management in the UK.
- Dr Jacqueline Hannam was appointed President of the British Society of Soil Science, an international organisation and charity committed to the study of soil.

As an institution, we aim to spread knowledge and learning not just to our learners and research partners but to the wider public:

- Cranfield staff have inspired and encouraged young people to study STEM subjects. Four schools in Milton Keynes were visited by experts to share knowledge about materials engineering. The University received a grant of £30,000 for this from the Royal Academy of Engineering, part of its *Ingenious* awards, which aim to reach underrepresented audiences and change perceptions of engineering.
- School pupils in Bournemouth became flight engineers for the day with a special visit from Cranfield's National Flying Laboratory Centre, in collaboration with Bournemouth Airport.

### **Employee engagement**

Engagement with our staff community remains a priority for the University and aligns to our People Strategy and our ambition to be an 'Employer of Choice'. As an Employer of Choice, we want to have an inclusive culture where everyone can flourish and contribute towards our success and for colleagues to feel part of a diverse, skilled and ambitious community who are empowered and engaged within a collaborative, supportive and safe working environment, one which prioritises the wellbeing of our staff.

This year we have focused on embedding our People Strategy, establishing several new staff ED&I networks, publishing our Equity, Diversity and Inclusion Strategy and introducing a new tool 'Report + Support' through which staff can raise concerns. Some of the key actions over the past year include:

- promoting and embedding our Corporate Plan and the underpinning Strategies, holding drop-in sessions last year for staff to come along and ask questions and understand how they can contribute to the success of Cranfield.
- publishing our Equity, Diversity and Inclusion Strategic plan for 2023 – 2027. The plan articulates our ambition for EDI over the next five years and weaves these golden threads into one clearly articulated set of objectives, supporting us to build on our culture of inclusion and improve our diversity.
- measuring and tracking staff engagement and wellbeing through regular pulse surveys. Our last pulse survey showed that 84% of staff felt proud to work at Cranfield. The University also saw a significant improvement in staff feeling we are making progress with our EDI agenda (+8%).
- as part of our ambition to develop a culture where it is 'safe to speak up' and challenge inappropriate behaviours, we have introduced Report + Support. This online tool complements our existing provision providing a straightforward, accessible, and safe channel for staff and students to report incidents of unacceptable behavior. This can be done either anonymously or with contact details. One of the key benefits of adopting this tool, is the ability to bring together cohesively the various strands that create a safe study and work environment.
- formulating a joint ED&I and Wellbeing Committee to report annually through Executive to Council, for overall transparency and accountability.

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(continued...)

- setting up two new staff networks to promote further staff engagement in broader areas of diversity. The new networks are Q at Cranfield, our staff network for our LGBTQ+ community and allies and a Parent and Carer Network providing support for those with caring responsibilities. These are in addition to our existing networks to include Step-Up Network, Cranfield Disability Network and EmbRace.
- establishing the University Executive's Forum to widen diversity at a management level and as a forum to share best practice across the University and engage with initiatives referred to it by our Executive.
- meeting regularly with the recognised Trade Unions to promote engagement and discuss proposed decisions on various topics for example workload and pay gaps.
- continuing with our Vice Chancellor Live events with question-and-answer sessions for staff during which the Vice Chancellor and members of the senior management team provide topical updates on University activities and respond to live staff questions.
- staff meetings were also held regularly in the four schools and individual professional service units.
- issuing regular communications, including the staff e-bulletin and 'news and highlights' on our Intranet pages.
- holding regular all staff School/PSU meetings in addition to a number of local events, such as Team Days and social events to bring the community together again on a face-to-face basis.
- We have a planned calendar of events in relation to general health and wellbeing, aligning where possible to National Campaigns. As part of this we have continued with our monthly 'Happy to Chat' coffee mornings which bring people together, from differing areas of the University, in an informal manner. Staff have reported they value these sessions highly and they promote positive relationships across the university.
- introduction of lunchtime nature/environment walks, tennis and badminton sessions.
- organising 'Step' challenges during the year to include bringing together more than 90 colleagues from across the University to take part in a virtual Land's End to John O'Groats step challenge. Collectively, the steppers did a total of 40,804,990 steps, or the equivalent of more than one full trip around the world!
- we have continued to support our programme of training for additional staff to become Mental Health First Aiders to boost our current regularly accessed provision.

#### Employment of disabled persons

Applications by disabled persons for employment and for admission to courses of study or research are always fully considered, bearing in mind the aptitudes of the applicant concerned. In the event of existing staff and students becoming disabled every effort is made to ensure that their employment or study with the University continues and that appropriate training and support is arranged. It is the policy of the University that the training, career development and promotion and opportunities to undertake study and research should, as far as possible, be identical for all staff and students.

#### Health and Safety

The University is committed to providing a safe and healthy environment by taking effective means to manage our risks and protect people from being harmed. There is a process of continuous improvement through a programme connected to the University having ISO 45001 Health and Safety Management accreditation across the University in all areas of work and study. The University first achieved full accreditation under OHSAS 18001 in July 2016 and has been re-accredited for ISO 45001 in 2021. Since the start of the pandemic the University has taken the opportunity to undertake a number of initiatives with respect to the mental health of staff and students.



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### STRATEGIC REPORT

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(continued...)

#### Modern Slavery and Human Trafficking

The University is committed to improving practices to combat slavery and human trafficking and supports the UK Government's approach to implementing the UN Guiding Principles on Business and Human Rights.

In implementing this approach the University supports the Base Code of the Ethical Trading Initiative. This Base Code is an internationally recognised code of labour practice requiring that:

- Employment is freely chosen
- Freedom of association and the right to collective bargaining are respected
- Working conditions are safe and hygienic
- Child labour shall not be used
- Working hours are not excessive
- No discrimination is practiced
- Regular employment is provided
- No harsh or inhumane treatment is allowed

#### Trade Union Facility Time

##### *Background*

Our Trade Union Facility Time data, shown below, has been prepared in accordance with our duty under Section 13 of the Trade Union Act 2016. The data has been collated and extracted from our HR & Payroll database and covers the 12 month "relevant period", which is the 12 months from 1 April to 31 March every year, with the current period being from 1 April 2022 to 31 March 2023.

At Cranfield there are three Unions who are recognised for consultation and negotiation purposes, these being UCU, Unite and Unison.

**Table 1 - Relevant union officials**

Total number of our employees who were relevant union officials during the relevant period?

Number of employees who were relevant union officials during the relevant period	Full-time equivalent employee number
12	10.4

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(continued...)

**Table 2 - Percentage of time spent on facility time**

Number of employees who were relevant union officials employed during the relevant period spent a) 0%, b) 1%-50%, c) 51%-99% or d) 100% of their working hours on facility time?

<i>Percentage of time</i>	<i>Number of employees</i>
0%	3
1-50%	9
51%-99%	0
100%	0

**Table 3 - Percentage of pay bill spent on facility time**

Figures determining the percentage of the total pay bill spent on paying employees who were relevant union officials for facility time during the relevant period.

Provide the total cost of facility time	£20,673
Provide the total pay bill	£98,897,446
Provide the percentage of the total pay bill spent on facility time, calculated as: (total cost of facility time ÷ total pay bill) x 100	0.02%

**Table 4 - Paid trade union activities**

As a percentage of total paid facility time hours, the number of hours spent by employees who were relevant union officials during the relevant period on paid trade union activities?

<i>Time spent on paid trade union activities as a percentage of total paid facility time hours calculated as: (total hours spent on paid trade union activities by relevant union officials during the relevant period ÷ total paid facility time hours) x 100</i>	<b>13.42%</b>
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## CRANFIELD UNIVERSITY

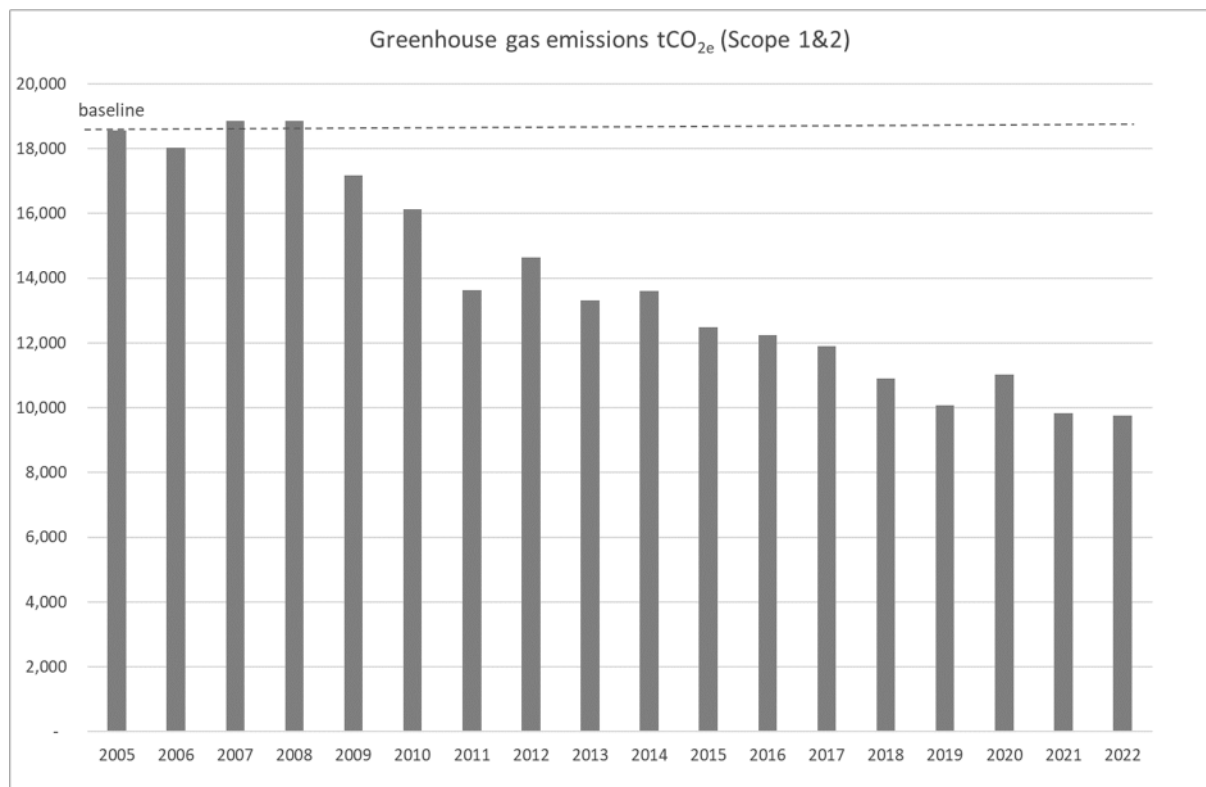
### STRATEGIC REPORT

FOR THE YEAR ENDED 31ST JULY, 2023

(continued...)

#### Streamlined Energy and Carbon Reporting (SECR) and Carbon Management Plan

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.



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.

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STRATEGIC REPORT

FOR THE YEAR ENDED 31ST JULY, 2023

(continued...)

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 2022/2023

Fuel Type	Energy Purchased kWh		tCO <sub>2e</sub>				
	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	239.1	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
<b>Sub-Total</b>	<b>51,144,244</b>	<b>53,688,908</b>	<b>6,769.0</b>	<b>2,763.5</b>	<b>239.1</b>	<b>9,771.6</b>	<b>9,827.5</b>
Business Travel (miles) (rental/employee owned vehicles where fuel is purchased)	254,122	110,013			108.8	108.8	69.6
<b>Total Gross tCO<sub>2e</sub></b>			<b>6,769.0</b>	<b>2,763.5</b>	<b>347.9</b>	<b>9,880.4</b>	<b>9,897.1</b>

The Intensity Ratio in 2022/23 for all emissions reported in table is 4.49 tCO<sub>2e</sub>/£100,000 turnover. In 2021/22 it was 4.92 tCO<sub>2e</sub>/£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 (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](http://www.cranfield.ac.uk).

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**FOR THE YEAR ENDED 31ST JULY, 2023**  
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### **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 in recent years in emissions and a large investment in clean technology through the Public Sector Decarbonisation Scheme. As part of development of the residential estate further tree planting has been taking place through the Trees for Climate scheme and an innovative "Tiny Miyawaki Forest" has also been established. The University has reported on its contribution to the Sustainable Development Goals through the THE Impact Awards.

### **Outlook for 2023/2024**

Cranfield will continue to develop its thematic offerings in Aerospace, Defence and Security, Energy and Power, Environment and Agrifood, Management, Manufacturing and Materials, Transport Systems and Water, supported by the University's professional service units.

The University is forecasting to increase its operating surplus following the pandemic and the significant inflationary pressures of the last eighteen months. This is supported by a record research order book in 2022/23, a forecast return to pre-pandemic levels of professional development income and a reduction in future pension payments to the USS pension scheme following its March 2023 tri-annual valuation.

Cranfield will continue to utilise all appropriate Government Coronavirus schemes during the year to the extent relevant and available. Two smaller subsidiaries had taken out CLBILS loans in 2020 and will make the final repayments during 2023/24.

As part of the Council's consideration of the appropriateness of adopting the going concern basis in preparing the financial statements, a severe scenario has been reviewed by the Finance Committee. The assumptions modelled are based on reductions in student registrations, reductions in Government funding and delays in the delivery of research programmes. For each income stream the University has sensitised the revenue, profit and cash flow impact of reduced trading activity. The scenarios are most sensitive to the assumptions made for student numbers. The University has assumed a decreases in student numbers for both UK and international students for the purpose of the scenario modelling. A key judgement applied is the willingness of international students to travel to the UK given present geo-political uncertainties. Our severe scenario deficit would likely lead to a deficit of £6 million based on these assumptions prior to mitigating actions. Under this scenario, mitigating actions are all within management control, can be initiated as they relate to discretionary spend and do not impact the ability to meet demand. These actions include the stopping of all non-essential and non-committed unfunded capital expenditure in the next 12 to 18 months. It has been assumed that no significant structural changes to the business will be needed in the scenario modelled. As at 31 July 2023, the consolidated statement of financial position reflects a net asset position of £105 million with fixed assets included at historic cost which are included at £205 million for buildings the University owns which compares to their insured value of £470 million.

New educational initiatives continuing in 2023/24 include the further development of MK:U that is now based in Central Milton Keynes and provides undergraduate courses in business and STEM subjects aligned to both Milton Keynes and Cranfield.

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With regard to capital expenditure, Cranfield has continued to be successful in winning high profile investment bids for the development of facilities and should see further energy saving facilities come on line during 2023/24.

**Conclusion**

During the year 2022/23 the University successfully grew its intake of students by 3.9% which helped to offset further significant increases in utility costs and the impacts of general inflation. This has continued to be a difficult financial trading period and addressing this remains a significant focus for the Executive, but despite these challenges the University has continued to grow its community spirit as staff and students work together to deliver Ambition 27.

The University has had further success with its infrastructure funding bids to support its Estates strategy and the Corporate Plan and is confident that, through its thematic approach to research, education and executive development, it will continue to add significant value for its students, business and government partners and for the wider public benefit.

