

ANNUAL SUSTAINABILITY REPORT

Academic Year 2020-2021





1. FOREWORD

Academic Year 2020/21 continued to be impacted heavily by the global Covid-19 pandemic with the University operating mostly online for much of the year. This resulted in improvements across many of our operational impacts for example water and waste. However

In spite of this the university continued to implement numerous project to improve our sustainability performance.

At a time when engagement is extremely challenged due to social distancing measures our SDG toolkit workshops and focus groups brought teaching staff and students together to enhance sustainability in the curriculum. Our students and staff also engaged with our first UCC Climate Assembly, which focused on how we as a university could "Build Back Better" following the pandemic.

2. SUSTAINABILITY AT UCC



UCC's Sustainability Strategy (2016) set out our goals and ambitions in incorporating sustainability into all aspects of university life.

The Strategy focuses on **nine key areas**:



**Sustainability
Citizenship**



**Teaching and
Learning**



Research



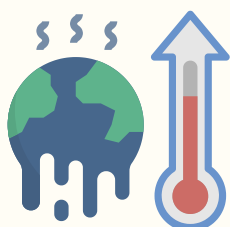
**Food, Health
and Wellbeing**



**Landscape,
Heritage and
Natural Resources**



**Recycling and
Waste Management**



**Energy, Water and
Climate Change**



**Procurement and
Contracts**



**Commuting and
Business Travel**

The Strategy also specifically calls for the use of the University's infrastructure for research and learning in relation to sustainability.



2.1 MISSION



UCC

University College Cork, Ireland
Coláiste na hOllscoile Corcaigh



GREEN CAMPUS

“

UCC's vision is:
“To be a world class University, leading the drive towards sustainability in Higher Education Institutes and beyond, to our community, region and planet”.

- To facilitate the **development and empowerment of future leaders** in sustainability through our research, teaching and learning activities.
- To **engage our student body, staff and wider community** in becoming active citizens for sustainability.
- To **minimise the local, regional and global environmental impacts** of our educational, research, and ancillary operations, and infrastructural development.
- To **enhance the health and well being of the University and wider community** through the facilitation and promotion of healthy eating and living as an integral part of sustainable living.
- To be an overall **positive force** in the journey towards creating a sustainable world for all.



The Sustainability Strategy speaks directly to the United Nations Sustainable Development Goals and much work is ongoing across the university to assess how the goals are implemented across our teaching, learning, research and outreach, as well as to measure the impact of these activities.

SUSTAINABILITY HIGHLIGHTS FOR 2020/21 ACADEMIC YEAR:

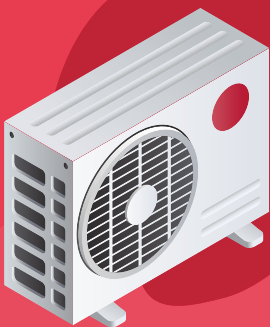
UCC RANKED

62nd

*globally in the
Times Higher
Education Impact
Rankings for the
SDGs*



HEA Pathfinder Funding
secured for O'Rahilly
Building Heat Pump project



SDG TOOLKIT

Development of teaching resource
funded by the National Forum for
Teaching and Learning delivers 57
workshops, 15 pilot lectures and two
design sprints



THE GLOBAL GOALS



First UCC Climate
Assembly held in
February 2021

UCC PLACED

#9

in the UI Green Metric
World University
Ranking



Staff e-bike trial signs up
over 100 users

AWARDED

BEST GREEN CAMPUS

AT THE 2021 EDUCATION AWARDS

3. SUSTAINABILITY CITIZENSHIP



Strategic Aim:

- To engage our student body, staff and wider community in becoming active citizens for sustainability, and establish sustainability citizenship as a central component of the University ethos – with students and staff giving a commitment to learning more about sustainability and taking responsible action.



UCC'S FIRST CLIMATE ASSEMBLY

In February 2021, UCC students and staff came together to run a climate assembly in UCC. This was the first assembly of its kind to take place in an university in Ireland. The assembly was inspired by the Citizens' Assembly, and was based around the need to "Build Back Better".

The pandemic has exposed some of the deep inequalities in our society, and has made people reevaluate their connection to the planet. We are facing a climate emergency, and it is necessary that we act immediately to instill climate action into everything we do.

The assembly consisted of eight themed workshops, which were co-facilitated by a student and a staff member. The workshops ran over two weeks, and were open to anyone in the UCC community. The assembly was a collaboration between the Green Campus Committee, the Students' Union, and UCC Societies. Buildings & Estates staff also helped in the organisation of the workshops, and several staff and academics contributed presentations at the beginning of the workshops.

