Ulster University

SUSTAINABILITY

Annual Report 2018 - 2019

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INTRODUCTION

This sustainability report provides a summary of the excellent progress the University has made in the last academic year 2018/19.

Ulster University, Northern Ireland's civic university is committed to understanding and managing its environmental impacts in line with our environmental sustainability policy and for the benefit of students and staff as well as neighbouring and global communities.

Ulster seeks to be a leader in environmental sustainability by promoting campus environmental sustainability awareness, embedding environmental sustainability into research and teaching programmes and adopting best practice in estates management. This year the Business in the Community organisation recognised the University through its Environmental Leadership award.

Within the report we also outline the University activities that contribute to the Sustainable Development Goals. The 2030 Agenda for Sustainable Development and the 17 Sustainable Development Goals (SDGs) were adopted by all UN member states in 2015 and set out an ambitious plan for sustainable societies by 2030.

Achieving the SDGs will require the concerted efforts of all members of society. Ulster is well-placed to contribute to the solutions needed for a sustainable future through our world-class and award-winning campus operations, research, teaching and engagement.

Professor Ian Montgomery

LEADERSHIP AND GOVERNANCE

At Ulster the Environmental Sustainability Steering Group (ESSG) reporting to the Resources Committee is chaired by Prof. Ian Montgomery and has representatives from faculties and directorates across the University who co-ordinate information and activity areas of responsibility.

Student representatives at ESSG are the Student Union's President and Chief Executive who provide the student voice and input on student-led sustainability activities.

The Sustainability Manager and Education for Sustainability Lead form an informal 'sustainability team' who network closely with others to disseminate information and drive initiatives.

Ulster's Estates Services Department implements policy commitments in relation to carbon emissions reduction, energy efficiency and water conservation, waste management, sustainable travel, sustainable procurement and education for sustainable development.

The Sustainability Manager supports ESSG and its members by facilitating meetings, preparing reports and papers and providing guidance on sustainability changes that affect the University community.

Ian Montgomery
Chair ESSG

Amanda Castray
Director of Campus Life

Colm Crean
Director of Faculty Operations

Carol Curran
Executive Dean Life and Health Sciences

Michael Fitzpatrick
Director of Estates Services

Marie-Louise Gaile
Sustainability Manager

Peter Hope
Chief Finance Officer

Elaine Lackermeier
Executive Manager Research and Impact

David Longstaff
UUSU Chief Executive Officer

Liam Maguire
Executive Dean Computing and Engineering

Andrew McAnallen
UUSU President

Declan McHugh
Head of Engineering Services

Amanda Platt
Lecturer in Higher Education Practice

Una McGinley
Environmental Champion Representative

PARTNERSHIP AND ENGAGEMENT

Colleagues from Ulster University were presented with the Environmental Leadership Award, sponsored by Arthur Cox, at Business in the Community's 2019 Responsible Business Awards.

Ulster's collaborative approach to sustainability involving students and the academic and professional services staff communities is based on the principle that sustainability is the responsibility of everybody in the University. Through sustainability partnerships and engagement, we have had the following award success:

Award Success

Environmental Leadership Award - BiTC Responsible Business Awards

Ulster University won the Business in the Community Responsible Business Award for Environmental Leadership. The judges were impressed by the University's strong commitment to environmental leadership at all levels of the organisation including senior management, staff and students.

This great achievement highlights Ulster's strong commitment to sustainable business operations including student engagement to reduce energy and water use in residences, implementation of an environmental management system, and carbon and waste reductions. The collaboration of professional services and academic partners has helped to achieve goals in relation to campus renewable technologies, adoption of sustainable procurement practices and supplier engagement alongside plans to embed sustainability within our curriculums.

Silver Rating - Sustainability Leadership Scorecard

Ulster obtained a Silver rating in the first annual Sustainability Leadership Scorecard Report which summarises data submitted by 45 Higher Education Institutions in the UK and Ireland. The scorecard has been developed to assist institutions to track sustainability progress and improve areas of weakness across the four categories of Leadership and Governance, Partnership and Engagement, Learning, Teaching and Research and Estates and Operations.