Ian Hart ACA  
Chair of Finance Committee

## **CRANFIELD UNIVERSITY**

### **CORPORATE GOVERNANCE**

The University is committed to following best practice in all aspects of corporate governance and is in full compliance with the CUC Higher Education Code of Governance as updated in 2020. The following statement is given to enable readers of the financial statements to obtain a better understanding of the legal structure of the University and the governance procedures applied by the University's Council.

In March 2013, Her Majesty The Queen in Council approved revisions to the University's Charter and Statutes. The primary impact of these revisions on governance was to make the University Council the unambiguous governing body for the University, in line with the governance guidelines of the Higher Education Funding Council for England. Following the approval of the Charter and Statutes, Council approved a revised set of Ordinances and Senate approved new Regulations; together, the Charter, Statutes, Ordinances and regulations make up the University Laws.

Council's functions, as articulated in the Charter, are to: be ultimately responsible for the affairs of the University; determine the strategic direction of the University; ensure the effective management and control of the University's affairs, property and finances; determine the structure, staffing and overall composition of the University; appoint the Pro-Chancellor; and appoint and dismiss the Vice-Chancellor.

The principal academic and administrative officer of the University is the Chief Executive and Vice-Chancellor who has a general responsibility to the Council for maintaining and promoting the efficiency and good order of the University. Under the terms of the formal Financial Memorandum between the University and the Office for Students terms and conditions of funding, the Vice-Chancellor is the accountable officer of the University and in that capacity can be summoned to appear before the Public Accounts Committee of the House of Commons.

The matters specially reserved to the Council for decision are defined by the University Laws and by custom in line with the Financial Memorandum with the Office for Students terms and conditions of funding.

The Council has a majority of members from outside the University, (described as independent members), from whom the Chair and Deputy Chair must be drawn. Also included in its membership are staff of the University and a member nominated by the student body. The composition of the Council and the procedures for appointment of members, their tenure and removal from office, are determined by the Statutes of the University.

The Council meets at least four times a year and has four standing Committees, Finance, Nominations, Remuneration and Audit. Each of these Committees is formally constituted with terms of reference and comprises mainly independent members of the Council.

## CRANFIELD UNIVERSITY

### CORPORATE GOVERNANCE

(continued ...)

- **Finance Committee** - meets at least four times a year and, inter alia, recommends to the Council the University's annual revenue and capital budgets and monitors performance quarterly in relation to the approved budgets. The Committee also reviews the University's annual financial statements for reporting to the Council.

Attendance of members during the year is outlined below:

	No. Of Meetings Entitled to Attend	No. of Meetings Attended
Mrs Lesley Chen Davison	4	3
Mr Colin Day	4	3
Mr Ian Hart	4	4
Professor Karen Holford	4	4
Dr Simon Rowlands	4	4

- **Nominations Committee** - considers nominations for vacancies in the independent membership of Council under the relevant Statute and makes recommendations to the Council for such appointments.
- **Remuneration Committee**

#### *Terms of Reference for the Remuneration Committee*

The Remuneration Committee at Cranfield, established by Council, has delegated authority to determine the Executive Reward Strategy, setting and reviewing the salaries and other emoluments, terms and conditions and where appropriate, severance payments of the Executive, to include the following members of staff:

- a. The Chief Executive and Vice-Chancellor;
- b. Members of the University Executive;
- c. Such other members of staff as decided by Council.

The Remuneration Committee also have oversight of the remuneration of all staff earning £100,000 or more.

While the primary focus of the Remuneration Committee are the internal relativities and needs of Cranfield University, comparable information on salaries and other emoluments both within the University sector and as appropriate, the wider market, are considered.

#### *Remuneration Committee Membership*

The membership of the Remuneration Committee as of 31 July 2023 comprise the following members of Council:

- Chair of the Remuneration Committee - Miss Caroline Carter, former partner of Ashurst LLP
- Chair of the Finance Committee – Mr Ian Hart, Director General at The Takeover Panel
- Dr Jaz Saggu, Chair, Watmos Ltd; INED for Saffron Building Society, BHSF Group Ltd and INED, A2 Dominion
- Mr Simon Rowlands, retired Co-Founder of Cinven, Founder of Africa Platform Capital, Board member of British International Investments and Spire Healthcare.



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*(continued ...)*

Advisory services for the Committee are provided by the Director of People and Culture and/or their nominated representative. The Director of People and Culture is a member of the University Executive and as such, is not in attendance for the discussion of her remuneration or targets.

The Pro-Chancellor, Mr Iain Ferguson is in attendance at the Remuneration Committee meeting but is not a member.

The Chief Executive and Vice-Chancellor is in attendance at the Remuneration Committee for consideration of remuneration for her direct reports but is not a member. She is not present for the discussion of her remuneration.

The Remuneration Committee meets three times a year and any three members present will constitute a quorum.

Attendance of members between August 2022 and July 2023 is detailed below:

	No. Of Meetings (Aug 22-Jul 23)	No. Of Meetings Entitled to Attend	No. of Meetings Attended
Miss Caroline Carter	3	3	3
Mr Ian Hart	3	3	2
Dr Jaz Saggu	3	3	3
Mr Simon Rowlands	3	3	3

***Key decisions taken by the Remuneration Committee between August 2022 to July 2023***

In line with the Remuneration Committee's Terms of Reference and our cyclical standing agenda, three meetings were held during the year, with any interim updates to the Committee via paper circulation as appropriate.

The Remuneration Committee agreed previously that there may be occasions where in exceptional circumstances an 'out of cycle' salary review needs to occur and that such reviews could be managed through paper circulation to the Committee membership. It is noted no exceptional cases were circulated to the Committee during this reporting year.

**October 2022**

The October meeting typically concentrates on the review of performance of the University and individual members of the Executive during the year and the resulting agreement of any pay increases and bonus payments.

At the October meeting, the Remuneration Committee reviewed progress against the corporate and individual objectives considering both qualitative and quantitative measures for the Executive and agreed performance against the corporate scorecard at 80%. In addition, the financial moderator, which was introduced during 2022 to **drive positive behaviours and key priorities, specifically financial performance and cash flow, was** provisionally set for the Remuneration Committee to consider appropriate adjustments.

It was noted by the Committee that the **Executive** had performed well and that exceptional performance should be acknowledged, in line with the wider University pay principles. **The Committee agreed it was appropriate for** bonus payments to be made to all members of the Executive including the Chief Executive and Vice-Chancellor, based on their performance, both at a corporate and individual level.

One salary uplift was also agreed due to a change in responsibilities.

## CRANFIELD UNIVERSITY

### CORPORATE GOVERNANCE

*(continued ...)*

The Committee also discussed whether a cost-of-living adjustment should be applied to the Executive (the payment of any cost-of-living increase for the Executive is decided on a discretionary basis by the Committee, every October). It was agreed for this year, that in line with the University cost of living increase, a flat rate increase of £1,750 should be applied to salary, effective from 1 October 2022.

To assist the above decision-making, the Committee received the following background documents:

- Summary salary report including the Chief Executive and Vice-Chancellor and other members of Executive, detailing basic salary and other emoluments.
- Performance and development review documentation for members of the Executive, detailing individual and corporate scorecards and a qualitative performance assessment against wider behavioural characteristics.
- Performance and development review documentation for the Chief Executive and Vice-Chancellor undertaken by the Pro-Chancellor and Chair of Council.
- A detailed report providing a general overview on pay, both within the sector and wider, together with independent salary data/benchmarks relevant to the roles within the Remuneration Committee remit. Cranfield typically benchmarks against Russell Group institutions and leading Business Schools. The information was compiled using the Committee of University Chairs report on Vice-Chancellors pay, the Universities and Colleges Association Senior Staff Remuneration Survey and data from sector pay experts at Korn Ferry.
- Summary report on basic salary and other emoluments for the Senior Management Team and staff earning over £100,000.

#### April 2023

The April Remuneration Committee meeting allows for strategy and policy decisions together with an overview of progress towards the plan for next year, alongside any other business.

At the meeting, the University presented the recently published pay gap reports for both gender and ethnicity, alongside relevant benchmark data from the higher education sector. While the University have been reporting on gender for a number of years in line with statutory obligations, this was the first time the University had published the pay gap figures for ethnicity. Both reports were duly noted by the Committee and various scenarios were discussed as to how the University might make a meaningful impact on the pay gaps. The Committee agreed that the ethnicity pay gap report, which had been published on a voluntary basis, provided a useful base line for the University regarding future targeted initiatives.

The University also provided for context, an overview of the challenges facing the HE sector at present, alongside the Cranfield perspective focusing on pay and reward, to include further details on the pay framework review by Korn Ferry, the early pay negotiations with Cranfield's recognised Trade Unions and the annual review process.

#### July 2023

The July Remuneration Committee meeting typically focuses on target setting for the forthcoming year.

The Committee reviewed the strategic targets and objectives for each member of the Executive Team for forthcoming financial year (including our ED&I related objectives aligned to our Equity, Diversity and Inclusion Plans and People Strategy) and these will be finalised at the October 2023 meeting.

The Remuneration Committee's Terms of Reference were also discussed, with no amendments recommended.

**CRANFIELD UNIVERSITY**  
**CORPORATE GOVERNANCE**  
(continued ...)

***Approach to Remuneration***

A copy of the University's Remuneration Framework, under which the Committee operates, is available below. It has been designed to ensure that the University remains competitive in the market place, aligns to our core values and can deliver the University's strategy, priorities and targets, while providing an environment where everyone can achieve their potential, thrive and contribute at their best.

Cranfield University operates outside of the higher education sector National Pay Framework (JNCHES); however, the University maintains an overview of the national pay bargaining process. Roles at the University are evaluated using the Hay Grading methodology for determining job size.

***Reward Strategy***

The University's reward strategy considers a range of information from Cranfield, the HE sector and wider market practice, and aligns to our core values and behaviours. It is kept under review and may be adjusted, depending on the University's strategy and circumstances, the market, the requirements of key stakeholders and the Regulator (Office for Students (OfS)).

***Definition of reward***

Reward is a combination of different elements. Cranfield's reward offer includes:

- A package of pay and benefits which is competitive in the market and reflects everyone's role and contribution.
- The opportunity to carry out interesting work which makes an impact – on students, the institution, industry and society.
- Access to development and support for all our people.
- Access to career opportunities.
- An inclusive culture and community where we respect everyone and we value diversity and support wellbeing.
- The opportunity to work alongside colleagues and with an organisation that recognises and celebrates ambition and success.

***Purpose***

The purpose of the reward strategy is to:

- Enable the recruitment and retention of people with the talent, skills and commitment the University needs.
- Support the delivery of the University's strategy, priorities and targets, and demonstrate and underpin our core values.
- Provide an environment where everyone can achieve their full potential and contribute at their best.

***Principles***

We will:

- Reward our people for the work they do and how well they do it.
- Ensure rewards are competitive in the sector and where relevant in the wider market.
- Ensure reward arrangements reflect the nature of the work and the market for the skills concerned.
- Ensure rewards are fair and equitable.
- Provide the opportunity for everyone to develop and progress in their career.
- Promote a culture which values diversity, supports wellbeing and embodies our core values.
- Ensure we celebrate and recognise success.
- Communicate the full value of pay and benefits as part of our total reward offer.

**CRANFIELD UNIVERSITY**  
**CORPORATE GOVERNANCE**  
*(continued ...)*

***Taking principles into practice***

The table below summarises how we will put our principles into practice.

Principle	What we will do
Reward people for the work they do and how well they do it	Maintain our pay and benefits structures to match the level and type of role and provide the mechanisms for performance to be recognised and rewarded.
Ensure rewards are competitive	Undertake regular monitoring on external market practice – in the higher education sector and beyond – and consider internal indicators, such as recruitment, retention and staff opinion.
Ensure rewards reflect the nature of the work and the market for the skills concerned	Have distinct policies for different groups of roles but founded on the same principles (see below). Allow for pay differences where they are well justified by market evidence.
Ensure rewards are fair and equitable	Create and maintain policies and governance structures, which promote fairness and conduct and where appropriate, undertake reviews of their impact (e.g. biennial equal pay review, annual gender and ethnicity pay reporting and workforce audits).
Provide the opportunity to develop and progress	Offer programmes of training and development and provide the opportunity to discuss job and career development with line managers and HR.
Promote an inclusive culture which values diversity and equity, supports wellbeing and embodies our core values	Embed our shared values within the university, to support the University's transition to becoming a modern inclusive employer and enhancing our Employee Value Proposition. Delivering on our key targets in our Equity, Diversity and Inclusion Strategy and Plan, Athena Swan Action Plan and other related initiatives and providing an environment, which looks after everyone's wellbeing.
Celebrate and recognise success	Promote and keep under review all forms of recognition, ranging from 'thank you' to a formal salary adjustment, bonus or use of the recognition scheme, to ensure appropriateness to the role and its setting.
Communicate the full value of pay and benefits	When we have the supporting systems in place, provide an annual statement of the value of the pay and benefits package, in the context of the total reward offer.

***Policies***

In keeping with our third principle, the approach to pay and rewards will reflect the character of each job family. There are differences in: whether salaries are a spot rate or sit within a range; the markets used for benchmarking pay and reward practices; and how performance is recognised and rewarded (although all staff are subject to a performance and development review on an annual basis).

All policies take account of:

- The distinctive character of Cranfield, as a postgraduate institution, which has close links to, and partnerships with industry.
- Governance requirements, including those set out by the Office for Students and the Committee of University Chairs.
- The need to secure value for money.

## CRANFIELD UNIVERSITY

### CORPORATE GOVERNANCE

(continued ...)

#### **a) University Executive**

Rewards for members of the University Executive are determined and reviewed by the Remuneration Committee, who have full delegated authority for the salaries and other emoluments, terms and conditions and, where appropriate, severance payments of:

- the Chief Executive and Vice-Chancellor;
- full members of the University Executive;
- and such other senior members of staff as decided by Council.

Our Executive reward reflects the need for competitive spot salaries and includes an incentive scheme, which is appropriate for jobs at this level and provides a strong link to performance. The package includes USS pension or a payment in lieu (PILP) for those who have reached their Lifetime Allowance, plus an optional USS Life Assurance.

**The University Executive does not benefit from any automatic “cost of living increase” received by all other University employees, usually in August. On an annual basis the Remuneration Committee considers whether it is appropriate to adjust salaries in line with the agreed “cost of living” increase received by other staff, based on the performance of the University. Any movement on salary being effective from 1 October in any year and not backdated to August.**

#### **b) Senior managers**

Rewards for senior managers are determined by the Chief Executive and Vice-Chancellor or members of the Executive Team. The Remuneration Committee has oversight of the remuneration of all members of the Senior Management Team and any other staff earning £100,000 per annum, or above.

The policy for this group provides for spot salaries to reflect the role, the market and the value of the individual to the University. Amounts are benchmarked mainly against other universities, with a check on other markets where appropriate. Performance can be rewarded with a non-consolidated annual bonus, linked to the achievement of agreed performance indicators aligned to the delivery of the Corporate Plan and a qualitative assessment of individual contribution and wider contribution to the Executive Team.

Senior managers are also eligible to receive the annual negotiated pay settlement with the recognised Trade Unions (normally taking effect from 1 August).

The package includes USS pension provision or a payment in lieu (PILP) for those who have reached their Lifetime Allowance, plus an optional USS Life Assurance.