A report was prepared with the findings of the assembly. The Build Back Better Climate Assembly Report. The report includes a series of ambitious recommendations for the college management to adopt. These recommendations include improvement to cycling infrastructure, reduction of private car usage, reduction in academic business travel, and a target for net zero emission by 2030. Additionally, a guide was produced to assist other colleges in running similar events. It's hoped that this encourages other institutions to increase the participation of their campus communities in shaping their climate action policy.



COMMUNICATING SUSTAINABILITY

The COVID-19 lockdown made communicating our sustainability and Green Campus message both more difficult and more important. In 2020/21, we launched the UCC Green Campus podcast series. The podcast features interviews with people from across UCC, both students and staff, who are working to improve sustainability within their sphere of influence.

Episodes to date have included interviews with UCC President Professor John, O'Halloran, Director of Buildings and Estates Mark Poland, Head of IT Services Ger Culley, and student entrepreneur Timothy McGrath. It is hoped that the podcast will grow to include insights into the wide range of activities happening on UCC campus as well as in the local community.



March 2021 also saw another successful Green Week with over 30 events being held across the University. The events included a student-led litter pick, sustainable fashion workshop and numerous talks arranged by societies as wide-ranging as Macra na Feirme and UCC Architectural Society. A highlight of the week was a student changemakers panel hosted by Green Campus Committee co-Chair Mark Falvey.

The events formed part of the wider national Green Week in association with Green Campus Ireland where students from Green Campus registered institutions across the island took part in environmentally themed events. The theme of the national event was "Sustainability, Diversity and Inclusion" and events included a national scavenger hunt and social media campaigns.



4. LEARNING & TEACHING



Strategic Aims:

- To foster a culture of sustainability citizenship within the University Community through both formal and informal teaching and learning opportunities and activities;
- To facilitate the development and empowerment of future leaders in sustainability through our teaching and learning programmes and activities.

4 QUALITY EDUCATION



SDG 4 “Quality Education”, Target 4.7 calls on educators to ensure

“THAT ALL LEARNERS ACQUIRE THE KNOWLEDGE AND SKILLS NEEDED TO PROMOTE SUSTAINABLE DEVELOPMENT...”.

UCC’s Academic Strategy (2018) commits the university to developing a **“Connected Curriculum”** with sustainability featured as one of six thematic areas. This reflects the government’s **National Strategy on Education for Sustainable Development** as well as a growing international literature highlighting the **need for HE curricula to reorient towards the SDGs**.

In 2020/21, UCC Green Campus contributed to the consultation process on the second National Strategy on Education for Sustainable Development, which is due to be released in 2022.





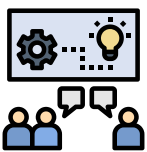
UCC SDG TEACHING TOOLKIT:

In 2020, UCC embarked on a project to support teaching staff in embedding the SDGs within their modules and programmes. A research support officer, Dr John Barimo, was employed with funding from the National Forum for Teaching and Learning to deliver this joint project between UCC Green Campus and UCC's Centre for the Integration of Research, Teaching and Learning (CITRL).

This project aimed to foster the development of globally-minded and action-oriented citizens who are empowered to help create solutions for a sustainable future. With this in mind, the SDG Toolkit project developed and curated resources to support staff in integrating sustainability into learning and teaching. Resources in the SDG Toolkit were informed by student and staff consultations. The resulting SDG Toolkit emphasizes active learning pedagogies, including project-based learning, problem-based learning, and case studies. A Community of Interest emerged during the development and piloting of the toolkit which makes it more dynamic and can be built on to encourage further knowledge exchange and transdisciplinary collaboration.

The project was guided by a steering committee made up of representatives of UCC Green Campus, CITRL and the academic community. An advisory committee included representatives from all four colleges of the university, the student body and local city council.

THE UCC SDG TOOLKIT PROJECT DELIVERED:



**15 PILOT
LECTURES ACROSS
4 COLLEGES**



**PROFESSIONAL DEVELOPMENT
FOR 57 UCC STAFF &
14 FROM OTHER HEIS**

**OPEN SOURCE TOOLKIT AVAILABLE ON UCC GREEN CAMPUS
WEBSITE AND CAN BE FREELY DOWNLOADED AND ADAPTED.**



**THE TOOLKIT EMPLOYS ACTIVE LEARNING PEDAGOGY INCLUDING
PROJECT-BASED LEARNING, CASE STUDY, AND/OR PROBLEM-BASE
LEARNING.**

'SUSTAINABLE FUTURES'

HUMAN CAPITAL INITIATIVE:

AY 2021/22 saw the first intake on UCC's flagship "Sustainable Futures" programme.

