



**United Nations
Principles of Responsible
Management Education
(UN PRME)**

Communication on
progress 2017 & 2018

Cranfield
School of
Management



United Nations Principles of Responsible Management Education (UN PRME)

Communication on progress 2017 & 2018

Cranfield School of Management is delighted to submit our fifth Communication on Progress to UN PRME covering the calendar years 2017 and 2018.

About Cranfield School of Management

We are one of the oldest business schools in Europe. As part of Cranfield University, the UK's only wholly postgraduate university, we are uniquely placed to connect technology and leadership. Our contribution to global innovation is world-leading, changing the way society thinks, works and learns.

Our Mission

To transform the practice of management around the world by creating and disseminating applied knowledge.

Our Vision

- To be a world leading management school for responsible management thinking and practice
- To conduct research that has a real impact on the practice of management around the world
- To be an employer of choice for faculty who are passionate about transforming the practice of management.

Our School of Management is uniquely placed to connect technology and leadership. We are one of an elite group of schools worldwide to hold the triple accreditation of: [AACSB International](#) (the Association to Advance Collegiate Schools of Business), [AMBA](#) (the Association of MBAs) and [EQUIS](#) (European Quality Improvement System).



Message from Prof Lynette Ryals Pro-Vice Chancellor & Director of Cranfield School of Management

This fifth Communication on Progress (COP) against the UN Principles of Responsible Management Education (PRME) reveals the emerging depth and breadth of corporate sustainability as an academic domain at Cranfield. This parallels the launch of the Cranfield Sustainability Network in 2017, raising awareness of sustainability as a coherent domain across the School of Management (SoM) and the University as a whole.

Our School of Management is committed to the following objectives:

- *Sustained growth in Masterships, to encourage wider access to Level 7 apprenticeships and to leadership roles for people from less advantaged backgrounds.*
- *Greater focus on blended learning to support the student learning experience and reduce the carbon footprint of our education.*
- *Deeper integration between SoM and the rest of the University to support opportunities for new education and research, including in sustainability and in organisational resilience.*
- *Investment in the physical facilities in SoM including buildings and technology based on leading-edge and sustainable processes and materials.*
- *Continued development of our brand primarily through Cranfield Executive Development, reaching out to individuals and organisations across the globe to help improve the outcomes for learners and their organisations.*

Our work to achieve these objectives supports our UN PRME progress as follows:

Principle 1 – Purpose. Our offering of sustainability Masters courses has increased and there is also an increased embedding of sustainability-themed modules in our MBA, MSc and Executive Education courses. The growth in Masterships will widen access to sustainability teaching to a more diverse group of students.

Principle 2 – Values. Our sustainability teaching and research reflects growing engagement with water, energy and waste management, climate change, supply chain logistics, diversity, leadership and other issues related to management for sustainability.

Principle 3 – Methods. Our increasing variety of activities, including the use of blended learning and gamification, is engaging more students with sustainability issues in new ways.

Principle 4 – Research. Our research in sustainability topics has also become increasingly differentiated, reflecting greater integration between SoM and the University.

Principle 5 – Partnership. Our teaching and research partnerships in the academic, private and public sectors continue to grow and diversify, across and beyond Cranfield SoM and the University.

Principle 6 – Dialogue. Our faculty, researchers and students continue to stimulate dialogue and debate on sustainability issues, through teaching, events and social media.

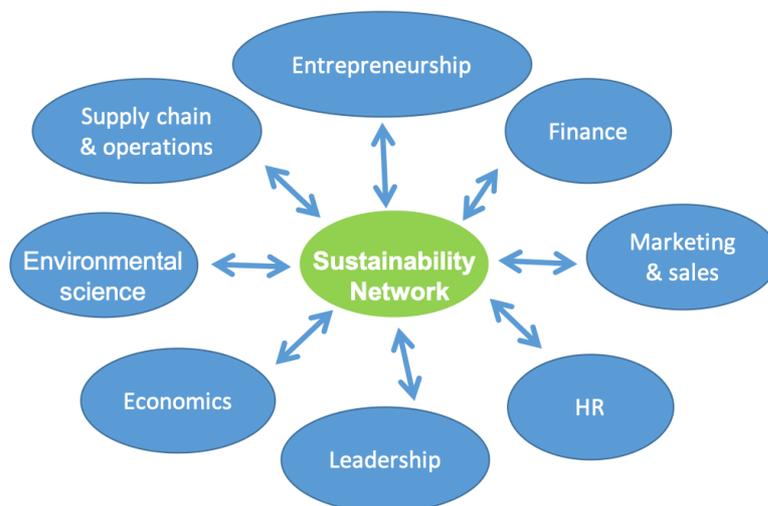
We continue to work to improve our performance as a 'sustainable university' as our Athena Swan Bronze Award, environmental KPIs and investment in sustainable buildings, technology and processes to reduce our carbon footprint all demonstrate.