#### **c) Professors**

Rewards for Professors are determined by the Chief Executive and Vice-Chancellor and members of the Executive Team through the annual review and the Professorial Pay Review processes, within a policy agreed and assured by the Remuneration Committee.

Professors are recruited and retained in a distinctive national and international market, in which identifying, benchmarking and rewarding different levels of professorial contribution has become common. Cranfield's policy provides for four levels of professor, each with a standard pay range. Performance is recognised by remuneration within the level and exceptionally by change of level. Variations in market rate are handled through evidence-based market supplements.

The Cranfield University Professorial Range Review (PRR), established in 2015 and undertaken on a triennial basis, provides a transparent framework for competitive performance-related remuneration of the professoriate. The Professorial Pay Review provides consistency of approach across the University and is informed and benchmarked against relevant peer groups within the higher education sector and beyond.

## CRANFIELD UNIVERSITY

### CORPORATE GOVERNANCE

(continued ...)

On an annual basis, the overall performance of Professors is assessed against generic academic standards tailored to individual targets established through annual Performance and Development Reviews together with the annual assessment of the individual's contribution to the School by the relevant Pro-Vice-Chancellor. There is also the opportunity for advancement via exceptional management-led recommendations for outstanding performance.

The Professoriate are also eligible to receive the annual negotiated pay settlement with the Trade Unions (normally taking effect from 1 August).

The package includes USS pension or a payment in lieu (PILP) for those who have reached their Lifetime Allowance, plus an optional USS Life Assurance.

#### ***d) Staff within Salary Level 1 to 7***

Rewards for staff within salary levels 2 to 7 are determined through both an annual negotiated pay settlement with the Trade Unions (normally taking effect from 1 August) and a centrally co-ordinated annual review management process (normally taking effect from October of every year). The salary structure has strong parallels with the nationally negotiated Pay Framework Agreement for university staff but recognises the distinctive nature of Cranfield.

Each salary level has related pay ranges, which are determined and reviewed taking account of practice in the sector. The salary levels have a core of increments, through which staff move, subject to satisfactory performance, on an annual basis. Once an individual reaches the top of the incremental range, consistent exceptional performance over time can be recognised through use of a high-performance zone (salary levels 2 to 7).

Exceptional performance or one-off achievements can be recognised through a non-consolidated Recognition Award Scheme.

The package includes pension provision linked to the level and type of role or where appropriate a payment in lieu for those who have reached their Lifetime Allowance, plus for those in USS, an optional USS Life Assurance.

The University is an accredited Living Wage Employer and all directly engaged staff in Level 1 and other associated workers are paid at the relevant Real Living Wage rate, reviewed annually.

During the year, we have been undertaking a review with external reward consultants to ensure our pay framework remains relevant, allows for flexibility and is both competitive and innovative in this volatile market. The external pay consultants met with a number of key stakeholders, including our Chief Operating Officer, Director of Finance, Director of People and Culture and our recognised Trade Unions, before making their recommendations. As a result, we are making changes to our pay framework for Level 2 to 7 over a phased two-year period.

#### ***Equity, Diversity and Inclusion considerations***

In August 2022, following approval at Council, the University launched its Corporate Plan, [Ambition 2027 – creating impact together](#), where equity, diversity and inclusion (ED&I) runs as a thread throughout. In the plan, the University set out its 'desire to be an 'Employer of Choice' – an organisation that people want to work for, with a fair, inclusive culture where everyone can flourish and contribute towards the University's success.

In March 2023, the University published a full gender pay report and alongside this, for the first time, also published voluntarily the ethnicity pay gap data. The Remuneration Committee received a copy of both reports, alongside a more detailed analysis at the April meeting.

## CRANFIELD UNIVERSITY

### CORPORATE GOVERNANCE

(continued ...)

At various points throughout the reporting cycle, the Remuneration Committee review the approach adopted by the University in ensuring equal pay across their areas of remit, to include the Executive, the Senior Management Team and those earning over £100,000. It was agreed there were no instances where there were gender-related differences in reward for roles of the same type.

All the Executive Team have equity, diversity and inclusion related objectives and KPIs within their P&DR (aligning with our Corporate Plan) and the outputs are considered alongside the achievement of the other objectives during the Annual Review process.

Equality Impact Assessments are undertaken at key stages of pay reviews to ensure that there is no apparent bias or disadvantage for any particular groups of staff.

The University, following endorsement at Council, recently published a new five-year [Equity, Diversity and Inclusion Strategy](#) and action plan, which highlights how the university is going beyond these obligations to:

- Eliminate unlawful discrimination/harassment and victimisation.
- Promote equality of opportunity between people who share a protected characteristic and those who do not.
- Foster good relations between people who share a protected characteristics and those who do not.

#### ***Remuneration of the Chief Executive and Vice-Chancellor***

Details of the remuneration for the CEO and VC are summarised in note 6 of the Financial Statement.

Professor Karen Holford joined the University on 1 August 2021, following the retirement of Professor Sir Peter Gregson. Professor Holford's engineering career spans industry and academia; beginning at Rolls-Royce (Aero), before pursuing an academic career where, during 31 years at Cardiff University, she engaged in research with industrial impact and research-led learning and teaching together with a significant administrative and leadership profile. She served as Deputy Vice Chancellor from 2017 – 2021, led the College of Physical Sciences and Engineering as the founding Pro Vice-Chancellor 2012 -2017 and prior to this she was Head of the School of Engineering.

In 2018, Professor Holford received a CBE for services to engineering and the advancement of women in engineering, and in 2019 received the Suffrage Science award in Physical Sciences and Engineering. She has served as a Council member for UKRI STFC and a member of the EPSRC Strategic Advisory Network, having previously served as the external Chair of the EPSRC Engineering Strategic Advisory Team. In 2020, Professor Holford took up the role of Chair of the Royal Academy of Engineering Research Committee.

*As Chief Executive and Vice-Chancellor at Cranfield University, Professor Holford currently serves on the Oxford-Cambridge Arc Universities Group Board and on the Oxford Cambridge Supercluster Board and in 2023 she took up the role of Chair of the Midlands Innovation University Partnership Board and joined the Board of Universities UK.*

*The remuneration received by Professor Holford in 2022/23 included a base salary of £271,750. It is considered that Professor Holford's overall remuneration reflects her significant experience and leadership within the higher education sector.*

*From 1 March 2022, Professor Holford has been in receipt of a Pay in Lieu of Pension (PILP) allowance on the same terms as other relevant members of staff. The payment does not attract bonus or other benefits based on basic salary.*

*The Chief Executive and Vice-Chancellor resides in Cayley Lodge, a property owned by the University. The occupancy of Caley Lodge is treated as a taxable benefit, with the tax being paid by the University via a PAYE Settlement Agreement (PSA). The taxable benefit, taking into account property values, utilities, Council tax etc. is based on £11,438.*

**CRANFIELD UNIVERSITY**  
**CORPORATE GOVERNANCE**  
*(continued ...)*

Pay multiple calculation:

<b>Cranfield University</b>	<b>2023</b>	<b>2022</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>
Vice-Chancellor basic salary multiplier	6.89	7.16	7.99	7.96	7.99	7.85	7.72
Vice-Chancellor total remuneration multiplier	7.85	7.32	6.61	7.89	8.56	7.71	8.78

***Severance Payments***

The University's principle is to manage all departing staff fairly and equitably, taking into account the circumstances of their departure. Where restructurings occur, impact assessments are undertaken to ensure there are no biases on any protected characteristic.

Members of the Executive, as for all other staff, are entitled to be paid their contractual base salary and contractual benefits, during any notice period. In exceptional circumstances, the University has the discretion to make a lump sum payment, as pay in lieu of notice (PILON).

All Executive members (including the Chief Executive and Vice-Chancellor) have permanent contracts and have notice periods of 6 months.

Typically, no additional enhanced payments are made to compensate members of the Executive when their employment terminates, unless the employment ends by means of redundancy. In exceptional circumstances, a settlement agreement may be put in place and the University may make payments it considers reasonable in settlement of any potential litigation.

During 2022/23, no severance payments were made to members of the Executive.

***Payment of Directorships, Consultancies and Outside Work***

The University recognises the benefits that outside work whether voluntary or remunerated can bring to both employees and the University.

All employees (to include the Executive) must seek written approval from the relevant Senior Line Manager (PVC, COO or CEO and VC).

For the CEO and VC approval is sought from the Pro-Chancellor. The treatment of remuneration received from such activities is considered on a case-by-case basis as part of the approval process. It is the responsibility of those undertaking external work to ensure that it is fully declared in the Register of Interest.



**CRANFIELD UNIVERSITY**  
**CORPORATE GOVERNANCE**  
*(continued ...)*

- **Audit Committee** - meets on at least three occasions annually to review the work of the internal and external auditors. The Committee considers detailed audit reports, together with recommendations, for the improvement of the University's systems of internal control, governance, risk management and value for money, as well as management's responses and implementation plans.

Attendance of members during the year is outlined below:

	<b>No. Of Meetings Entitled to Attend</b>	<b>No. of Meetings Attended</b>
Miss Alice Hynes	4	4
Dr Jaz Saggu	4	4
Mrs Anna Smallwood	4	4
Mrs Claire Stokes	4	2
Mr Peter Watkins	4	4

Most independent members of the Council do not receive any payment, apart from the reimbursement of expenses, for the work they undertake for the University.

The report of the Chair of Finance Committee is given on pages 12 to 30 and the responsibilities of the Council are outlined on page 43. The annual financial statements are presented in a format which is in accordance with applicable Accounting Standards and the 2019 Statement of Recommended Practice - Accounting for Further and Higher Education.

The Council is also responsible for the University's internal control system and for monitoring its effectiveness. Such a system is designed to manage rather than eliminate the risk of failure to achieve the University's overall objective and mission, as well as its annual strategic aims. It can only provide reasonable, but not absolute, assurance against any material misstatement or loss. The key features of the control system are:-

- **Risk management** – whilst it is neither possible nor desirable to eliminate risk from the University's activities, there is an on-going process for the recognition, assessment and management of all significant opportunities and risks. This process has been in place for the year and up to the date of approval of the annual financial statements. The process is reviewed annually by the Audit Committee on behalf of the Council. The Audit Committee reports annually to the Council on its review. Exposure and control analyses, including mitigating factors and counter measures, are prepared annually and are monitored by key performance indicators and controls. The results from these reviews inform the planning, reporting and budgetary control processes. The management of each significant risk is assigned to one or more individuals and built into personal objectives as part of the staff development and appraisal procedures, which identify training needs. Staff generally are asked to report perceived significant risks.
- **Control environment** – clear definitions of the responsibilities of, and the authority delegated to, heads of academic and administrative departments are established. There is a Financial Manual, detailing financial controls and procedures which is approved by the Council as well as other management policies. Compliance with the Financial Manual is a requirement included in contracts of employment. The approach to internal control is risk based and embedded in effective management systems.

## CRANFIELD UNIVERSITY

### CORPORATE GOVERNANCE

*(continued ...)*

- **Information and control systems** – the University has a comprehensive medium and short-term planning process, supplemented by detailed annual revenue, capital and cash flow budgets. There are clearly defined and formalised requirements for approval and control of expenditure with investment decisions involving capital or revenue expenditure being subject to formal detailed appraisal and review according to approval levels set by the Council. There are regular reviews of operating results involving variance reporting and updates of estimated out-turns. In relation to academic information and control systems, the University's Senate, Education Committee, Research Committee and Directors of Education and Research in the Schools oversee detailed processes to maintain and control the quality and standards of the University's academic work.
- **Monitoring system** – the effectiveness of the information and internal control systems and control environment are monitored by management review, the internal audit function and the Audit Committee, on behalf of the Council. As part of their audit responsibilities, the external auditors also provide reports to the Audit Committee on the operation of aspects of the University's internal control system.

On the basis of the above control system, procedures have been in place for the whole financial year to enable a full statement on internal control to be made for the year and up to the date of the approval of the Financial Statements.

## CRANFIELD UNIVERSITY

### PRIMARY RESPONSIBILITIES OF THE COUNCIL

The Council is the supreme governing body of the University. Its principal responsibilities are based on the Model Statement taken from the Committee of University Chairs(CUC) Higher Education Code of Governance (2020), adapted to reflect the powers and responsibilities that Council derives from the University Laws. These responsibilities are to:

- set and agree the mission, strategic vision and values of the University with the Executive;
- agree long-term academic and business plans including key performance indicators and to ensure that these meet the interests of stakeholders, especially staff, students and alumni;
- appoint, on the recommendation of a Joint Appointing Committee of Council and Senate, the Vice-Chancellor as Chief Executive of the University and to establish suitable arrangements for monitoring their performance;
- be responsible for the removal of the Vice-Chancellor for good cause in accordance with the University Laws;
- delegate authority to the Vice-Chancellor for the academic, corporate, financial, estate and human resource management of the institution, and establish and keep under regular review the policies, procedures and limits within such management functions as will be undertaken by and under the authority of the Vice-Chancellor;
- ensure the establishment and monitoring of systems of control and accountability, including financial and operational controls, risk assessment, value for money arrangements and procedures for handling internal grievances and managing conflicts of interest;
- ensure that processes are in place to monitor and evaluate the performance and effectiveness of Cranfield University against the strategy, plans and approved key performance indicators, which will, where possible and appropriate, be benchmarked against other comparable institutions;
- establish processes to monitor and evaluate the performance and effectiveness of Council;
- conduct its business in accordance with best practice in higher education corporate governance and with the principles of public life drawn up by the Committee on Standards in Public Life;
- safeguard the good name and values of the University;
- appoint a Secretary to Council, on the recommendation of a Joint Appointing Committee of Council and Senate, and to ensure that if the person appointed has managerial responsibilities in the University, there is an appropriate separation in the lines of responsibility;
- be the employing authority for all staff in the University and to be accountable for ensuring the establishment of a human resources strategy;
- be the principal financial and business authority of the University, to ensure that proper books of account are kept, to approve the annual budget and financial statements, and to have overall accountability for the University's assets, property and estate;
- be the University's legal authority and, as such, to ensure that systems are in place for meeting all the University's legal obligations, including those arising from contracts and other legal commitments made in the University's name. This includes accountability for health, safety and security and for equality, diversity and inclusion;

## CRANFIELD UNIVERSITY

### PRIMARY RESPONSIBILITIES OF THE COUNCIL

*(continued ...)*

- receive assurance that adequate provision has been made for the general welfare of students; make such provision as it thinks fit for the general welfare of students, in consultation with Senate;
- act as trustee for any property, legacy, endowment, bequest or gift in support of the work and welfare of the University;
- ensure that the University's Laws are followed at all times and that appropriate advice is available to enable this to happen;
- promote a culture which supports inclusivity and diversity across the institution;
- maintain and protect the principles of academic freedom and freedom of speech legislation; and
- ensure that all students and staff have opportunities to engage with the governance and management of the University.