The programme, which is led by UCC with partners Maynooth University and IT Sligo, uses enterprise informed curriculum development to provide students with the skills needed to deliver a low carbon future. Sustainable Futures is a cross-university initiative that bringing together science and enterprise, academia and industry, to drive sustainability and decarbonisation by developing new qualifications and CPD courses that will draw upon UCC's expertise in the environmental field.

Sustainable Futures currently offers:

- A Higher Diploma in Sustainability in Enterprise (Level 8) postgraduate conversion course is focused on environmental sustainability and decarbonisation in industry and enterprise.
- An online Part-time PG Certificate in Sustainability in Enterprise (Level 9) to develop highly competitive graduates with expertise in environmental sustainability, sustainability in business and management, and in systems thinking.
- An Online Part-time MSc in Sustainability in Enterprise (Level 9) to support graduates to solve complex multi-faceted sustainability challenges both now and in the future

4. LEARNING & TEACHING



2021 saw the completion of a Sustainable Futures teaching space in the Iris Ashley Cummins Building in the School of Engineering and Architecture, and an enterprise academia collaboration space at the ERI Lee Road Building. The space within the School of Engineering is designed primarily for undergraduate and postgraduate teaching and training. It is envisaged that the space at ERI Lee Road Building will be used to catalyse and stimulate collaboration between academics and industry to generate new sustainability courses and research projects.



5. RESEARCH



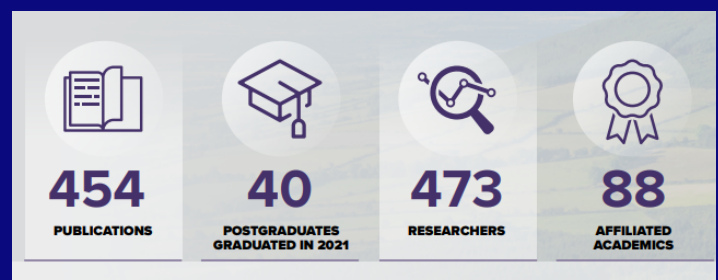
'Strategic Aims:

- *To facilitate the development and empowerment of future leaders in sustainability through our research activities;*
- *To maintain and enhance the University's standing in research on sustainability topics.*

In December 2022, UCC launched "UCC 2022: Delivering a Connected University" to replace the final two years of the university's Strategic Plan 2017-2022. It set out a thematic prioritisation of the university's strategy, as well as transformative changes to our core operations in response to geopolitical challenges, the escalating climate crisis and accelerating societal and economic pressures associated with the Covid-19 pandemic.

This prioritisation included an action to map all of the university's research onto the Sustainable Development Goals. An action group with representation from across the university was established and it quickly became clear that in order to ensure an in-depth and sustainable mapping exercise be completed the project needed to be resourced. Funding has now been secured through the President's Strategic Fund and a research support officer is in place to deliver on this action.

The Environmental Research Institute is UCC's flagship for research related to the Sustainable Development Goals. The Institute's mission is to generate new research knowledge for the understanding and protection of our natural environment, and develop technologies, tools, services and policy knowledge to facilitate a transformation to a zero carbon, resource efficient, and sustainable society.





GREENING RESEARCH PRACTISES:



Research is one of the most energy intensive activities undertaken in universities and research labs are also the source of many single-use plastic items. The Covid-19 lockdowns have highlighted the degree to which this statement is true. It is thus more urgent than ever to work toward greening our research activities throughout campus. There are two primary accreditation systems available for greening laboratory practises, namely 'My Green Lab' (A US based accreditation body) and the 'Laboratory Efficiency Assessment Framework (LEAF)' (Developed by 'Green Lab Associates' in the UK). The popularity of these greening systems has grown recently in Ireland, with a neuroscience lab at NUIG becoming the first 'My Green Lab' accredited in the EU in 2019.

Having previously trialled the LEAF programme across several chemistry labs in the Kane Building we have now established a 'Green Lab Community' composed of technical and research staff from throughout the University's research-intensive buildings & institutes. Represented are research labs from the Kane, Pharmacy, BioSciences, Western Gateway, and Food Science Buildings. Two labs will be selected by each discipline to compare the two different Green Lab processes and identify which system works best for UCC. The intent is to standardise the greening of research facilities across UCC in the coming years and ensure that a whole institution approach is taken.