The sector report highlights that Estates and Operations are high performing areas and the most challenging areas to improve are those around linking activities to the curriculum.

Ulster University celebrates achieving Platinum status – the highest scoring level - at the 2019 NI Environmental Benchmarking Survey Results Launch.

Platinum - Northern Ireland Environmental Benchmarking Survey

The University has participated in the Environmental Benchmarking Survey for the last 10 years and this year attained Platinum, the highest-level award. The survey annually assesses the environmental management, performance and assurance credentials of Northern Ireland organisations in stepping up to protect the environment.

Travel survey

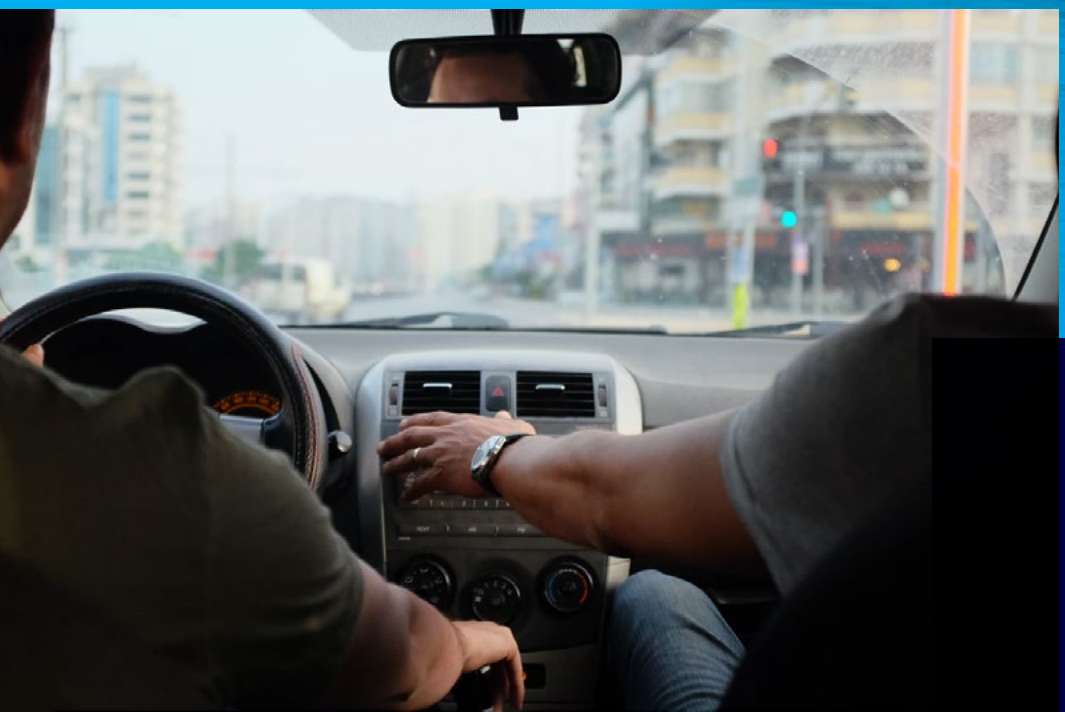
Student and staff travel surveys were undertaken to give us an understanding of travel modes to the University, how these have changed over time and what more we might be able to do to encourage greater uptake of more active and sustainable travel modes.

The survey results help inform progress towards our targets for reducing the proportion of commuting trips made by our staff and students as a lone car driver.

	Staff	Students
Lone car driver 2019	75%	42%
Lone car driver 2017	71%	36%

The main reasons cited for lone car travel by both staff and students included the car being quicker and public transport not being convenient.

Public transport initiatives could see a reduction in lone car journeys with over half of student respondents stating that discounted travel cards/season tickets would encourage them to use public transport to travel to campus. Staff reported that more fast, frequent and direct public transport services would encourage them to use public transport.