#### Members of Council

The following members served throughout the period from 1<sup>st</sup> August 2022 to 27<sup>th</sup> November 2023 unless otherwise stated:

Name	Sub-Committee Membership	Position	Period
Ferguson, Iain	N, HD	Pro-Chancellor & Chair of Council	
Holford, Karen	F, N, HD	Chief Executive & Vice-Chancellor	
Atkinson, Professor Helen			
Carter, Miss Caroline	N, R	Chair of Remuneration Committee	
Chen Davison, Lesley	F, N		
Day, Colin	F, HD		
Greening, Connie			
Hart, Ian	F	Chair of Finance Committee	
Hill, James			
Hubble, Jane			
Hynes, Alice	A, N	Chair of Audit Committee	
Imafidon, Ehizuelen			from 1 June 2023
Price, Joanna	A		from 1 August 2023
Rowlands, Simon	F, R		
Saggu, Jaz	A, R		
Smallwood, Anna	A		to 31 July 2023
Stokes, Claire	A		
Wainwright, James			to 31 May 2023
Watkins, Peter	A		
Zeidler, Philip	F		From 1 August 2023

A=Audit, F=Finance, R=Remuneration, N=Nomination, HD=Honorary Degrees

## CRANFIELD UNIVERSITY

### PRIMARY RESPONSIBILITIES OF THE COUNCIL

*(continued ...)*

The Council is required to present audited financial statements for each financial year and for keeping proper accounting records which disclose with reasonable accuracy at any time the financial position of the University and to enable it to ensure that the financial statements are prepared in accordance with the Statutes of the University, the 2019 Statement of Recommended Practice - Accounting for Further and Higher Education and other relevant Accounting Standards. In addition, within the terms and conditions of a Financial Memorandum agreed between the Higher Education Funding Council for England and the Council of Cranfield University, the Council, through its designated office holder, is required to prepare financial statements for each financial year which give a true and fair view of the state of affairs of the University and the Group and of the surplus or deficit and cash flows for that year.

In causing the financial statements to be prepared, Council has ensured that:

- suitable accounting policies are selected and applied consistently;
- judgements and estimates are made that are reasonable and prudent;
- applicable Accounting Standards have been followed, subject to any material departures disclosed and explained in the financial statements; and
- financial statements are prepared on the going concern basis unless it is inappropriate to presume that the University will continue in operation. The Council is satisfied that the University has adequate resources to continue in operation for the foreseeable future: for this reason the going concern basis continues to be adopted in the preparation of the financial statements.

The Council has taken reasonable steps to:

- ensure that funds from Research England and the Office for Students are used only for the purposes for which they have been given and in accordance with the Financial Memorandum with Research England and the Office for Students terms and conditions of funding and any other conditions which the Funding Council of Office for Students may from time to time prescribe;
- ensure that there are appropriate financial and management controls in place to safeguard public funds and funds from other sources;
- safeguard the assets of the University and the Group and prevent and detect fraud; and
- secure the economical, efficient and effective management of the University's resources and expenditure.

# ***Independent auditors' report to the Council of Cranfield University (the "University")***

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## **Report on the audit of the financial statements**

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### **Opinion**

In our opinion, Cranfield University's group financial statements and University financial statements (the "financial statements"):

- give a true and fair view of the state of the group's and of the University's affairs as at 31 July 2023 and of the group's and of the University's income and expenditure, gains and losses and changes in reserves, and of the group's cash flows for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards, comprising FRS 102 "The Financial Reporting Standard applicable in the UK and Republic of Ireland", and applicable law); and
- have been properly prepared in accordance with the requirements of the Office for Students' Accounts Direction (OfS 2019.41).

We have audited the financial statements, included within the Financial Statements (the "Annual Report"), which comprise the consolidated and University Statements of financial position as at 31 July 2023; the consolidated and University statements of comprehensive income and expenditure, the consolidated and University statements of changes in reserves, and the statement of consolidated cash flows for the year then ended; the Principal accounting policies and the notes to the financial statements .

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### **Basis for opinion**

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities under ISAs (UK) are further described in the Auditors' responsibilities for the audit of the financial statements section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### **Independence**

We remained independent of the group in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, which includes the FRC's Ethical Standard, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

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### **Conclusions relating to going concern**

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the group's and University's ability to continue as a going concern for a period of at least twelve months from the date on which the financial statements are authorised for issue.

In auditing the financial statements, we have concluded that the Council's use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

However, because not all future events or conditions can be predicted, this conclusion is not a guarantee as to the group and University's ability to continue as a going concern.

Our responsibilities and the responsibilities of the Council with respect to going concern are described in the relevant sections of this report.

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### **Reporting on other information**

The other information comprises all of the information in the Annual Report other than the financial statements and our auditors' report thereon. The Council is responsible for the other information. Our opinion on the financial statements does not cover the other information and, accordingly, we do not express an audit opinion or any form of assurance thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If we

identify an apparent material inconsistency or material misstatement, we are required to perform procedures to conclude whether there is a material misstatement of the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report based on these responsibilities.

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## **Responsibilities for the financial statements and the audit**

### *Responsibilities of the Council for the financial statements*

As explained more fully in the Primary responsibilities of the Council of Cranfield University, the Council is responsible for the preparation of the financial statements in accordance with the applicable framework and for being satisfied that they give a true and fair view. The Council is also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Council is responsible for assessing the group and University's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless the Council either intends to liquidate the group and University or to cease operations, or has no realistic alternative but to do so.

### *Auditors' responsibilities for the audit of the financial statements*

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The extent to which our procedures are capable of detecting irregularities, including fraud, is detailed below.

Based on our understanding of the institution/industry, we identified that the principal risks of non-compliance with laws and regulations related to UK employment legislation and immigration laws regarding international students, and we considered the extent to which non-compliance might have a material effect on the financial statements. We also considered those laws and regulations that have a direct impact on the financial statements such as the Office for Students' Accounts Direction (OfS 2019.41). We evaluated management's incentives and opportunities for fraudulent manipulation of the financial statements (including the risk of override of controls), and determined that the principal risks were related to manipulation of financial information through the posting of journal entries, or undue bias exhibited in accounting estimates and judgements. Audit procedures performed included:

- discussions with management in relation to known or suspected instances of fraud, or non-compliance with laws and regulations;
- testing of significant estimates and judgements made by management, including the verification of the data and accuracy of the models;
- incorporating elements of unpredictability into our audit procedures;
- testing of journal entries using a risk-based approach, including entries which credit revenue offset by an unusual counter entry, as well as postings made by unexpected users; and
- review of the financial statements for disclosures required by the accounting standards and the accounts direction provided by the OfS

There are inherent limitations in the audit procedures described above. We are less likely to become aware of instances of non-compliance with laws and regulations that are not closely related to events and transactions reflected in the financial statements. Also, the risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as fraud may involve deliberate concealment by, for example, forgery or intentional misrepresentations, or through collusion.

A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at: [www.frc.org.uk/auditorsresponsibilities](http://www.frc.org.uk/auditorsresponsibilities). This description forms part of our auditors' report.

### *Use of this report*

This report, including the opinions, has been prepared for and only for the Council as a body in accordance with section 5 of the Charters and Statutes of the University and for no other purpose. We do not, in giving these opinions, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

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## ***Other required reporting***

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### **Opinions on other matters prescribed in the Office for Students' Accounts Direction (OfS 2019.41)**

In our opinion, in all material respects:

- funds from whatever source administered by the University for specific purposes have been properly applied to those purposes and, if relevant, managed in accordance with relevant legislation;
- funds provided by the Office for Students, UK Research and Innovation (including Research England) and the Education and Skills Funding Agency have been applied in accordance with the relevant terms and conditions.

Under the Office for Students' Accounts Direction, we are required to report to you, if we have anything to report in respect of the following matters:

- The University's grant and fee income, as disclosed in note 2 to the financial statements, has been materially misstated; or

We have no matters to report arising from this responsibility.

PricewaterhouseCoopers LLP  
Chartered Accountants and Statutory Auditors  
Milton Keynes



**CRANFIELD UNIVERSITY**  
**PRINCIPAL ACCOUNTING POLICIES**

**1. Basis of accounting and preparation**

These financial statements have been prepared in accordance with the Statement of Recommended Practice (SORP): Accounting for Further and Higher Education 2019 and in accordance with Financial Reporting Standards (FRS 102). They have also been prepared in accordance with the 'carried forward' powers and duties of previous legislation (Further and Higher Education Act 1992 and the Higher Education Act 2004) and the new powers of the Higher Education and Research Act 2018 during the transition period to 31 July 2019, the Royal Charter, the Accounts Direction issued by the Office for Students (OfS), the Terms and conditions of funding for higher education institutions issued by the OfS and the Terms and conditions of Research England Grant. The University is a public benefit entity and therefore has applied the relevant public benefit requirements of FRS 102. The financial statements are prepared in accordance with the historical cost convention (modified by the revaluation of certain assets). The following exemptions available under FRS 102 has been applied to these financial statements:

- Disclosures in respect of transactions with wholly owned subsidiaries
- University cash flow

**2. Basis of consolidation**

The consolidated financial statements include the financial statements of the University and all its subsidiaries prepared up to the end of the financial year. They do not include the financial statements of student associations as it is considered the University has limited financial interest and no control or significant influence over policy decisions.

**3. Foreign currencies**

Transactions denominated in foreign currencies are recorded at the rate of exchange ruling at the dates of the transactions. Monetary assets and liabilities in foreign currencies are translated into sterling at the rate of exchange ruling at the balance sheet date. The resulting exchange differences are reflected in the income and expenditure account for the financial year.

**4. Recognition of income**

Income from the sale of goods and services is credited to the Statement of Comprehensive Income and Expenditure when the goods or services are supplied to the external customers or the terms of the contract have been satisfied. Other income received in relation to the utilisation of the University estate is recognised when the services or goods have been delivered.

**1) Tuition fee income**

Tuition fee income is stated gross of any expenditure over the period in which the students are studying. Bursaries and scholarships are accounted for gross as expenditure and not deducted from income. Fee discounts are treated as a fee bursary. Tuition fee refunds would be charged to tuition fee income.

**2) Grant Funding**

Grant funding including Funding Council block grant, research grants from government sources, grants (including research grants) from non government sources are recognised as income when the University is entitled to the income and performance related conditions have been met. Income received in advance of performance related conditions being met is recognised as deferred income within creditors on the balance sheet and released to income as the conditions are met.

Government grant funding has been received in the prior year in relation to the Coronavirus Job Retention Scheme (CJRS) and is recognised within other income in the period in which amounts become receivable.

## CRANFIELD UNIVERSITY

### PRINCIPAL ACCOUNTING POLICIES

*(continued...)*

#### 3) **Donations and endowments**

Non exchange transactions without performance related conditions are donations and endowments. Donations and endowments with donor imposed restrictions are recognised in income when the University is entitled to the funds. Income is retained within the restricted reserve until such time that it is utilised in line with such restrictions at which point the income is released to general reserves through a reserve transfer.

Donations with no restrictions are recognised in income when the University is entitled to the funds.

Investment income and appreciation of endowments is recorded in income in the year in which it arises and as either restricted or unrestricted income according to the terms applied to the individual endowment fund.

There are four main types of donations and endowments identified in reserves:

1. Restricted donations – the donor has specified that the donation must be used for a particular objective.
2. Unrestricted permanent endowments – the donor has specified that the fund is to be permanently invested to generate an income stream for the general benefit of the University.
3. Restricted expendable endowments – the donor has specified a particular objective other than the purchase or construction of tangible fixed assets, and the University has the power to use the capital
4. Restricted permanent endowments – the donor has specified that the fund is to be permanently invested to generate an income stream to be applied to a particular objective.

#### 4) **Capital grants**

Capital grants are recognised in income when the University is entitled to the funds subject to any performance related conditions being met.

#### 5) **Investment income**

Investment income is credited to the Consolidated Statement of Comprehensive Income and Expenditure on a receivable basis.

#### 5. **Research and development**

Expenditure on research and development is charged to the income and expenditure account in the year in which it is incurred.

#### 6. **Tangible fixed assets**

##### (1) *Land and buildings*

Land is stated at valuation and is formally revalued triennially, with consideration made at each period end to ensure that the carrying value of an asset at the reporting date is not materially different from its fair value. The basis of valuation is open market value for existing use, and in the case of the technology park, open market value with vacant possession. The most recent valuation was carried out as at 31st July, 2022 by Gerald Eve LLP. Freehold land is not depreciated as it is considered to have an indefinite useful life. Where land is held for resale and a conditional sale agreement is in place at the year end the land is revalued to the anticipated net proceeds and retained in fixed assets.

Freehold and leasehold buildings are stated at cost and depreciated over their expected useful lives or the life of the lease, whichever is shorter. Where there is a permanent reduction in value, provision is made in the financial statements.

## CRANFIELD UNIVERSITY

### PRINCIPAL ACCOUNTING POLICIES

(continued...)

Where buildings are acquired with the aid of specific grants, they are capitalised and depreciated as below.

#### (2) *Equipment*

Equipment, plant and machinery and fixtures and fittings costing less than £5,000 per individual item or group of related items is written off in the year of acquisition. All other equipment is capitalised at cost and depreciated over its expected useful life. Equipment costing more than £5,000 purchased as part of the construction of prototype or pilot plants for specific research projects are also written off in the year of acquisition.

Where equipment is acquired with the aid of specific grants or gifts, it is capitalised and depreciated as above.

#### (3) *Depreciation*

Depreciation is calculated on the original cost of the assets at the following rates:-

Buildings	2% - 5% per annum
Equipment	20% - 33.33 % per annum
Fixtures plant and machinery	5% - 25% per annum

### 7. **Leases**

Leasing agreements that transfer to the University substantially all the benefits and risks of ownership are considered to be finance leases. All other leases are operating leases.

Fixed assets held under finance leases and the related lease obligations are recorded in the balance sheet at the fair value of the leased assets at the inception of the lease. The excess of lease payments over recorded lease obligations is treated as finance charges which is amortised over each lease term to give a constant rate of charge on the remaining balance of the obligations.

Rental costs under operating leases are charged to expenditure over the periods of the leases.

### 8. **Investments**

- (1) Non current asset investments that are classified as basic financial instruments are held on the Balance Sheet at amortised cost less impairment.
- (2) Complex financial instruments are initially measured at fair value, which is normally the transaction price. These are subsequently carried at fair value and the changes in fair value are recognised in the statement of comprehensive income and expenditure.
- (3) Investment in subsidiaries is included in the balance sheet at cost, less any provisions for impairment.

### 9. **Stock**

Stock is valued at the lower of cost and net realisable value on a first in, first out basis. Provision is made for obsolete or surplus material.

**CRANFIELD UNIVERSITY**  
**PRINCIPAL ACCOUNTING POLICIES**  
*(continued...)*

**10. Work in progress**

Work in progress is stated at cost plus attributable overheads less provisions for any known or anticipated deficits and payments on account receivable.

**11. Taxation status**

The University is an exempt charity within the meaning of Schedule 3 of the Charities Act 2011 and as such is listed as a charity within the meaning of Paragraph 1 of Schedule 6 to the Finance Act 2010. Accordingly, the University is potentially exempt from taxation in respect of income or capital gains received within categories covered by Sections 472–488 of the Corporation Tax Act 2010 and Section 256 of the Taxation of Chargeable are applied to exclusively charitable purposes.

Current tax, including UK corporation tax and foreign tax, is provided at amounts expected to be paid (or recovered) using the tax rates and laws that have been enacted or substantively enacted by the reporting date.