6. FOOD, HEALTH & WELL-BEING



Strategic Aims:

- *To enhance the health and well-being of the University and wider community through the facilitation and promotion of aspects of healthy eating and living as an integral part of sustainable living.*



3 GOOD HEALTH AND WELL-BEING



SDG 3, 'Good Health & Well-being' aims to prevent non-communicable disease and promote mental health & well-being (Target 3.4), and to reduce health risks caused by pollution of the environment (Target 3.9).

SUCCESS: IT'S IN YOUR NATURE

In 2021 UCC Green Campus joined forces with the Graduate Attributes Programme to develop a Canvas Space for students on the theme of green space and wellbeing. "Success: It's in Your Nature" draws on expertise from across the university and years of collaboration between Green Campus and Dr Annalisa Setti in UCC's School of Applied Psychology.

Success, it's in your nature showcases all the ways students and staff can engage with nature on our campus to enhance mental and physical health and wellbeing, enhance their academic and personal success and build their graduate attributes and values. Dr Setti has also been collaborating with the University of Bologna to undertake survey of students in both campuses (UCC and UNIBO) and assess the impact of time spent in green space on their mental wellbeing and in particular exam anxiety.





SUCCESS

IT'S IN YOUR NATURE



Engage with nature on your campus to boost your mental and physical health and wellbeing, enhance your academic and personal success and build your graduate attributes and values.

For more info visit:
ucc.ie/successatucc

#UCCsuccessNature



The Canvas space directs students to the wealth of resources on campus where they can further engage with green space and biodiversity. These include UCC's Open Arboretum, Looped Campus Walks, Community Gardens, The Glucksman Gallery, Nature Soundscapes, Mindful Walking and the UCC Pollinator plan.

It is also an excellent way to cultivate and nurture Graduate Attributes i.e. the skills, knowledge and abilities students develop during their time as a UCC student. Such initiatives will help students to successfully navigate the transition in to, through and out of UCC, enabling them to begin, belong and become the person they want to be. Within the Success, it's in your nature module, in particular, independent and creative thinking and social responsibility and core values of ambition, respect, compassion, integrity, and resilience are explored.



Creators,
evaluators and
communicators
of knowledge



Independent
and creative
thinkers



Digitally
Fluent



Socially
responsible



Effective, global
citizens who
recognise and
challenge
inequality

7. LANDSCAPE, HERITAGE AND NATURAL RESOURCES



Strategic Aim:

- *To promote and engage in the sustainable use and management of the landscape and natural resources of the University, in all its campus areas, with respect to ecosystem services, natural and cultural heritage;*
- *To minimise the local, regional and global environmental impacts of our educational, research, operations and infrastructural development.*

UCC's Biodiversity Action Plan (2018-2023) outlines our approach to biodiversity management on campus. In 2019, the University took the decision to implement a reduced mowing schedule across all campus green space and to allow certain area go completely wild. This was undertaken in support of the All Ireland Pollinator Plan, a national initiative to wild green areas in support of our native pollinators. UCC renewed it's support for the All Ireland Pollinator Plan in 2021.

This academic year so the first harvest of hay from the meadows and no-mow areas of campus. This was a new experience for our grounds team, having been accustomed to more regular mowing! The grounds team also invested in a new electrical cylinder mower, the first of its kind in Ireland.

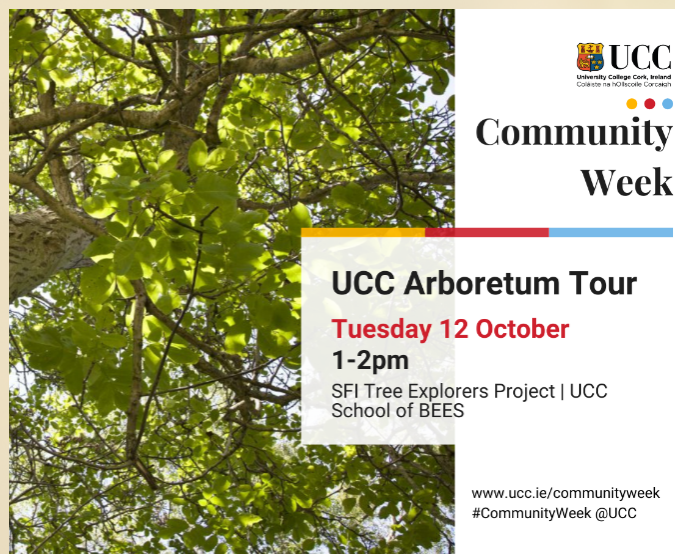


The grounds team have also been monitoring the ecological succession evident in campus flora since this change in management. Tree saplings and a native orchid have begun to bloom on campus for the first time. These species were clearly dormant in the seed bank and have been encouraged to sprout due to the new management practice.