ENERGY AND WATER

Electricity usage per square metre decreased by 1.7% in 2018/19. This maintains a 10 year downward trajectory in electricity consumption brought about by the modernisation/Magee teaching block before the rationalisation/ demolition at Jordanstown. In addition, energy efficient technologies and electricity saving projects have been completed on the Belfast campus such as the upgrade of the heating system to reduce runtimes and also lighting upgrades in circulation areas to reduce electrical lighting load.

Weather-corrected heating energy consumption per unit area decreased by 5.2% in 2018/19. Ongoing heating efficiency and building fabric improvement projects continue to be investigated.

In 2018/19, energy-related carbon emissions decreased by 8.4% due to a reduction in both fossil fuel and electricity consumption combined with the ongoing decarbonisation of the electricity grid. The two wind turbine generators generated over 3,000,000 kWh and the eight solar power schemes generated over 100,000 kWh of electricity. The total renewable electricity generated was equivalent to 17% of the university's electricity consumption.

Battery powered grounds equipment

Estates Services has introduced rechargeable battery powered hand-held leaf blowers and grass strimmers. These are fossil fuel and emissions free and offer the user the benefits of low noise and low vibration operation.

The Student Energy Project (TSEP)

TSEP is a national organisation, which aims to engage students in reducing energy and water consumption in residences. The initiative across all University owned student residences had 57% of students register in the year to take part in the project and to be more mindful of their energy usage.

Water

Reported water consumption increased by 0.2%. The small increase was due to now resolved metering and leak issues. Water usage has reduced overall by 79,195m^3 per annum from 2010 baseline.

Water consumption has halved over the last 10 years, largely due to University investment in campus pipework infrastructure, monitoring, reporting and leak detection works.

LEARNING, TEACHING AND RESEARCH

Education for sustainable development in the curriculum

Ulster University has an ongoing commitment to Education for Sustainable Development (ESD). The vast majority of our courses already include ESD related issues aligned with the UN Sustainable Development Goals and we want to encourage more staff to consider how this global imperative can be developed and more explicitly embedded in the curriculum.

To be most effective, ESD requires active and enquiry-based teaching and learning methods that motivate and inspire learners to modify their behaviour and take action for sustainable development. Accordingly, ESD promotes and affords our students the opportunity to experience contemporary and effective teaching and learning approaches that promote `exploration, innovation, entrepreneurship, critical thinking and problem solving` (L&T Strategy 2018-24).

During 2017/18, Ulster University endorsed the establishment of an Education for Sustainable Development Working group. The group met several times during 2018/19 and is refining and progressing its ESD project, which encompasses the four key strands of interest, outlined below.

This academic year, these aspects have been progressed with the assistance of a dedicated ESD placement student who will work on the project until the end of June 2020.

1. Benchmark and generate heatmaps that illustrate the current existence of sustainable development related themes in existing programme curricula, as documented in the institutional curriculum management system (CMS)

2. Encourage and support staff to identify, develop and explicitly embed discipline-relevant ESD in all curricula, utilising the aligned mechanisms of the Integrated Curriculum Design Framework (ICDF) and revised revalidation processes, which include ESD as a curriculum design priority

3. Progressively cultivate the sustainable development awareness, understanding, literacy and capabilities among staff and students through for example, the Integrated Curriculum Design Framework and Revalidation processes and the National Union of Students Global Goals Teach In initiative.

4. In support of points 2 and 3, identify and disseminate existing internal case studies of ESD in the curriculum via a dedicated webpage: ulster.ac.uk/esd

Collaboration with MSC Fashion and Textile Retail Management and Belfast City Council

Developing a sustainable future for textile art, design and fashion at Ulster

Staff and students from Textile Art, Design and Fashion came together in 2018/19 to raise awareness of the sustainability issues facing the global textile industry. The industry feeds the desire for fast fashion and an overproduction of cheap clothing which often ends up in landfill.