Most of the University's principal activities are exempt from Value Added Tax ('VAT'), but certain activities and other ancillary supplies and services are liable to VAT at various rates. Expenditure includes VAT charged by suppliers to the University where it is not recoverable and is likewise included in the cost of fixed assets.

Commercial trading activities undertaken by the University are operated through its subsidiary companies. This income will attract applicable VAT and the profits are liable to Corporation Tax. However, the taxable profits made by these companies are covenanted to the University and paid under Gift Aid, to the extent that the companies have distributable reserves, which negates that liability.

**12. Deferred taxation**

Deferred taxation is recognised as a liability or asset if transactions or events have occurred by the balance sheet date that give rise to an obligation to pay more taxation, or a right to pay less taxation, in future. An asset is not recognised to the extent that the transfer of economic benefits in future is uncertain. Deferred tax assets and liabilities recognised are not discounted.

**13. Maintenance of premises**

The cost of all maintenance is charged to the income and expenditure account as incurred. Provisions are made for dilapidation of leasehold property where an appropriate obligation exists.

**14. Pension schemes**

The two principal pension schemes of the University's employees are the Universities Superannuation Scheme (USS) and the Local Government Pension Scheme (LGPS) administered by Bedfordshire County Council. The USS scheme is a multi-employer scheme as defined by FRS 102.

*Defined benefit schemes*

A defined benefit plan is a post-employment benefit plan other than a defined contribution plan. Under defined benefit plans the Universities obligation is to provide the agreed benefits to current and former employees, and actuarial risk (that benefits will cost more or less than expected) and investment risk (that returns on assets set aside to fund the benefits will differ from expectations) are borne in substance by the Institution.

## CRANFIELD UNIVERSITY

### PRINCIPAL ACCOUNTING POLICIES

*(continued...)*

The net liability is recognised in the balance sheet in respect of each scheme and is the present value of the defined benefit obligation at the reporting date less the fair value of the plan assets at the reporting date.

The group should recognise a liability for its obligations under defined benefit plans net of plan assets. This net defined benefit liability is measured as the estimated amount of benefit that employees have earned in return for their service in the current and prior periods, discounted to determine its present value, less the fair value (at bid price) of plan assets. The calculation is performed by a qualified actuary using the projected unit credit method. Where the calculation results in a net asset, recognition of the asset is limited to the extent to which the Institution is able to recover the surplus either through reduced contributions in the future or through refunds from the plan.

Annually actuaries are engaged on behalf of the University to calculate the obligation for each scheme. The present value is determined by discounting the estimated future payments at a discount rate based on market yields on high quality corporate bonds denominated in sterling with terms approximating to the estimated period of the future payments. The fair value of a scheme's assets is measured in accordance with the FRS 102 fair value hierarchy and in accordance with the Universities policy for similarly held assets. This includes the use of appropriate valuation techniques.

Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to other comprehensive income. These amounts together with the return on plan assets, less amounts included in net interest, are disclosed as actuarial gains and losses.

Where the fair value of the defined benefit schemes assets exceeds the present value of the defined benefit obligation the University consider the amount that can be recognised as an asset within the statement of financial position in line with the requirements of FRS 102. A defined benefit surplus is only recognised if it meets the following criteria: if the University has an unconditional right to a refund; or if the University can realise it at some point during the life of the plan or when the plan liabilities are settled. As these criteria are not met the University has decided not to recognise a net retirement benefit asset.

The cost of the defined benefit plan, recognised in expenditure as staff costs, except where included in the cost of an asset, comprises the increase in pension benefit liability arising from employee service during the period and the cost of plan introductions, benefit changes, curtailments, and settlements. The net interest cost is calculated by applying the discount rate to the net liability. This cost is recognised in expenditure as a finance cost. Details of the schemes are included in Note 22.

#### 15. Provisions

Provisions are recognised when the University has a present legal or constructive obligation as a result of a past event and it is probable that a transfer of economic benefit will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation.

#### 16. Going concern

As highlighted in the outlook for 2023/24 on page 29, the University considers that it has sufficient financial resources and is confident that its future income streams will maintain these resources. Council believe that the University is well placed to effectively manage its business risks, despite the current uncertain economic situation.

The budgeted operating surplus for 2023/24 is based on expected student numbers registering in September 2023 and a continued growth for professional development and research income. Costs will continue to be managed carefully with all discretionary spend and travel budgets on hold. The University is forecasting not to breach the bond covenants.

**CRANFIELD UNIVERSITY**  
**PRINCIPAL ACCOUNTING POLICIES**  
*(continued ...)*

Council have a reasonable expectation that the University has adequate resources to continue operating in existence for the foreseeable future. Thus, they continue to adopt the going concern basis in preparing the financial statements.

**17. Financial instruments**

The Institution has elected to adopt Sections 11 and 12 of FRS 102 in respect of the recognition, measurement, and disclosure of financial instruments. Financial assets and liabilities are recognised when the Institution becomes party to the contractual provision of the instrument and they are classified according to the substance of the contractual arrangements entered into.

A financial asset and a financial liability are offset only when there is a legally enforceable right to set off the recognised amounts and an intention either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

*Financial assets*

Basic financial assets include trade and other receivables, cash and cash equivalents, and investments in commercial paper (i.e. deposits and bonds). These assets are initially recognised at transaction price unless the arrangement constitutes a financing transaction, where the transaction is measured at the present value of the future receipts discounted at a market rate of interest. Such assets are subsequently carried at amortised cost using the effective interest rate method. Financial assets are assessed for indicators of impairment at each reporting date. If there is objective evidence of impairment, an impairment loss is recognised in the statement of comprehensive income.

For financial assets carried at amortised cost the impairment loss is the difference between the carrying amount of the asset and the present value of the estimated future cash flows, discounted at the asset's original effective interest rate.

Other financial assets, including investments in equity instruments which are not subsidiaries, associates, or joint ventures are initially measured at fair value, which is typically the transaction price. These assets are subsequently carried at fair value and changes in fair value at the reporting date are recognised in the statement of comprehensive income. Where the investment in equity instruments are not publicly traded and where the fair value cannot be reliably measured the assets are measured at cost less impairment.

Financial assets are de-recognised when the contractual rights to the cash flows from the asset expire or are settled or substantially all of the risks and rewards of the ownership of the asset are transferred to another party.

*Financial liabilities*

Basic financial liabilities include trade and other payables, bank loans, and intra-group loans. These liabilities are initially recognised at transaction price unless the arrangement constitutes a financing transaction, where the debt instrument is measured at the present value of the future payments discounted at a market rate of interest. Debt instruments are subsequently carried at amortised cost using the effective interest rate method.

Trade payables are obligations to pay for goods and services that have been acquired in the ordinary course of business from suppliers. Accounts payable are classified as current liabilities if payment is due within one year or less. If not, they are presented as non-current liabilities. Trade payables are recognised initially at transaction price and subsequently measured at amortised cost using the effective interest rate method.

## CRANFIELD UNIVERSITY

### PRINCIPAL ACCOUNTING POLICIES

(continued ...)

#### 18. Significant accounting estimates and judgements

In the process of applying these accounting policies, the University is required to make certain estimates, judgements and assumptions that management believe are reasonable based on the information available. These are reviewed on a regular basis by the University's senior management team. Significant estimates and material judgements used in the preparation of the financial statements are as follows:

##### **Estimates:**

###### *Recoverability of debtors*

The provision for doubtful debts is based on our estimate of the expected recoverability of those debts. Assumptions are made based on the level of debtors which have defaulted historically, coupled with current economic knowledge. The provision is based on the current situation of the customer, the age profile of the debt and the nature of the amount due.

###### *Valuation of land*

Valuations are undertaken every three years by an independent external team of chartered surveyors. This is then updated annually by senior management based on the current economic developments and other factors that may be considered to have an impact on the rental yield going forward.

###### *Retirement benefit obligations*

The University contributes to the Local Government Pension Scheme (LGPS) administered by Bedfordshire County Council which is accounted for as a defined benefit scheme. The recognised liability is based on the valuation provided by professionally qualified independent actuaries which is based on a number of assumptions. These include the future cash flows of the scheme, the discount rate used, the pensionable salary growth going forward and proposed price inflation. Further details can be found in note 22. Management reviews the assumptions made to derive the provisions recorded in the balance sheet to ensure that they are reasonable. The University also operates within the Universities Superannuation Scheme ('USS') which is accounted for as a defined contribution scheme since insufficient information is available to identify the University's share of the underlying assets and liabilities. As the University is contractually bound to make deficit recovery payments to USS, this is recognised as a liability on the balance sheet. The USS deficit recovery plan defines the deficit payment required as a percentage of future salaries until 2031. These contributions will be reassessed within each triennial valuation of the scheme. The provision is based on management's estimate of expected future salary inflation, changes in staff numbers and the prevailing rate of discount.

###### *Provisions*

Management apply judgement to arrive at the best estimate for any obligation required. The amount recognised as a provision is management's best estimate of the present value of the amount required to settle the obligation. To arrive at this amount management assess the likelihood and extent of any future settlement and make judgements based on these.

##### **Judgements:**

###### *Revenue recognition*

Revenues are subject to judgement over when and by how much revenues should be recognised in the financial statements. This includes determining when performance criteria have been met, recognising research and other funding revenues in line with expenditure once a right to the funding is deemed to have arisen, and determining the revenues associated with partially delivered courses and training where the activities have not been fully completed at the reporting date.

CRANFIELD UNIVERSITY

CONSOLIDATED AND UNIVERSITY STATEMENT OF COMPREHENSIVE INCOME AND EXPENDITURE

FOR THE YEAR ENDED 31ST JULY, 2023

		CONSOLIDATED		UNIVERSITY	
		2023	2022	2023	2022
	Notes	£'000	£'000	£'000	£'000
<b>Income</b>					
Tuition fees and education contracts	1	94,843	87,640	82,346	77,512
Funding Council grants	2	23,699	21,239	23,699	21,239
Research grants and contracts		43,325	44,725	43,326	41,754
Other income	3	53,221	42,666	49,864	37,021
Investment income	4	212	97	251	110
<b>Operating income</b>		<b>215,300</b>	<b>196,367</b>	<b>199,486</b>	<b>177,636</b>
Donations and endowments	5	4,986	3,946	4,986	3,946
<b>Total income</b>		<b>220,286</b>	<b>200,313</b>	<b>204,472</b>	<b>181,582</b>
<b>Expenditure</b>					
Staff costs					
Operating staff costs	6	110,031	103,417	98,758	91,101
Pension provision movement		(3,518)	30,174	(3,434)	30,068
Total staff costs		106,513	133,591	95,324	121,169
Other operating expenses		93,401	88,482	89,610	82,030
Depreciation	10	19,586	20,175	19,166	19,569
Interest and other finance costs	8	4,438	1,899	4,437	1,794
<b>Total expenditure</b>	7	<b>223,938</b>	<b>244,147</b>	<b>208,537</b>	<b>224,562</b>
<b>Deficit before other gains and losses</b>		<b>(3,652)</b>	<b>(43,834)</b>	<b>(4,065)</b>	<b>(42,980)</b>
Profit on disposal of assets		-	126	-	(7)
(Loss)/gain on investments		(145)	972	(145)	45
Deficit before tax		(3,797)	(42,736)	(4,210)	(42,942)
Taxation	9	703	(668)	(82)	(23)
<b>Deficit for the year</b>		<b>(3,094)</b>	<b>(43,404)</b>	<b>(4,292)</b>	<b>(42,965)</b>
Unrealised surplus on revaluation of land		-	13,797	-	13,797
Actuarial gain in respect of pension schemes	22	42,753	55,481	42,753	55,481
<b>Total comprehensive income for the year</b>		<b>39,659</b>	<b>25,874</b>	<b>38,461</b>	<b>26,313</b>
Represented by:					
Endowment comprehensive income/(loss) for the year		757	(1,364)	757	(1,364)
Unrestricted comprehensive income for the year		38,902	27,238	37,704	27,677
		<b>39,659</b>	<b>25,874</b>	<b>38,461</b>	<b>26,313</b>

The notes on pages 61 to 82 form part of these financial statements.



CRANFIELD UNIVERSITY

CONSOLIDATED STATEMENT OF CHANGES IN RESERVES  
FOR THE YEAR ENDED 31ST JULY, 2023

Consolidated	Income and expenditure account			Revaluation reserve	Total
	Endowment	Restricted	Unrestricted		
	£'000	£'000	£'000	£'000	£'000
<b>Balance at 1 August 2021</b>	<b>9,593</b>	<b>-</b>	<b>(31,412)</b>	<b>61,289</b>	<b>39,470</b>
Surplus from the income and expenditure statement	(1,364)	-	27,238	-	25,874
Transfer between revaluation reserve and income and expenditure reserve	-	-	(13,797)	13,797	-
Other comprehensive income	-	-	-	-	-
<b>Total comprehensive income for the year</b>	<b>(1,364)</b>	<b>-</b>	<b>13,441</b>	<b>13,797</b>	<b>25,874</b>
<b>Balance at 31 July 2022</b>	<b>8,229</b>	<b>-</b>	<b>(17,971)</b>	<b>75,086</b>	<b>65,344</b>
Surplus from the income and expenditure statement	757	-	38,902	-	39,659
Transfer between revaluation reserve and income and expenditure reserve	-	-	-	-	-
Other comprehensive income	-	-	-	-	-
<b>Total comprehensive income for the year</b>	<b>757</b>	<b>-</b>	<b>38,902</b>	<b>-</b>	<b>39,659</b>
<b>Balance at 31 July 2023</b>	<b>8,986</b>	<b>-</b>	<b>20,931</b>	<b>75,086</b>	<b>105,003</b>

CRANFIELD UNIVERSITY  
UNIVERSITY STATEMENT OF CHANGES IN  
RESERVES  
FOR THE YEAR ENDED 31ST JULY, 2023

University	Income and expenditure account			Revaluation reserve	Total
	<i>Endowment</i>	<i>Restricted</i>	<i>Unrestricted</i>		
	£'000	£'000	£'000	£'000	£'000
<b>Balance at 1 August 2021</b>	<b>9,593</b>	<b>-</b>	<b>(32,252)</b>	<b>61,289</b>	<b>38,630</b>
Surplus from the income and expenditure statement	(1,364)	-	27,677	-	26,313
Transfer between revaluation reserve and income and expenditure reserve	-	-	(13,797)	13,797	-
Other comprehensive income	-	-	-	-	-
<b>Total comprehensive income for the year</b>	<b>(1,364)</b>	<b>-</b>	<b>13,880</b>	<b>13,797</b>	<b>26,313</b>
<b>Balance at 31 July 2022</b>	<b>8,229</b>	<b>-</b>	<b>(18,372)</b>	<b>75,086</b>	<b>64,943</b>
Surplus from the income and expenditure statement	757	-	37,704	-	38,461
Transfer between revaluation reserve and income and expenditure reserve	-	-	-	-	-
Other comprehensive income	-	-	-	-	-
<b>Total comprehensive income for the year</b>	<b>757</b>	<b>-</b>	<b>37,704</b>	<b>-</b>	<b>38,461</b>
<b>Balance at 31 July 2023</b>	<b>8,986</b>	<b>-</b>	<b>19,332</b>	<b>75,086</b>	<b>103,404</b>

The notes on pages 61 to 82 form part of these financial statements.