I would like to thank all my colleagues who are working to improve the practice of responsible, sustainable management.

Sustainability Network builds connection and collaboration for sustainability

In 2017-18 the School of Management has continued to build on Cranfield University's unique competencies in leadership, aerospace, defence and security, energy and power, environment and agrifood, manufacturing, transport systems, and water demonstrating the power of collaboration between management and science in leading organisations to achieve sustainability outcomes.

In June 2017 Cranfield School of Management launched its **Sustainability Network**, a cross-disciplinary group of academics from a range of disciplines including corporate responsibility, marketing, entrepreneurship, innovation, supply chain management, strategy, finance, economics and environmental science.



The Sustainability Network, led by Professor Emma Macdonald, includes specialists in marketing (Prof Hugh Wilson), supply chain (Mike Bernon and Dr Benny Tjahjono), economics (Dr Andy Angus), and entrepreneurship (Dr Richard Adams), along with sustainability expert, Prof David Grayson.

Members of the network have led seminars, teaching and research with the goal of helping functional specialists work together across the organisation to embed sustainability as a collective endeavour. The group's Prof Hugh Wilson re-launched the MSc in Management & Corporate Sustainability which doubled in numbers between 2017 and 2018.

The Sustainability Network builds on the legacy of the [Doughty Centre for Corporate Responsibility](#) formerly led by Professor David Grayson. See the Doughty Centre 10th Anniversary report [here](#).

Management and Corporate Sustainability MSc

It's a very good learning environment. The professors are not only really good, they are very motivated. You have the feeling they really want to teach you something.

- Sara Siakala, Alumna, Management and Corporate Sustainability MSc 2015

Cranfield School of Management's [Management and Corporate Sustainability MSc](#) course illustrates all six UN Principles of Responsible Management Education. It has engaged, not only students from countries as diverse as China, India, Iran, Thailand and Turkey as well as the UK with sustainability (Principle 1), but also Cranfield faculty from diverse disciplines working together with external sustainability specialists (Principle 5). Together they promote dialogue (Principle 6) and build awareness of the Sustainable Development Goals and other global sustainability issues (Principle 2) through a range of methods (Principle 3). The MCS MSc students are now engaged in research for their theses (Principle 4), having joined students from other courses and faculty to hear guest presentations from several visiting speakers and participated in a range of events.

Dr. Jim Bentley, CEO of Hunter Water, Australia presented to the Cranfield Sustainability Network about developing a sustainable and resilient water and wastewater future – see his slides [here](#).



Management and Corporate Sustainability MSc student Kiera Dempsey-Brench wrote a blog about Guy Champniss' presentation on use of behavioural psychology [here](#).

MSc students participated in the Doing Good, Doing Well 2018 conference in Barcelona – organized around the Sustainable Development Goals - more [here](#).



MSc students completed a well-received [consulting assignment](#) for the sustainability youth-engagement platform [InSpring Global](#).

Principle 1: Purpose

We will develop the capabilities of students to be future generators of sustainable value for business and society at large and to work for an inclusive and sustainable global economy.

Expanding and embedding sustainability teaching

The School has worked to embed sustainability through modules on our flagship programmes and through content of modules across a range of disciplines. Examples of Masters programmes include the [Management and Corporate Sustainability MSc](#) (described above) and the [Management MSc](#), which teaches the practicalities of how businesses successfully embed sustainability into their core business purpose and strategy.