The team began by auditing their approach to teaching and redesigning workshops. The importance of waste was emphasised with a focus on re-using and recycling in all classes. This approach was also about rediscovering textile and fashion's sustainable past with a renewed focus on developing a more sustainable future.

Sustainability workshops organised made new work from donated fabric, darning and mending lessons were provided alongside teaching on the need to slow down, to take care of our possessions and ourselves. The team asked of themselves and their students to become agents for change. An exhibition was hosted on the Belfast campus investigating models for future fashion practice aimed at raising awareness of the environmental impact of the industry and encouraging change.

External speakers were invited to described to students their sustainable businesses and ethical stances, offering a crucial model for future careers. Masters and undergraduate students collaborated with Belfast City Council on a sustainable market. These are a few of the initiatives started in 2018/19, many have become embedded in teaching practice with an understanding that this is just the beginning.

Progress against our targets

Over the course of 2018/19, we've made significant progress in a range of areas; laying down the foundations for new and revised strategies, implementing further energy efficiency projects and increasing awareness of sustainable transport alternatives.

We've also tackled a number of new areas in 2018/19, including working to understand the University's biodiversity contributions and considering how to embed sustainability within the curriculum to support student knowledge and employability in relation to sustainability skills.

However, there's still room for improvement and there are a number of areas where progress has slowed. Specifically, we have not made the progress we would have wanted in business air and car travel which requires a more open debate about our travel footprint and options to reduce it.

Impact Area	Baseline Year	Baseline	Target %	Target Year	Target	2016/17	2017/18	Current Progress 2018/19	Position
Engagement - Green Impact Award Silver Teams	2014/15	2	-	2019/20	5	6	5	4	We are making good progress
Engagement - Green Impact Award Bronze Teams	2014/15	11	-	2019/20	25	7	8	9	We are making good progress
Carbon Emissions - Scope 1 & 2 Emission Tonnes	2005/06	19,889	↓29	2020/21	14,207	11,542	10,878	9,964	We have achieved our target
Water - Mains Water Consumed m3	2009/10	159,821	↓20	2020/21	127,857	79,742	80,448	80,626	We have achieved our target
Resource Use - Routine Commercial Waste Tonnes	2009/10	682	↓38	2020/21	425	564.58	523.99	589.87	We can do better
Travel - Business Car Miles	2009/10	2,258,754	↓25	2019/20	1,694,066	1,574,786	1,573,115	1,740,251	We can do better
Travel - Air Travel Carbon Emission Tonnes	2013	1,370	↓20	2020/21	1,096	1580	1,668	1,916	We can do better
Sustainable Procurement	2015/16	Level 1 Flexible Framework	-	2018/19	Level 4 Flexible Framework	Level 3	Level 3	Level 4	We are making good progress
Sustainable Education - ESD Exemplars	2017/18	2019/20	Staff call for existing ESD exemplars by March 2019			-	-		We are making good progress
Sustainable Education - Benchmarking	2017/18	2019/20	Staff and student awareness, surveys and analysis by June 2019			-	Participated in NUS global goals teach in student survey complete		
Sustainable Education - Curriculum Development	2017/18	2019/20	Exploration and benchmarking of CMS for ESD related curriculum by April 2020			-	Commenced		
Sustainable Education - Review	2017/18	2019/20	Terms of Reference for the ESD WG by Jul 2020			-	On-going		

GLOBAL GOALS AT ULSTER

Education for sustainable development working group established.

Supported 550 **businesses** to develop free sustainability action plans.

Business **car travel reduced** by 518,503 miles from 2010 baseline.

500 customer electric vehicle charging sessions.

Routine commercial **waste reduced** by 139 tonnes from 09/10 baseline.

Exceeded our scope 1 & 2 carbon emission reduction target of 29% by 2020/21

Woodland Walk developed on Coleraine campus.

Water usage reduced by 79,195m³ from 2010 baseline.

94 Suppliers using our supplier engagement tool **committed to tackling modern slavery**

Sustainability Smart Programme has engaged over **60 staff** teams and **50 student auditors** since 2014/2015.