**CRANFIELD UNIVERSITY**  
**STATEMENT OF FINANCIAL POSITION AT 31ST JULY, 2023**

		<b>CONSOLIDATED</b>		<b>UNIVERSITY</b>	
		<b>2023</b>	<b>2022</b>	<b>2023</b>	<b>2022</b>
	<b>Notes</b>	<b>£'000</b>	<b>£'000</b>	<b>£'000</b>	<b>£'000</b>
<b>Non-current assets</b>					
Fixed assets	10	324,511	315,274	320,531	310,919
Investments	11	4,761	5,129	4,705	5,073
Investments in subsidiaries	12	-	-	5,186	5,186
		<u>329,272</u>	<u>320,403</u>	<u>330,422</u>	<u>321,178</u>
<b>Current assets</b>					
Stock		253	260	187	203
Trade and other receivables	13	50,742	46,256	48,195	44,379
Cash and cash equivalents	18	4,919	14,076	4,764	10,023
		<u>55,914</u>	<u>60,592</u>	<u>53,146</u>	<u>54,605</u>
<b>Current liabilities</b>					
Creditors: amounts falling due within one year	14	(84,537)	(74,465)	(84,610)	(69,982)
<b>Net current liabilities</b>		<u>(28,623)</u>	<u>(13,873)</u>	<u>(31,464)</u>	<u>(15,377)</u>
<b>Total assets less current liabilities</b>		<u>300,649</u>	<u>306,530</u>	<u>298,958</u>	<u>305,801</u>
Creditors: amounts falling due after more than one year	15	(151,562)	(152,158)	(151,562)	(152,000)
<b>Provisions</b>					
Pension provisions	16	(44,084)	(89,028)	(43,992)	(88,858)
Other provisions		-	-	-	-
<b>Total net assets</b>		<u>105,003</u>	<u>65,344</u>	<u>103,404</u>	<u>64,943</u>
<b>Financed by:-</b>					
<b>Restricted Reserves</b>					
Income and expenditure reserve – endowment reserve	17	8,986	8,229	8,986	8,229
<b>Unrestricted Reserves</b>					
Income and expenditure reserve - unrestricted		20,931	(17,971)	19,332	(18,372)
Revaluation reserve		75,086	75,086	75,086	75,086
<b>Total Equity</b>		<u>105,003</u>	<u>65,344</u>	<u>103,404</u>	<u>64,943</u>

The financial statements on pages 49 to 82 were approved by the Council on 27<sup>th</sup> November, 2023 and signed on its behalf by:-

I Hart ACA  
**CHAIR OF FINANCE COMMITTEE**

PROFESSOR K HOLFORD CBE FREng  
**CHIEF EXECUTIVE & VICE-CHANCELLOR**

I SIBBALD FCA  
**DIRECTOR OF FINANCE**

The notes on pages 61 to 82 form part of these financial statements.

CRANFIELD UNIVERSITY

STATEMENT OF CONSOLIDATED CASH FLOWS

FOR THE YEAR ENDED 31ST JULY, 2023

	Notes	2023 £'000	2022 £'000
<b>Cash flows from operating activities</b>			
Deficit for the year before tax		(3,797)	(42,736)
<b>Adjustment for non-cash items</b>			
Depreciation	10	19,586	20,175
Loss/(gain) on investments		145	(972)
Exchange loss/(gain)		344	(264)
Decrease in stock		7	204
Increase in debtors		(4,680)	(271)
Increase/(decrease) in creditors		5,843	(1,694)
Pension provision movement		(3,518)	30,174
(Decrease)/increase in other provisions		-	(60)
Receipt of donated equipment		(31)	-
<b>Adjustment for investing or financing activities</b>			
Investment income	4	(212)	(97)
Interest payable	8	4,438	1,899
Endowment income		(1,810)	-
Taxation inflow		703	-
Income on the sale of fixed assets		-	(126)
Capital grant income	5	(4,986)	(3,946)
<b>Net Cash inflow from operating activities</b>		<u>12,032</u>	<u>2,286</u>
<b>Cash flows from investing activities</b>			
Proceeds from sale of fixed assets		2	126
Capital grants receipts		4,955	3,851
Disposal of non-current asset investments		339	501
Investment income		34	-
Payments made to acquire fixed assets		(29,938)	(29,115)
New non-current asset investments		(50)	(106)
<b>Total cash outflow from investing activities</b>		<u>(24,658)</u>	<u>(24,743)</u>
<b>Cash flows from financing activities</b>			
Interest paid		(1,618)	(123)
Interest element of finance lease		-	(10)
Endowment cash received		1,810	488
New unsecured loans		-	-
Repayments of amounts borrowed		(1,580)	(1,667)
Capital element of finance lease and service concession payments		-	(243)
<b>Total cash outflow from financing activity</b>		<u>(1,388)</u>	<u>(1,555)</u>
<b>Decrease in cash and cash equivalents in the year</b>		<u>(14,014)</u>	<u>(24,012)</u>
Cash and cash equivalents at beginning of the year	18	14,076	38,088
Cash and cash equivalents at end of the year	18	62	14,076
<b>Movement in cash</b>		<u>(14,014)</u>	<u>(24,012)</u>

The notes on pages 61 to 82 form part of these financial statements.

**CRANFIELD UNIVERSITY**

**NOTES TO THE ACCOUNTS**  
**FOR THE YEAR ENDED 31ST JULY, 2023**

	<b>CONSOLIDATED</b>		<b>UNIVERSITY</b>	
	<b>2023</b>	<b>2022</b>	<b>2023</b>	<b>2022</b>
	<b>£'000</b>	<b>£'000</b>	<b>£'000</b>	<b>£'000</b>
<b>1. Tuition fees and education contracts</b>				
Long course fees	67,088	64,564	67,088	64,564
Professional development courses	20,101	15,997	7,814	5,733
Teaching contract	7,654	7,079	7,444	7,215
	<u>94,843</u>	<u>87,640</u>	<u>82,346</u>	<u>77,512</u>
<b>2. Funding Council grants</b>				
Recurrent grant	14,420	12,338	14,420	12,338
Special initiatives	9,279	8,901	9,279	8,901
	<u>23,699</u>	<u>21,239</u>	<u>23,699</u>	<u>21,239</u>
<b>Details of grant and fee income</b>				
Grant income from OfS	2,223	2,729	2,223	2,729
Grant income from Research England	21,476	18,510	21,476	18,510
Fee income for taught awards (exclusive of VAT)	74,742	71,643	74,532	71,779
Fee income from non-qualifying courses (exclusive of VAT)	20,101	15,997	7,814	5,733
Total grant and fee income	<u>118,542</u>	<u>108,879</u>	<u>106,045</u>	<u>98,751</u>
<b>3. Other income</b>				
Residences and conference centres	18,333	14,257	15,124	11,720
Rents from tenant organisations	799	740	1,421	1,348
Other	34,089	27,669	33,319	23,953
	<u>53,221</u>	<u>42,666</u>	<u>49,864</u>	<u>37,021</u>

The Coronavirus Job Retention Scheme (CJRS) grant relates to staff who had been furloughed due to Covid-19. The scheme ran until September 2021 with employers able to claim up to 80% of a furloughed employee's wages/salaries up to a maximum of £2,500 plus associated employer's costs (e.g. employer's national insurance contributions). This grant was be paid to the employer by HMRC.

The Group received £Nil (2022 £45,000) and the University received £Nil (2022 £20,000) in relation to the CJRS and there are no unfulfilled contingencies or commitments attached to this balance.

CRANFIELD UNIVERSITY

NOTES TO THE ACCOUNTS  
FOR THE YEAR ENDED 31ST JULY, 2023  
*(continued...)*

	CONSOLIDATED		UNIVERSITY	
	2023	2022	2023	2022
	£'000	£'000	£'000	£'000
<b>4. Investment income</b>				
Investment income from endowments	178	97	178	99
Other investment income	34	-	73	11
	<hr/>	<hr/>	<hr/>	<hr/>
	212	97	251	110
	<hr/>	<hr/>	<hr/>	<hr/>
<b>5. Donations and endowments</b>				
New endowments ( <i>Note 17</i> )	1,810	488	1,810	488
Donations without restrictions	3,176	3,458	3,176	3,458
	<hr/>	<hr/>	<hr/>	<hr/>
	4,986	3,946	4,986	3,946
	<hr/>	<hr/>	<hr/>	<hr/>

**CRANFIELD UNIVERSITY**  
**NOTES TO THE ACCOUNTS**  
**FOR THE YEAR ENDED 31ST JULY, 2023**  
*(continued...)*

		<b>CONSOLIDATED</b>		<b>UNIVERSITY</b>	
		<b>2023</b>	<b>2022</b>	<b>2023</b>	<b>2022</b>
		<b>£'000</b>	<b>£'000</b>	<b>£'000</b>	<b>£'000</b>
<b>6. Staff</b>					
a. Staff costs					
Wages and salaries		85,458	80,143	75,680	69,704
Social security costs		9,082	8,610	8,173	7,570
Other pension costs		15,417	14,484	14,831	13,647
		<hr/>	<hr/>	<hr/>	<hr/>
		109,957	103,237	98,684	90,921
Staff restructuring		74	180	74	180
		<hr/>	<hr/>	<hr/>	<hr/>
Operating staff costs		110,031	103,417	98,758	91,101
Pension provision movement		(3,518)	30,174	(3,434)	30,068
		<hr/>	<hr/>	<hr/>	<hr/>
Total staff costs		106,513	133,591	95,324	121,169
		<hr/>	<hr/>	<hr/>	<hr/>
Number of staff receiving payment for loss of office		13	22	13	22
		<hr/>	<hr/>	<hr/>	<hr/>
Emoluments of the Vice-Chancellor (as detailed in the Remuneration Committee report on page 39)					
Base salary		272	270	272	270
Pension cost		17	54	17	54
Cost of pension opt-out		33	-	33	-
Taxable benefit		6	6	6	6
Performance related pay		38	-	38	-
		<hr/>	<hr/>	<hr/>	<hr/>
		366	330	366	330
		<hr/>	<hr/>	<hr/>	<hr/>
The Vice-Chancellors salary and total remuneration expressed as a multiple of median salary and total remuneration of all other staff was:					
Vice-Chancellor basic salary multiplier		6.89	7.16	6.89	7.16
Vice-Chancellor total remuneration multiplier		7.85	7.32	7.50	6.92
		<hr/>	<hr/>	<hr/>	<hr/>
b. The average number of employees during the year, expressed as full-time equivalents, was as follows:-		Number	Number	Number	Number
Academic		466	450	450	435
Research		223	220	223	220
Technical		156	154	114	114
Other		1,006	939	789	752
		<hr/>	<hr/>	<hr/>	<hr/>
		1,851	1,763	1,576	1,521
		<hr/>	<hr/>	<hr/>	<hr/>

**CRANFIELD UNIVERSITY**  
**NOTES TO THE ACCOUNTS**  
**FOR THE YEAR ENDED 31ST JULY, 2023**  
(continued...)

6. **Staff** (continued...)

	<b>CONSOLIDATED</b>		<b>UNIVERSITY</b>	
	<b>2023</b>	<b>2022</b>	<b>2023</b>	<b>2022</b>
	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
c. <i>Remuneration of other higher paid staff, excluding employer's pension contributions, were as follows:-</i>				
£100,000 - £104,999	7	4	5	3
£105,000 - £109,999	3	6	3	6
£110,000 - £114,999	6	11	5	9
£115,000 - £119,999	5	4	4	4
£120,000 - £124,999	3	2	3	1
£125,000 - £129,999	5	1	4	1
£130,000 - £134,999	1	1	1	1
£135,000 - £139,999	3	4	3	4
£140,000 - £144,999	2	1	2	1
£145,000 - £149,999	3	2	3	2
£150,000 - £154,999	1	-	1	-
£155,000 - £159,999	2	1	2	1
£160,000 - £164,999	1	1	1	1
£165,000 - £169,999	-	1	-	1
£170,000 - £174,999	1	-	1	-
£175,000 - £179,999	-	-	-	-
£180,000 - £184,999	2	1	2	1
£185,000 - £189,999	1	3	1	3
£190,000 - £194,999	3	2	3	2

**Key Management personnel**

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the University. 2023 13 Members (2022: 12 members).

	<b>CONSOLIDATED &amp; UNIVERSITY</b>	
	<b>2023</b>	<b>2022</b>
	<i>£'000</i>	<i>£'000</i>
<i>Key management personnel compensation</i>	2,587	2,336

**Council Members**

The University's council members are the trustees for charitable law purposes. Due to the nature of the University's operations and the compositions of the Council, it is inevitable that transactions will take place with organisations in which a member of the Council may have an interest. All transactions involving organisations in which a member of Council may have an interest are conducted at arm's length and in accordance with the University's Financial Regulations and usual procurement procedures.

No Council member received any payment for their role as a trustee. The total expenses paid to or on behalf of 5 council members was £2,779 (2022 £2,213 to 6 council members). This represents travel and subsistence expenses incurred in attending Council, Committee meetings and Charity events in their official capacity.



**CRANFIELD UNIVERSITY**  
**NOTES TO THE ACCOUNTS**  
**FOR THE YEAR ENDED 31ST JULY, 2023**  
*(continued...)*

	<b>CONSOLIDATED</b>		<b>UNIVERSITY</b>	
	<b>2023</b>	<b>2022</b>	<b>2023</b>	<b>2022</b>
	<b>£'000</b>	<b>£'000</b>	<b>£'000</b>	<b>£'000</b>
<b>7. Other operating amounts charged include:-</b>				
Equipment expensed	5,026	5,627	4,996	5,586
Operating lease rentals	344	285	261	285
Auditors' remuneration:-				
- external audit	277	177	210	111
- other services including tax	105	62	105	62
Council members' expenses	3	11	3	11
	<hr/>	<hr/>	<hr/>	<hr/>
<b>8. Interest and other finance costs</b>				
Loan interest	3,112	119	3,117	15
Finance leases	-	10	-	10
Net charge on Pension schemes	1,326	1,770	1,320	1,769
	<hr/>	<hr/>	<hr/>	<hr/>
	4,438	1,899	4,437	1,794
	<hr/>	<hr/>	<hr/>	<hr/>
<b>9. Taxation</b>				
Recognised in the statement of comprehensive income:-				
Current tax expense	-	-	-	-
Overseas tax	(703)	908	82	23
R&D tax credits	-	(240)	-	-
	<hr/>	<hr/>	<hr/>	<hr/>
<b>Total tax (credit)/charge</b>	<b>(703)</b>	<b>668</b>	<b>82</b>	<b>23</b>
	<hr/>	<hr/>	<hr/>	<hr/>

The tax assessed for the year is higher than the standard rate (2022 higher than the standard rate) of corporation tax in the UK. The differences are explained below:

Deficit on ordinary activities before taxation	(3,797)	(42,736)	(4,210)	(42,942)
	<hr/>	<hr/>	<hr/>	<hr/>
Tax on deficit on ordinary activities before taxation multiplied by the lower rate of corporation tax in the UK of 19% (2022 – 19%)	(721)	(8,120)	(800)	(8,159)
Factors affecting charge:				
Tax losses	721	8,120	800	8,159
University surplus exempt from corporation tax	-	-	-	-
R&D tax credits	-	(240)	-	-
Overseas tax	(703)	908	82	23
Other permanent differences	-	-	-	-
	<hr/>	<hr/>	<hr/>	<hr/>
Corporation tax (credited)/charged in the year	(703)	668	82	23
	<hr/>	<hr/>	<hr/>	<hr/>

CRANFIELD UNIVERSITY

NOTES TO THE ACCOUNTS  
FOR THE YEAR ENDED 31ST JULY, 2023  
(continued...)