Sustainability modules which are embedded in other Masters courses include *Challenges for Leaders: Managing People, Change and Sustainability* (which aims to provide students with an introduction to the challenges faced by leaders in developing and sustaining organisations and is included in [Full-time MBA](#), [Executive MBA](#) and [MBA Energy](#) programmes) and *Supply Chain Strategy and Sustainability* (which explores the ways in which good practice in logistics and supply chain can contribute to achieving sustainable competitive advantage and is included in [Logistics and Supply Chain Management MSc](#) and [MSc \(Executive\)](#), [Procurement and Supply Chain Management MSc](#) and [MSc \(Executive\)](#) programmes).

Executive Short Courses are offering increasing sustainability content. The [Supply Chain Management Programme \(Short Course\)](#) provides students with strategic approaches to sustainable supply chain management in the Industry 4.0 Digital era. [Leading Complex Change \(Customized Leadership Development\)](#) helps clients plan for complex challenges that will impact their direction of travel, sustainability and organisation resilience.

Cranfield's [Environment and Agrifood cluster](#) offers Continuing Professional Development courses with the [Agrifood Training Partnership \(AFTP\)](#) that include [Evaluating Sustainability Through Life Cycle Approaches](#) and [Principles of Sustainability](#).



Cranfield University has worked with [edie](#) to develop the Sustainability Leadership Programme. The vision is to ensure sustainability professionals are equipped with both the managerial and technical skills and knowledge to make their voices heard at board level, so that sustainability considerations are embedded into day to day decisions and business strategies. The programme brings together

Cranfield's world leading research and teaching to provide an integrated experience which will enable participants to embed sustainability strategies and practices within their organisations. The short courses include [Sustainability Leadership](#), [Circular Innovation and Sustainability](#), [Maximising Opportunities](#), [Business Resilience](#), [Building the Case for Sustainability](#) and [Sustainable Leadership Implementation](#).



Cranfield was the first University in England to launch [Masterships](#) - Master's level Apprenticeships (Level 7) which enable employers to use their Apprenticeship Levy to accelerate the development of middle and senior managers, and employees in senior technical positions so that they can contribute much more as they move into leadership positions.

Masterships programmes generally have a strong sustainability emphasis in their content; they need to map against 35 criteria, 12 of which are linked to sustainability.

Current [Cranfield Masterships® courses](#) include [Engineering Competence \(Executive\) PgDip](#), [Executive MBA](#), [MSc in Logistics and Supply Chain Management](#), [Executive MBA Defence Export](#), [Business and Strategic Leadership MSc](#), [Management and Leadership MSc](#) and [Systems Engineering Pg Diploma](#).

Principle 2: Values

We will incorporate into our academic activities and curricula the values of global social responsibility as portrayed in international initiatives such as the United Nations Global Compact.

Thought Leadership

We are proud to embed responsible management thinking into every part of our teaching and research, which in turn influences inspiring business leaders and clients to make a real impact on their organisations. Among Cranfield faculty, [Professor David Grayson](#), [Professor Ruth Bender](#) and [Professor Sue Vinnicombe](#) have raised awareness of global social responsibility and sustainability issues, not only among current Cranfield students but also alumni and the wider community. This [thought leadership](#) outreach work, which encompasses online blogs and other social media, books and other publications as well as face-to-face addresses to Cranfield students and faculty and audiences around the world, stimulates dialogue and therefore also qualifies as “Principle 6” activity.

[Professor Ruth Bender](#) [Emeritus Professor of Corporate Financial Strategy](#)



“Shareholder value is NOT about next quarter’s profits. As originally construed – and indeed, the way we teach it at Cranfield – it is about the long term. Timescale is a fundamental part of the shareholder value equation. And that means you need to make trade-offs. Yes, I can increase this quarter’s profits. But if that cost-cutting makes my best employees leave, it hits the long term. Yes, I can get more sales. But if it then hacks off my leading customers, that destroys value. Or, yes I can reduce my tax down to zero – but if it makes people boycott drinking my coffee the best way to think of it is that SV is basically, Warren Buffett’s philosophy slammed into a formula – his Owner’s manual at Berkshire Hathaway focuses on Intrinsic Value over the long term.”