As part of the UCC Living Laboratory Funded **"Open Arboretum"** project, UCC was designated an Open Arboretum by ArbNet in 2020. The UCC Arboretum has a collection of approximately 2,500 trees across the campus (c. 42 acres). There are approximately 120 different tree species in the collection.

In 2021, the Open Arboretum team was awarded funding from Science Foundation Ireland for a new "Tree Explorers" project. Tree Explorers' will make use of the Arboretum to engage primary school students as well as adults with STEM topics. The primary school strand of the project has been specifically co-created with primary school teachers to target schools in communities at risk of disadvantage and social exclusion (DEIS schools). Engaging audiences with such living scientific collections has been shown to have significantly positive effects on educational attainment, mental and physical health, attitudes and knowledge of STEM subjects and careers, as well as willingness to engage in dealing with global challenges such as climate change and biodiversity loss. The project will involve in-school activities with project team members as well as visits by the students to the UCC Open Arboretum - 2,500 trees of over 120 different species.



The adult strand of the project will deliver a tailored "UCC Tree Tour" as well as a series of workshops and talks for the general public throughout 2021 in addition to specific tours as part of Science Week, National Tree Week and other important STEM festivals. Educational materials, a self-guided map and a series of videos linking trees to other STEM topics (climate, health, medicine, etc.) will also be delivered.



UCC Tree Explorers project team, Dr Emma Hutchinson, Professor Barbara Doyle-Prestwich, and Dr Eoin Lettice.

8. RECYCLING & WASTE MANAGEMENT



Strategic Aim:

- To manage and reduce waste generation by the University community through behavioural and practice change, in accordance with the EU 'waste management hierarchy'.

The UCC Sustainability Strategy aligns closely with SDG 12 'Responsible Consumption & Production', which sets out 11 targets calling for the responsible management and consumption of resources, reductions in waste generation and responsible disposal of waste.

This work is also linked directly to SDG 11.6 which, amongst other things, aims to reduce the environmental impact of our cities by paying attention to waste management. Similarly, SDG 14 aims to prevent marine pollution from landbased activities, including plastics.