	Land & Buildings		Equipment	Fixtures, Plant & Machinery	Total
	Freehold	Leasehold			
	£'000	£'000	£'000	£'000	£'000
<b>10. Fixed assets</b>					
<i>a. Consolidated</i>					
Cost/valuation					
At beginning of year	283,021	6,900	77,923	142,470	510,314
Additions	1,698	-	10,137	16,990	28,825
Disposals	-	-	(563)	(608)	(1,171)
Revaluation	-	-	-	-	-
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
At end of year	284,719	6,900	87,497	158,852	537,968
Consisting of valuation as at:					
31 July 2023	75,086	-	-	-	75,086
Cost	209,633	6,900	87,497	158,852	462,882
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
Accumulated depreciation					
At beginning of year	39,880	5,732	56,049	93,379	195,040
Charge for year	4,264	230	5,785	9,307	19,586
Disposals	-	-	(563)	(606)	(1,169)
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
At end of year	44,144	5,962	61,271	102,080	213,457
Net book amount					
At end of year	240,575	938	26,226	56,772	324,511
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
At beginning of year	243,141	1,168	21,874	49,091	315,274
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>

**CRANFIELD UNIVERSITY**  
**NOTES TO THE ACCOUNTS**  
**FOR THE YEAR ENDED 31ST JULY, 2023**  
*(continued...)*

	Land & Buildings			Fixtures, Plant & Machinery	Total
	Freehold	Leasehold	Equipment		
	£'000	£'000	£'000	£'000	£'000
<b>10. Fixed assets</b> <i>(continued ...)</i>					
<i>b. University</i>					
Cost/valuation					
At beginning of year	276,972	6,900	77,129	135,677	496,678
Additions	1,698	-	10,097	16,984	28,779
Disposals	-	-	(558)	(607)	(1,165)
Revaluation	-	-	-	-	-
At end of year	278,670	6,900	86,668	152,054	524,292
Consisting of valuation as at:					
31 July 2023	75,086	-	-	-	75,086
Cost	203,584	6,900	86,668	152,054	449,206
Accumulated depreciation					
At beginning of year	36,889	5,732	55,340	87,798	185,759
Charge for year	4,131	230	5,754	9,051	19,166
Disposals	-	-	(558)	(606)	(1,164)
At end of year	41,020	5,962	60,536	96,243	203,761
Net book amount					
At end of year	237,650	938	26,132	55,811	320,531
At beginning of year	240,083	1,168	21,789	47,879	310,919

At 31 July, 2023, freehold land and buildings included £75,086,000 (2022 £75,086,000) in respect of freehold land at valuation and is not depreciated.

The net book amounts of tangible fixed assets include £Nil (2022 - £53,000) in respect of assets held under finance leases in the consolidated and University financial statements respectively. The related depreciation charge for the year was £Nil (2022 - £65,000). At 31st July 2023, buildings, fixtures and plant included £12,368,000 (2022 - £8,471,000) in respect of assets under construction in the consolidated financial statements. In the University assets under construction amounted to £12,368,000 (2022 - £8,471,000).

**CRANFIELD UNIVERSITY**  
**NOTES TO THE ACCOUNTS**  
**FOR THE YEAR ENDED 31ST JULY, 2023**  
*(continued...)*

	<b>CONSOLIDATED</b>		<b>UNIVERSITY</b>	
	<b>2023</b>	<b>2022</b>	<b>2023</b>	<b>2022</b>
	<b>£'000</b>	<b>£'000</b>	<b>£'000</b>	<b>£'000</b>
<b>11. Investments</b>				
Investments at beginning of year	5,129	5,449	5,073	5,393
Additions	50	105	50	105
(Losses)/gains in year	(79)	76	(79)	76
Disposals	(339)	(501)	(339)	(501)
At end of year	<u>4,761</u>	<u>5,129</u>	<u>4,705</u>	<u>5,073</u>

Investments are in three key areas:

- a. Prodigy loan scheme which enables the University to invest in bonds that will finance Cranfield student tuition and maintenance loans of £37,000 (2022 - £331,000) in the consolidated and University financial statements.
- b. CCLA Investment funds for specific endowments of £2,696,000 (2022 - £2,820,000) in the consolidated and University financial statements.
- c. Investments in spin out companies and associates of £2,028,000 (2022 - £1,978,000) in the consolidated financial statements and £1,972,000 (2022 - £1,922,000) in the University.

	<b>UNIVERSITY</b>	
	<b>2023</b>	<b>2022</b>
	<b>£'000</b>	<b>£'000</b>
<b>12. Investments in subsidiaries</b>		
At beginning of year	5,186	5,186
Additions	-	-
Disposals	-	-
At end of year	<u>5,186</u>	<u>5,186</u>

At 31st July, 2023 the group's principal subsidiaries, all of which were wholly owned and registered in England and Wales at the same address as the University, comprised:-

<b>COMPANY</b>	<b>NATURE OF BUSINESS</b>
<b>Cranfield Group Holdings Limited</b>	Holding company
Cranfield Airport Operations Limited	Provision of airport services
<b>Cranfield Conference Centre Limited</b>	Provision of conference and accommodation services
<b>Cranfield Quality Services Limited</b>	Provision of residential support services
Cranfield Regatta Limited	Dormant company
<b>Cranfield Innovative Manufacturing Limited</b>	Provision of crash testing services and soil maps
<b>Cranfield Management Development Limited</b>	Provision of executive development programmes
<b>Cranfield Defence and Security Services Limited</b>	Provision of defence and security services
<b>MK:U Limited</b>	Dormant company

**CRANFIELD UNIVERSITY**  
**NOTES TO THE ACCOUNTS**  
**FOR THE YEAR ENDED 31ST JULY, 2023**  
*(continued...)*

On the 11<sup>th</sup> August, 2022 Cranfield Group Holdings Limited authorised Cranfield Aerospace Solutions Ltd to issue further preference shares to Tawazun Strategic Development Fund and Motus Ventures generating a further investment of £3,833,333. This reduced the Cranfield Group Holdings Limited investment in Cranfield Aerospace Solutions Limited to 23.98% on a pre diluted basis and 16.89% of the shares on a fully diluted basis.

	<b>CONSOLIDATED</b>		<b>UNIVERSITY</b>	
	<b>2023</b>	<b>2022</b>	<b>2023</b>	<b>2022</b>
	<b>£'000</b>	<b>£'000</b>	<b>£'000</b>	<b>£'000</b>
<b>13. Trade and Other receivables</b>				
Work in progress	9,807	10,251	9,807	10,251
Other trade debtors	32,121	28,292	27,678	24,692
Prepayments and accrued income	8,755	7,296	7,097	6,396
Other taxes	59	417	58	414
Amounts receivable from subsidiary undertakings	-	-	3,555	2,626
	<u>50,742</u>	<u>46,256</u>	<u>48,195</u>	<u>44,379</u>

Included in amounts receivable from subsidiary undertakings is £582,000 (2022 - £765,000) which is recoverable after more than one year and interest is charged at 1% over the Bank of England base rate.

**14. Creditors: amounts falling due within one year**

Bank overdraft	4,857	-	4,765	-
Unsecured loans	639	1,565	481	790
Amounts owed to subsidiary undertakings	-	-	5,047	1,084
Trade creditors	38,735	34,059	36,602	31,862
Social security costs and other taxation payable	2,643	2,651	2,137	2,042
Accruals and deferred income	37,663	36,190	35,578	34,204
	<u>84,537</u>	<u>74,465</u>	<u>84,610</u>	<u>69,982</u>

**15. Creditors: amounts falling due after more than one year**

Unsecured loans	151,562	152,158	151,562	152,000
	<u>151,562</u>	<u>152,158</u>	<u>151,562</u>	<u>152,000</u>

CRANFIELD UNIVERSITY  
NOTES TO THE ACCOUNTS  
FOR THE YEAR ENDED 31ST JULY, 2023  
(continued...)

	CONSOLIDATED		UNIVERSITY	
	2023	2022	2023	2022
	£'000	£'000	£'000	£'000
15. Creditors: amounts falling due after more than one year (continued ...)				
<i>Analysis of secured and unsecured loans due within one year or on demand (note 14)</i>	639	1,565	481	790
Between one and two years	481	628	481	470
Between two and five years	1,081	1,411	1,081	1,411
Five years or more	150,000	150,119	150,000	150,119
Due after more than one year	151,562	152,158	151,562	152,000
Total secured and unsecured loans	152,201	153,723	152,043	152,790

The Group had the following loans at 31st July, 2023:-

	Interest Rate	Loan Type	Security	Final Repayment	Loan Outstanding £'000
1.	Euro base + 0.18%	Floating(Euros)	None	15th August 2027	2,043
3.	2.20%	Private Bond	None	3rd March 2030	25,000
4.	2.30%	Private Bond	None	3rd March 2035	40,000
5.	2.49%	Private Bond	None	3rd March 2040	40,000
6.	2.60%	Private Bond	None	3rd March 2045	30,000
7.	2.67%	Private Bond	None	3rd March 2050	15,000
8.	Base + 2.08%	CLBILS Loan	None	20 <sup>th</sup> November 2023	125
9.	Base + 2.08%	CLBILS Loan	None	28 <sup>th</sup> August 2023	33
					152,201

CRANFIELD UNIVERSITY  
NOTES TO THE ACCOUNTS  
FOR THE YEAR ENDED 31ST JULY, 2023  
(continued...)

16. Pension provisions

Consolidated	Obligation to fund deficit on USS pension £'000	Defined Benefit Obligations (Note 22) £'000	Total Pensions Provisions £'000
At 1 August 2022	48,089	40,939	89,028
Utilised in year	-	-	-
Decrease in provision	(4,005)	(40,939)	(44,944)
At 31 July 2023	44,084	-	44,084

University	Obligation to fund deficit on USS pension £'000	Defined Benefit Obligations (Note 22) £'000	Total Pensions Provisions £'000
At 1 August 2022	47,919	40,939	88,858
Utilised in year	-	-	-
Decrease in provision	(3,927)	(40,939)	(44,866)
At 31 July 2023	43,992	-	43,992

**Pension enhancement**

The assumptions for calculating the provision for pension enhancements on termination under FRS 102 are as follows:

	Consolidated
Discount rate	5.15
Inflation	3.80

**USS deficit**

The obligation to fund the past deficit on the University's Superannuation Scheme (USS) arises from the contractual obligation with the pension scheme for total payments relating to benefits arising from past performance. Management have assessed future employees within the USS scheme and salary payment over the period of the contracted obligation in assessing the value of this provision.

CRANFIELD UNIVERSITY  
NOTES TO THE ACCOUNTS  
FOR THE YEAR ENDED 31ST JULY, 2023  
(continued...)

17. Income and expenditure  
reserve - endowment reserves

	Expendable endowments	Permanent endowments	2022/23 Total	2021/22 Total
	£'000	£'000	£'000	£'000
<b>Balances at 1 August 2022 and at 1 August 2021</b>				
Capital	5,691	2,106	7,797	9,255
Accumulated income	187	245	432	338
	<hr/>	<hr/>	<hr/>	<hr/>
	5,878	2,351	8,229	9,593
New endowments	1,810	-	1,810	488
Investment income	75	65	140	100
Expenditure	(987)	(60)	(1,047)	(1,997)
(Decrease)/increase in market value of investments	(101)	(45)	(146)	45
	<hr/>	<hr/>	<hr/>	<hr/>
<b>Total endowment comprehensive income/(expense) for the year</b>	797	(40)	757	(1,364)
	<hr/>	<hr/>	<hr/>	<hr/>
<b>At 31 July 2023 and at 31 July 2022</b>	6,675	2,311	8,986	8,229
	<hr/>	<hr/>	<hr/>	<hr/>
<b>Represented by:</b>				
Capital	6,408	2,106	8,514	7,797
Accumulated income	267	205	472	432
	<hr/>	<hr/>	<hr/>	<hr/>
	6,675	2,311	8,986	8,229
	<hr/>	<hr/>	<hr/>	<hr/>
<b>Analysis by type of purpose:</b>				
Lectureships	787	2,199	2,986	3,109
Scholarships and bursaries	958	112	1,070	998
Research support	783	-	783	505
Prize funds	143	-	143	157
General	4,004	-	4,004	3,460
	<hr/>	<hr/>	<hr/>	<hr/>
	6,675	2,311	8,986	8,229
	<hr/>	<hr/>	<hr/>	<hr/>
<b>Analysis by asset</b>				
Fixed assets	339	-	339	339
Current and non-current asset investments	2,210	2,311	4,521	4,720
Cash & cash equivalents	4,126	-	4,126	3,170
	<hr/>	<hr/>	<hr/>	<hr/>
	6,675	2,311	8,986	8,229
	<hr/>	<hr/>	<hr/>	<hr/>



**CRANFIELD UNIVERSITY**  
**NOTES TO THE ACCOUNTS**  
**FOR THE YEAR ENDED 31ST JULY, 2023**  
*(continued...)*

**18. Cash and cash equivalents**

Consolidated	At 1st August 2022 £'000	Cash Flows £'000	31st July 2023 £'000
Cash and cash equivalents	14,076	(9,157)	4,919
Bank overdraft	-	(4,857)	(4,857)
	<u>14,076</u>	<u>(14,014)</u>	<u>62</u>

**19. Consolidated reconciliation of net debt**

	2022/23 £'000	2021/22 £'000
Net debt 1 August	(139,647)	(117,594)
Movement in cash and cash equivalents	(14,014)	(24,012)
New finance lease liabilities	-	-
New unsecured loans	-	-
Repayments of finance leases	-	243
Repayments of unsecured loans	1,580	1,716
Repayment of secured loans	-	-
Changes in market value and exchange rates	(58)	-
Net debt 31 July	<u>(152,139)</u>	<u>(139,647)</u>
Change in net debt	<u>(12,492)</u>	<u>(22,053)</u>

Analysis of net debt:	2023 £'000	2022 £'000
Cash and cash equivalents	62	14,076
Borrowings: amounts falling due within one year		
Unsecured loans	639	1,565
Obligations under finance leases	<u>-</u>	<u>-</u>
	639	1,565
Borrowings: amounts falling due after more than one year		
Obligations under finance lease	-	-
Unsecured loans	<u>151,562</u>	<u>152,158</u>
	151,562	152,158
Net debt	<u>152,139</u>	<u>139,647</u>

**CRANFIELD UNIVERSITY**  
**NOTES TO THE ACCOUNTS**  
**FOR THE YEAR ENDED 31ST JULY, 2023**  
*(continued...)*

		<b>CONSOLIDATED</b>		<b>UNIVERSITY</b>	
		<b>2023</b>	<b>2022</b>	<b>2023</b>	<b>2022</b>
		<b>£'000</b>	<b>£'000</b>	<b>£'000</b>	<b>£'000</b>
<b>20.</b>	<b>Lease obligations</b>				
	Non-cancellable operating lease rentals are payable as follows:				
	Land and buildings				
	Within one year	262	285	262	285
	Between two and five years	503	769	503	769
	In more than five years	-	-	-	-
		<hr/>	<hr/>	<hr/>	<hr/>
		765	1,054	765	1,054
		<hr/>	<hr/>	<hr/>	<hr/>
	Other				
	Within one year	-	-	-	-
	Between two and five years	-	-	-	-
	In more than five years	-	-	-	-
		<hr/>	<hr/>	<hr/>	<hr/>
		-	-	-	-
		<hr/>	<hr/>	<hr/>	<hr/>
During the year £262,000 was recognised as an expense in the profit and loss account in respect of operating leases (2022 £285,000).					
<b>21.</b>	<b>Capital and other commitments</b>				
	a. Commitments contracted but not provided in the financial statements	1,092	6,596	1,092	6,596
		<hr/>	<hr/>	<hr/>	<hr/>
	b. Commitments authorised but not Contracted for	24,366	24,591	24,366	24,591
		<hr/>	<hr/>	<hr/>	<hr/>

**CRANFIELD UNIVERSITY**  
**NOTES TO THE ACCOUNTS**  
**FOR THE YEAR ENDED 31ST JULY, 2023**  
*(continued...)*

**22. Pensions**

The two pension schemes for the University's staff are the Universities Superannuation Scheme (USS) and the Local Government Pension Scheme (LGPS) administered by Bedfordshire County Council. The assets of the USS are held in a separate trustee-administered fund and a Pension Fund Investment Advisory Panel is responsible for the investment arrangements of the assets of the LGPS. Both schemes are defined benefit schemes, which are externally funded, valued every three years by actuaries using the projected unit method and are contracted out of the State Earnings Related Pensions Scheme. In the intervening years, the actuaries review the progress of the schemes.