Prof. Bender highlights the importance of creating Intrinsic Value over the long term in her teaching, publications and public lectures. Her textbook, [Corporate Financial Strategy \(Routledge, 2014\)](#) - required reading for Cranfield electives in Corporate Financial Strategy and Corporate Financial Transactions for several years - highlights the need to consider stakeholders when looking at creating shareholder value. In addition, Prof. Bender’s work on corporate governance includes [The Non-Executive Directors' Seminar](#), designed to equip participants with the understanding of the multifaceted and challenging nature of the non-executive director’s role. On 31 May 2017, Prof. Ruth Bender hosted a [Speakers Event to discuss the HBOS](#)

[Banking fraud](#) which had resulted in mis-selling of financial products to SMEs. Three SME leaders spoke about the impact the fraud had produced on them. The lecture drew students, alumni, and Milton Keynes business leaders and was streamed live over Cranfield's Facebook account.

[Professor Emeritus David Grayson CBE](#) [Director, The Doughty Centre for Corporate Responsibility](#)



In his role as Director of the Doughty Centre for Corporate Responsibility during 2007 - 2017, Prof. David Grayson, CBE has provided thought leadership through his writing and lectures, addressing audiences within Cranfield and around the world on a wide variety of corporate responsibility and sustainability issues. He has been named by The Guardian as one of the [‘10 top tweeters on sustainable leadership’](#). The topics he covers include, but are not limited to, business purpose, the circular economy, collaboration to achieve sustainability, social intrapreneurism, sustainable enterprise, employer support for carers (he is also [National Chair of Carers UK](#)). He has also contributed to several other books including "The Accountable Corporation," (2005), "Mainstreaming Corporate Responsibility" (2010) and "Managing Sustainable Business: An Executive Education Case and Textbook" (2018). David continues to write [books](#), newspaper and magazine articles for [Guardian Sustainable Business](#), [Cranfield School of Management](#) blogs, journal articles, conference papers and other publications.

[Professor Susan Vinnicombe CBE](#) [Professor of Women and Leadership](#)



Professor Susan Vinnicombe was founder director of the Cranfield International Centre for Women Leaders from 1999 to 2016 and the Deloitte Ellen Gabriel Endowed Chair in Women's Leadership at Simmons College, Boston, US from 2013-2016. She and her co-authors produce the annual [Female FTSE Index Benchmarking Report](#), which she launched in 1999 and is regarded as the premier research resource on women directors in the UK and is renowned globally. Susan is the Founder and Chair of the judges for Women in the City Awards and is a judge for the Sunday Times best NEDs of the year awards.

Susan's research interests focus on the lack of women in leadership, specifically on corporate boards; women's leadership styles and the issues involved in women developing their executive careers.

Susan has consulted for organisations in over twenty countries including the USA, Ireland, India, the UAE, Philippines, Trinidad, Nigeria, Australia and New Zealand, on how best to attract, retain and develop women executives. Susan is regularly interviewed by the press, on the radio and on television for her expert views on women directors and is a frequent keynote speaker at conferences.

Principle 3: Methods

We will create educational frameworks, materials, processes and environments that enable effective learning experiences for responsible leadership.

Course activities

Our Management and Corporate Sustainability MSc students have the opportunity to take part in a variety of [organised activities](#) throughout the year. From guest speaker talks to sustainability conferences, the activities allow students to see the theoretical knowledge they learn on the course put into practice. Here are some examples of the activities that take place on the course:

Edie Sustainability Leaders Forum

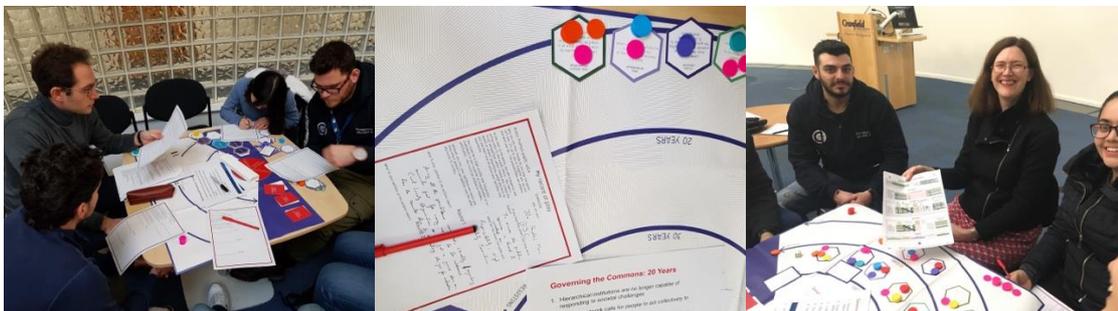
Each year our students have had the chance to attend the [Edie Sustainability Leaders Forum](#). The event features case studies, workshops and interactive discussions allowing participants to network and connect with other sustainability professionals to accelerate change.

C4D – retail hackathon for circular economy

The Circular Economy within the retail sector is a complex and diverse challenge, but also provides a wealth of exciting opportunities for design and innovation. This has prompted Cranfield University and the University of Exeter, two pioneer universities of the Ellen MacArthur Foundation, to collaborate on a [two-day hackathon event exploring 'Circular Retail'](#).

Game of Life 2050

The [Game of Life 2050](#) is an interactive board game developed as part of EU-InnovatE (an EU funded project in which Cranfield collaborated) and ran for the first time this year. The game allowed 50 Management MSc and Management and Corporate Sustainability MSc students. Students to interact with four scenarios that describe the radical changes needed in society for us to be living within all key environmental boundaries by 2050.



Participants in the Game of Life 2050 game



The game was championed by doctoral researcher and MCS Module Leader [Rosina Watson](#):

“I used the game to help students imagine the future beyond the 3–5 year horizon of the typical corporate business or marketing plan and to reflect on what success might look like in these future worlds. I wanted them to see businesses as operating as part of a wider system and experience working with societal stakeholders to achieve their visions.”

Doing Good Doing Well

Our students have had the chance to attend the [Doing Good Doing Well conference](#) in Barcelona. The conference features two days of keynote speakers, panels, workshops and competitions. The student run conference is organised by the Responsible Business Club of IESE Business School.



Conflict Free Gold Standard report offers key insights on corporate responsibility



This case study [a partnership with Harvard Kennedy School CR Initiative] describes why and how the World Gold Council led the development of the Conflict-Free Gold Standard (the Standard) from 2010 to the end of 2012. The Standard provides a common, voluntary approach through which gold mining companies can undertake due diligence and provide assurance to stakeholders, based on compliance with accepted international benchmarks, that their gold has been extracted in a manner that does not

cause, support or benefit unlawful armed conflict or contribute to serious human rights abuses or breaches of international humanitarian law.

“The case study illustrates the vital and inter-locking roles of both individual leadership and institutional leadership in developing a shared vision and practical solutions to addressing complex, systemic challenges.”

Professor David Grayson CBE
Director of the Doughty Centre for Corporate Responsibility

Jane Nelson
Director of The Corporate Responsibility Initiative M-RCBG

Principle 4: Research

We will engage in conceptual and empirical research that advances our understanding about the role, dynamics, and impact of corporations in the creation of sustainable social, environmental and economic value.

Building on the publication of [Cranfield on Corporate Sustainability](#) in 2012 – the first known textbook to compile essays on sustainability across an entire business school - the profile of sustainability research across Cranfield School of Management and Cranfield University as a whole expanded significantly during 2017-2018. The establishment of the Sustainability Network has made it possible to raise collective awareness of a diverse range of topics being researched at Cranfield, often in collaboration with multiple partners (Principle 5).



One researcher whose work exemplifies collaborative research on sustainability is [Liz Varga, Professor of Complex Infrastructure Systems](#). Liz Varga has expertise in trans-disciplinary research projects across infrastructure systems (energy, transport, water, waste and telecoms). Her skills are in creating abstractions of real-world systems, recognizing emergent phenomena and co-evolutionary effects, together with measurable systemic metrics.

She leads the design of computational agent-based models which represent the dynamics of inter-connected systems. She won the Cranfield University Research Award in 2014 and again in 2016. Two of the collaborative projects in which Liz is a co-investigator are OPTEMIN and STEPPING UP.