Between October 2011 and March 2016 USS provided two schemes, the first for existing members of staff at 30<sup>th</sup> September 2011 who were existing members of USS, this scheme had benefits based on final pensionable salary for academic and related employees of all universities in the United Kingdom and some other employers, the second for new entrants (other than in some specific, limited circumstances) were provided on a career re-valued benefit basis. From 1 April 2016 one revised career re-valued benefit scheme has been introduced for all academic and related employees.

LGPS provides similar benefits for other staff of the University, based on their final salary.

Pension costs are assessed, in accordance with the advice of the actuary, based on the latest actuarial valuation of the schemes and are accounted for on the basis of charging the cost of providing pensions over the period during which the University benefits from the employees' services.

**USS**

The institution participates in Universities Superannuation Scheme. The assets of the scheme are held in a separate trustee-administered fund. Because of the mutual nature of the scheme, the assets are not attributed to individual institutions and a scheme-wide contribution rate is set. The institution is therefore exposed to actuarial risks associated with other institutions' employees and is unable to identify its share of the underlying assets and liabilities of the scheme on a consistent and reasonable basis. As required by Section 28 of FRS 102 "Employee benefits", the institution therefore accounts for the scheme as if it were a defined contribution scheme. As a result, the amount charged to the profit and loss account represents the contributions payable to the scheme. Since the institution has entered into an agreement (the Recovery Plan) that determines how each employer within the scheme will fund the overall deficit, the institution recognises a liability for the contributions payable that arise from the agreement (to the extent that they relate to the deficit) with related expenses being recognised through the profit and loss account.

FRS 102 makes the distinction between a group plan and a multi-employer scheme. A group plan consists of a collection of entities under common control typically with a sponsoring employer. A multi-employer scheme is a scheme for entities not under common control and represents (typically) an industry-wide scheme such as Universities Superannuation Scheme. The accounting for a multi-employer scheme where the employer has entered into an agreement with the scheme that determines how the employer will fund a deficit results in the recognition of a liability for the contributions payable that arise from the agreement (to the extent that they relate to the deficit) and the resulting expense in profit or loss in accordance with section 28 of FRS 102. The directors are satisfied that Universities Superannuation Scheme meets the definition of a multi-employer scheme and has therefore recognised the discounted fair value of the contractual contributions under the recovery plan in existence at the date of approving these financial statements.

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**22. Pensions** *(continued...)*

The latest available complete actuarial valuation of the Retirement Income Builder is at 31 March 2020 (the valuation date), which was carried out using the projected unit method.

Since the institution cannot identify its share of USS Retirement Income Builder (defined benefit) assets and liabilities, the following disclosures reflect those relevant for those assets and liabilities as a whole.

The 2020 valuation was the sixth valuation for the scheme under the scheme-specific funding regime introduced by the Pensions Act 2004, which requires schemes to have sufficient and appropriate assets to cover their technical provisions. At the valuation date, the value of the assets of the scheme was £66.5 billion and the value of the scheme's technical provisions was £80.6 billion indicating a shortfall of £14.1 billion and a funding ratio of 83%.

The key financial assumptions used in the 2020 valuation are described below. More detail is set out in the Statement of Funding Principles ([uss.co.uk/about-us/valuation-and-funding/statement-of-funding-principles](http://uss.co.uk/about-us/valuation-and-funding/statement-of-funding-principles)).

CPI assumption	Term dependent rates in line with the difference between the Fixed Interest and Index Linked yield curves, less 1.1% p.a. to 2030 reducing linearly by 0.1% p.a. to a long term difference of 0.1% p.a. from 2040
Pension increases (subject to a floor of 0%)	CPI assumption plus 0.05%
Discount rate (forward rates)	Fixed interest gilt yield curve plus: Pre-retirement: 2.75% p.a. Post retirement: 1.00% p.a.

The main demographic assumption used relates to the mortality assumptions. These assumptions are based on analysis of the scheme's experience carried out as part of the 2020 actuarial valuation. The mortality assumptions used in these figures are as follows:

	<b>2020 valuation</b>
Mortality base table	101% of S2PMA "light" for males and 95% of S3PFA for females
Future improvements to mortality	CMI 2019 with a smoothing parameter of 7.5, an initial addition of 0.5% p.a. and a long-term improvement rate of 1.8% p.a. for males and 1.6% p.a. for females

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*(continued...)*

**22. Pensions** *(continued...)*

The current life expectancies on retirement at age 65 are:

	2021	2020
Males currently aged 65 (years)	23.9	24.7
Females currently aged 65 (years)	25.5	26.1
Males currently aged 45 (years)	25.9	26.7
Females currently aged 45 (years)	27.3	27.9

A new deficit recovery plan was put in place as part of the 2020 valuation, which requires payment of 6.2% of salaries over the period 1 April 2022 until 31 March 2024, at which point the rate will increase to 6.3%. The 2022 deficit recovery liability reflects this plan. The liability figures have been produced using the following assumptions:

	2023	2022
Discount rate	5.15	3.40%
Pensionable salary growth	3.80	3.85%

	Note	CONSOLIDATED 2023	2022
		£'000	£'000
<b>USS pension provision</b>			
At beginning of the year	16	48,089	20,695
Interest payable		-	331
Contributions paid against deficit		(3,493)	(1,264)
(Credited)/charged in the year		(512)	28,327
At end of the year		44,084	48,089

**LGPS**

The rate of the University's employer's contributions for LGPS is determined by the actuaries and is presently 19.6% of pensionable salaries. Employee rates for LGPS are statutorily prescribed. Variations from regular cost are spread over the expected average remaining working lifetime of members of the scheme after making allowances for future withdrawals.

The figures disclosed below estimated by the actuary as at 31st July, 2023 have been derived by suitable approximation methods from the full actuarial valuation as at 31st March, 2022. Surpluses or deficits that arise may impact on the University's future contribution commitment.

CRANFIELD UNIVERSITY

NOTES TO THE ACCOUNTS  
FOR THE YEAR ENDED 31ST JULY, 2023  
(continued...)

22. Pensions (continued...)

The major assumptions used by the actuary as at 31st July, 2023 are as follows:-

	2023	2022	2021
	%	%	%
Salary scale increases per annum	3.80	3.85	3.85
Pension increases per annum	2.80	2.85	2.85
Discount rate per annum	5.15	3.40	1.60
Members opting for enhanced commutation pre 2008 service	50.00	50.00	50.00
Members opting for enhanced commutation post 2008 service	50.00	50.00	50.00

The assumed life expectations on retirement at age 65 are:-

	2023	2022	2021
Retiring today			
Males	21.1	22.0	21.9
Females	23.9	24.4	24.3
Retiring in 20 years			
Males	22.1	22.9	22.8
Females	25.5	26.0	26.0

The estimated University share of the assets in the scheme were:-

	2023	2022	2021
	£'000	£'000	£'000
Equities	75,779	66,498	76,292
Property	17,093	14,899	10,170
Bonds	21,235	25,036	20,378
Cash	4,354	4,159	2,404
	<hr/>	<hr/>	<hr/>
	118,461	110,592	109,244

There is no provision for unitising the assets of a Fund under LGPS. The asset of the scheme, as a whole, is allocated to participating bodies on a consistent and reasonable basis.

**CRANFIELD UNIVERSITY**  
**NOTES TO THE ACCOUNTS**  
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*(continued...)*

22. **Pensions** *(continued ...)*

The University's share of the underlying assets and liabilities are as follows:-

	<b>2023</b> £'000	<b>2022</b> £'000
Market value of assets	118,461	110,592
Present value of liabilities	(117,346)	(151,531)
<b>Surplus/(deficit) in the scheme before restriction of surplus</b>	<b>1,115</b>	<b>(40,939)</b>
Current service cost	4,796	6,990
Loss due to curtailments	-	-
Past service cost	-	106
<b>Total operating charge</b>	<b>4,796</b>	<b>7,096</b>
<b>Analysis of the amount charged to interest payable</b>		
Interest on pension scheme liabilities	5,087	3,185
Interest on pension scheme assets	(3,767)	(1,746)
<b>Net charge to other finance costs</b>	<b>1,320</b>	<b>1,439</b>
<b>Total income and expenditure account charge</b>	<b>6,116</b>	<b>8,535</b>
<b>Analysis of other comprehensive income</b>		
Gain/(loss) on assets	1,678	(78)
Change in demographic assumptions	7,374	-
Change in financial assumptions	40,907	67,065
Experience loss on liabilities	(8,239)	(11,506)
Other actuarial gains	2,147	-
<b>Total other comprehensive income before deduction for tax</b>	<b>43,867</b>	<b>55,481</b>
<b>Cumulative actuarial loss recognised as other comprehensive income for LGPS Scheme</b>		
Cumulative actuarial (gains)/losses recognised at the start of the year	(18,529)	36,952
Cumulative actuarial gains recognised at the end of the year	(62,396)	(18,529)
<b>Analysis of movement in deficit during the year:</b>		
Deficit in scheme at beginning of the year	(40,939)	(91,869)
Movement in year:		
Current service cost	(4,657)	(6,861)
Contributions	4,303	3,984
Administration expenses	(139)	(129)
Past service cost	-	(106)
Other finance charge	(1,320)	(1,439)
Actuarial gain	43,867	55,481
Restriction of surplus recognised in the statement of financial position	(1,115)	-
<b>Surplus/(deficit) in scheme at end of the year</b>	<b>-</b>	<b>(40,939)</b>

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**NOTES TO THE ACCOUNTS**  
**FOR THE YEAR ENDED 31ST JULY, 2023**  
*(continued...)*

22. **Pensions** *(continued ...)*

	2023	2022
	£'000	£'000
<b>Amounts recognised in the statement of financial position</b>		
Present value of funded liabilities	(117,346)	(151,531)
Fair value of scheme assets	118,461	110,592
	<hr/>	<hr/>
Surplus/(deficit) in the scheme	1,115	(40,939)
Less restriction of surplus recognised in the statement of financial position	(1,115)	-
	<hr/>	<hr/>
Asset/(liability) recognised in the statement of financial position	-	(40,939)
	<hr/>	<hr/>
<b>Analysis of movement in the fair value of the scheme liabilities:-</b>		
Fair value at beginning of year	151,531	201,113
Current service cost	4,657	6,861
Interest cost	5,087	3,185
Contributions by members (including notional contributions)	862	745
Actuarial gains	(40,042)	(55,559)
Past service costs	-	106
Losses on curtailments	-	-
Actual benefits paid	(4,749)	(4,920)
	<hr/>	<hr/>
Present value at end of year	117,346	151,531
	<hr/>	<hr/>
<b>Analysis of movement in the fair value of the scheme assets:-</b>		
Fair value at beginning of year	110,592	109,244
Interest on plan assets	3,767	1,746
Contributions by members	862	745
Contributions by the employer	4,303	3,984
Actuarial gains/(losses)	3,825	(78)
Actual benefits paid	(4,749)	(4,920)
Administration expenses	(139)	(129)
	<hr/>	<hr/>
Fair value at end of year	118,461	110,592
	<hr/>	<hr/>

Estimated contributions for LGPS in the Financial year 2024 is £3,938,000.

In addition to the main schemes described above, some of the subsidiaries operate their own immaterial pension schemes, details of which can be found in the individual company financial statements.



CRANFIELD UNIVERSITY  
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	2023 £'000	2022 £'000
23. <b>Access funds</b>		
Funding Council grants in year	-	-
Disbursed to students in year	-	-
	<hr/>	<hr/>
Balance unspent at end of year	-	-
	<hr/>	<hr/>

Funding Council grants are available solely for students: the University acts only as paying agent. The grants and related disbursements are therefore excluded from the income and expenditure account.

**CRANFIELD UNIVERSITY**  
**NOTES TO THE ACCOUNTS**  
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*(continued...)*

**24. Related party transactions**

The following exemptions available under FRS 102 have been applied to these financial statements:

- Disclosures in respect of transactions with wholly owned subsidiaries

Invoices net of VAT of £ 762,153 (2022: £96,257 for 4 months) have been issued to Cranfield Aerospace Solutions Limited in the year. Of the amount £434,984 (2022: £93,561) net of VAT was outstanding at 31 July 2023.

	<b>CONSOLIDATED</b>		<b>UNIVERSITY</b>	
	<b>2023</b>	<b>2022</b>	<b>2023</b>	<b>2022</b>
	£'000	£'000	£'000	£'000
<b>25. Financial instruments</b>				
Financial assets at fair value through the comprehensive income account	4,761	5,640	4,705	5,073
Financial assets that are debt instruments measured at amortised cost:				
Cash and cash equivalents	4,919	14,076	4,764	10,023
Other investments measured at amortised costs	-	-	-	-
Trade debtors	31,121	28,292	31,233	27,318
Other debtors	8,814	7,713	7,155	6,810
	<u>49,615</u>	<u>55,721</u>	<u>47,857</u>	<u>49,224</u>
Financial liabilities measured at amortised cost:				
Secured loans	-	-	-	-
Unsecured loans	(152,201)	(153,723)	(152,043)	(152,790)
Finance leases	-	-	-	-
Trade creditors	(38,735)	(34,059)	(41,649)	(32,946)
Accruals	(12,616)	(13,622)	(12,055)	(12,867)
	<u>(203,552)</u>	<u>(201,404)</u>	<u>(205,747)</u>	<u>(198,603)</u>