Optimising Energy Management in Industry to Help Reduce Carbon Emissions

[OPTEMIN](#) is an EPSRC-funded project started in December 2016 which is taking a whole systems approach to the optimisation of energy management in industry. The UK Government, the European Union and the international community in general have ambitious targets for reduction of greenhouse gas (GHG) emissions and global warming. Even though the UK is likely to meet its 2020 emission reduction targets, longer-term targets to 2050 and 2100 are unlikely to be met without substantial changes to policy and technological approaches in the generation, distribution and utilisation of energy. Cranfield is part of a collaborative project known as OPTEMIN which is aiming to address these challenges by working closely with some key industrial collaborators. Its objective is to demonstrate, through the research programme and case studies supported by comprehensive data sets, the potential to achieve energy demand and carbon emission reductions of more than 15%.

Ensuring the UK's water, energy and food security

Cranfield is part of a UK collaborative project exploring the scaling-up of innovations which address the increasing challenges of integrated water, energy and food systems. [STEPPING UP](#) is one of three projects comprising a £4.5 million investment by the Engineering and Physical Sciences Research Council (EPSRC). This is to safeguard the UK's water, energy and food security, involving inter-disciplinary groups of scientists based at 19 universities and research institutes.

This project aims to explore the potential opportunities of innovations in the Water-Energy-Food (WEF) Nexus and understand the implications and challenges of achieving transformational change at different scales.

The four innovations central to the research are: [Diversion of surplus food](#), [Anaerobic digestion](#), [Valorisation](#) and [Insect Proteins](#).

Additional collaborative research projects in which Liz is a researcher are [CryoHub](#), [CECAN](#), [ENCORE](#) and [ICIF](#).

Other Cranfield academics who have been conducting sustainability-linked research include [Andrew Angus](#) (Economics), [Hugh Wilson](#) and [Emma MacDonald](#) (Marketing), [Michael Bourlakis](#), [Benny Tjahjono](#) and [Emel Aktas](#) (Logistics and Supply Chain Management), [Richard Adams](#) (Entrepreneurship) and [Clare Kelliher](#) (Work and Organization).

Principle 5: Partnership

We will interact with managers of business corporations to extend our knowledge of their challenges in meeting social and environmental responsibilities and to explore jointly effective approaches to meeting these challenges.

Gender and Leadership

Cranfield has continued to produce the annual Female FTSE benchmarking report, which has analysed the number of women directors on the corporate boards of the UK's top 350 companies since 1999. Led by Professor Sue Vinnicombe, we are the recognised experts on gender diversity on corporate boards in the UK. See [The Female FTSE Board Report 2018](#) and [100 Women to Watch 2018](#).

Professor Vinnicombe also led the [Gender Diversity Impact \(Gedii\)](#) project, examining the relationship between gender diversity within research teams in the STEM (science, technology, engineering and mathematics) sector, and research effectiveness and performance.

Project Leadership Programme (PLP)

Cranfield continues to run the [Project Leadership Programme \(PLP\)](#) in collaboration with PA Consulting Group and The Project Academy for senior civil servants responsible for major government projects. The IPA is concerned with delivery of all major Government projects and UK infrastructure, which includes economic and social infrastructure, housing, ICT and organisational change. The consortium has been delivering the programme in partnership with the IPA since 2015 with excellent feedback being received from participants and departments.

Executive MBA **In partnership with Grant Thornton**

Cranfield School of Management and leading business and financial adviser [Grant Thornton UK LLP](#) are continuing their partnership in delivering the [Cranfield Executive MBA programme](#). The collaboration aims to address the current management skills gap in the UK and improve productivity by using the Government's new Apprenticeship Levy to bring scale and wider accessibility to the world-class education offered by the Executive MBA.

Water management and infrastructure

In the field of [Water Science and Engineering](#), we are recognised internationally for our research, education, training and consultancy and attract outstanding students, academics, sponsors and partners worldwide. We provide short-term feasibility studies and develop strategic partnerships with clients so that they can access our expert knowledge and specialist advice. We also help companies to add value to their businesses, by leveraging funding from government departments and regional development agencies to develop or test new products and gain competitive advantage. In addition to excellence in research and teaching, we provide consultancy and training services to business clients.

In Government, our research clients include the Research Councils (eg. EPSRC) the Environment Agency, rural development agencies (eg. East of England Development Agency), the European Commission, Natural England, Defra, and DFID. Internationally, our clients include the World Bank, BP, Shell, Unilever, Veolia Water, the International Water Association, American Water Works Association, Keppel Seghers, and the Bill and Melinda Gates Foundation.

In the UK, we have research framework agreements with Yorkshire Water, Severn Trent Water and Anglian Water and strong research relationships with United Utilities, Southern Water, Affinity Water, Thames Water, South West Water and Northumbrian Water. We also carry out research for the industry levy boards such as the Agricultural and Horticultural Development Board.

Corporate Sustainability Consultancy

Businesses choose to work with us because of our deep knowledge and outstanding reputation for delivery of value-added consultancy informed by world leading research in the fields of water, energy, environment and agrifood. Our core services are corporate sustainability strategies, plans and reports; strategic advice and planning; technical advisory; industrial scale and unique test facilities; regulatory compliance and risk appraisals; and horizon and futures mapping.

Principle 6: Dialogue

We will facilitate and support dialog and debate among educators, students, business, government, consumers, media, civil society organisations and other interested groups and stakeholders on critical issues related to global social responsibility and sustainability.

Alumni

Cranfield has a global alumni network of over 18,000 members in over 130 countries worldwide. Many of our alumni hold senior management positions within their organisations and have a wealth of experience getting and succeeding in challenging roles. They have the opportunity to promote management for sustainability in the organizations where they serve.

Sustainability Spotlight: Nicki Doggart



Nicki Doggart (Cranfield MBA 2002) chose the Cranfield MBA as part of a quest for greater challenge in her career. After her MBA she joined British luxury confectioner Hotel Chocolat, whose sustainable ethos is a key facet of their brand. She led the company's startup operation in the USA and cites her time at Cranfield as a key influence. Cranfield was instrumental in giving her the tools and knowledge to make an impact in her career—and moreover, that more

business people should consider doing the same. [Speaking to BusinessBecause](#), Nicki said:

“Corporate responsibility, and being engaged in ethical and sustainable projects, isn’t just beneficial from a personal perspective. It doesn’t serve just to make us feel better; it actually makes business sense... it was actually on the Cranfield MBA that I encountered ‘corporate social responsibility’ as a concept. At the time, it was a relatively new idea, but it resonated with me. I became one of the founding members of the Corporate Social Responsibility Council at the business school. For me, ethical and sustainable ways of doing business are not to be underestimated. For one, it’s a competitive differentiator. It makes you stand out, as was the case with Hotel Chocolat. Secondly, it’s a ticket to play: increasingly, prospective employees are basing their decisions on companies’ ethical policies, just as consumers are looking for an emotional reason to buy when deciding what to purchase. Value-based conscious consumerism is huge, and it’s only going to get more prominent into the future.”

Alumni Conference



Through the sharing of valuable insight, know-how and best practice examples, the 2018 [Cranfield Alumni Conference](#) explored 'Inclusive Talent Management – towards a new norm'. The programme's topics included:

- HSBC case study featuring a CEO job share and a call for radical action;
- Engaging men as allies – developing talent in a male-dominated industry;
- Being a great employer for employees with disabilities and working carers
- Embracing the next generation of talent
- Ethnicity on Boards.

Social Media

Cranfield academics and teams who have been promoting awareness of sustainability on Twitter include [David Grayson](#), [Ruth Bender](#), [DrEmmaMacDonald](#), [CranfieldEnvironment](#), [Cranfield Agrifood](#), [CranfieldGreen](#) and the [DoughtyCentre](#).

Cranfield faculty and students also produce [Cranfield blogs](#) on a variety of sustainability topics.

Our Sustainable University

We understand that our own organisational practices should serve as example of the values and attitudes we convey to our students. Our aim is to provide a sustainable environment in which to live and work, both at the University campuses and other areas affected or influenced by our activities.

Athena SWAN recognition for Cranfield



Cranfield University has been successful in [achieving a prestigious Bronze Athena SWAN award](#). The institutional award recognises our commitment to advancing women's academic and research careers in STEMM (Science, Technology, Engineering, Mathematics and Medicine).

Through its award system, the [Athena SWAN charter](#) aims to advance equality and diversity in higher education and research, by promoting and supporting gender equality for women. In particular, it emphasises the progression of women to senior roles in STEMM areas by removing obstacles to their advancement, ensuring equal pay and mainstream support, through action at all levels across the organisation.

Professor Simon Pollard, Pro-Vice-Chancellor, commented: "We are delighted to be awarded a Bronze award in recognition of our commitment to gender equality at Cranfield. Our forward action plan, developed by Senior Diversity & Inclusion Business Partner, Hiran Odedra, and the self-assessment team, has far-reaching implications for talent management and retention at Cranfield. It will contribute to our growth strategy and lift the attractiveness of Cranfield as a place to work even further".

Environmental performance

Cranfield's Board for Energy and Environment (BEE) reports progress on our environmental objectives. An exciting new inclusion this year is the Living Lab, which seeks to harness more formally our academic expertise to the benefit of the operation and management of the estate.

Highlights from our Annual Environmental Report for 2017/18 are:

- Certification of our energy management system to the ISO 50001:2011 standard
- Certification of our environmental management system to the updated ISO 14001:2015 standard
- Two Wildlife Trust awards for our wildlife gardening
- The installation of a 1 MW solar farm providing 5% of the University's electricity We remain indebted to our staff and students that contribute to our

on-going improvements and to our Energy and Environment Team and BEE working group members who lead and coordinate our combined efforts.

More information is available from our Energy & Environment Team at green@cranfield.ac.uk.

Key performance indicators

Issue	Description	Progress	Target	By when
Carbon	Scope 1 & 2 emissions ¹	34%	50% reduction	2020 ²
Waste	Total weight produced	6%	10% reduction	2020
Recycling	Segregated on-site	54%	75% of total waste	2020
Travel	Single occupancy car use	4%	10% reduction	2017
Water	Consumption volume	8%	30% reduction	2020
Discharges	Ammonia	52%	50% below consent levels	2020
Discharges	Biochemical Oxygen Demand	60%	50% below consent levels	2020
Discharges	Suspended Solids	33%	50% below consent levels	2020

Key

	Indicates that progress is well behind trend to meet 2020 target
	Indicates that progress is behind trend but can still recover to meet 2020 target
	Indicates that progress is on trend to meet 2020 target

Environmental objectives

Focus	Objectives	Rationale for action
Carbon & energy	Reduce absolute Scope 1 & 2 carbon emissions by 30% in 2015 and 50% in 2020 from a 2005 baseline.	Contributes to the HEFCE sector carbon reduction target; supports Plan 415i, reducing operating costs.
Waste & recycling	Reduce absolute total waste by 5% in 2017 and 10% in 2020 against a 2010 baseline.	Improves resource efficiency; demonstrates best practice to staff and students; supports Plan 415i, reducing costs.
	Increase segregated waste reused or recycled to 50% of waste produced in 2015 and 75% in 2020.	
Travel	Reduce staff commuting in a single occupancy car by 10% in 2017 from a 2012 baseline. ACHIEVED for "All Commuters" but not for Staff	Reduces local road congestion; travel emissions and supports Plan 415i.
Water, emissions & discharges	Reduce Cranfield campus water consumption by 30% by 2020 from a 2009 baseline.	Maintains legal compliance and supports Plan 415i, reducing operating costs and demonstrates best practice to staff and students.
	Discharge treated effluent from the sewage works, which is on average 50% below permitted consent levels for ammonia, biochemical oxygen demand and suspended solids by 2017.	
Sustainable buildings & infrastructure	Achieve BREEAM Excellent for new buildings and all major refurbishments from 2012. Develop "zero carbon" standard for University Buildings by 2014	Supports carbon reduction and resource efficiency and Plan 415i, reducing operating costs and demonstrating best practice to staff and students.