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



11 SUSTAINABLE CITIES AND COMMUNITIES



14 LIFE BELOW WATER

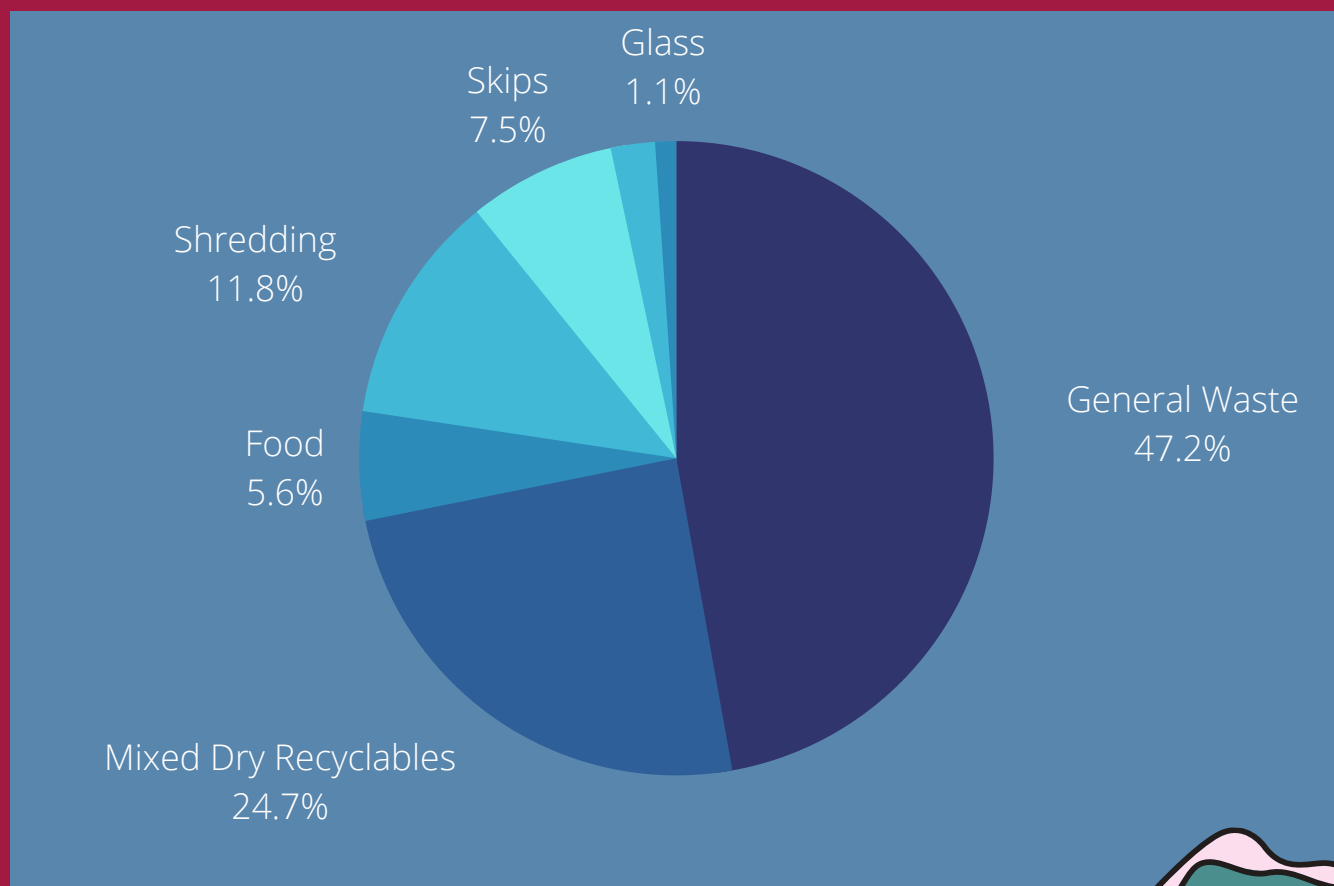


COVID IMPACTS ON WASTE:

The Covid-19 Pandemic again had a huge impact on waste production on campus. In particular, the closure of campus catering outlets for most of the year meant a huge reduction in campus food waste. However, the pandemic resulted in a set back in some of the University's attempts to reduce disposables on campus. Many people turned to disposables in the false hope that they might provide more protection against Covid. Our "ReCircle" Living Laboratory project focused on reusable takeaway containers had to be put on hold. In addition, disposable masks became a new source of non-recyclable waste on campus. This was addressed as part of a Green Week talk with UCC Surgical Society where guest speaker Dr Ana Rakovac from Irish Doctors for the Environment discussed the different types of medical waste being produced daily, how they are managed and disposed of as well as the impact it has on the environment.



8. RECYCLING & WASTE MANAGEMENT



There were 152t of 'General Waste' generated in 2021, representing 44% of all waste generated in UCC. General waste from UCC goes through a process called 'Mechanical-Biological-Treatment' (MBT) after it is collected. The MBT process aids in the recovery of recyclable and organic materials (~25%) from the waste stream, while ~75% of the material is diverted for energy recovery through incineration. Through this process almost all of UCC's waste is diverted from landfill, however the generation of such large amounts of general waste each year remains a concern. The other waste streams identified are either recycled, composted or re-used in some way.



9. ENERGY, WATER & CLIMATE



Strategic Aims:

- To minimise the local, regional and global environmental impacts of our educational, research, and ancillary operations, and infrastructural development;
- To reduce energy intensity and greenhouse gas emissions (carbon footprint) of the University's operations;
- To reduce the water use on campus.



Direct links are observable here between SDG 6 'Clean Water & Sanitation', SDG 7 'Clean & Affordable Energy', SDG 9 'Industry, Innovation & Infrastructure', SDG 11 'Sustainable Cities & Communities', SDG 12 'Responsible Consumption & Production' and SDG 13 'Climate Action'.



UCC CLIMATE ACTION MANDATE



UCC, like all large organisations, contributes to climate change both directly, through university activities, and indirectly, as a result of activities associated with the university. The Irish government mandated all public bodies to reduce their absolute emissions by 51% by 2030 under the Climate Action Plan 2021.



This is an absolute emission reduction, so the university's actual emissions must be reduced in spite of any growth in student numbers or building area.



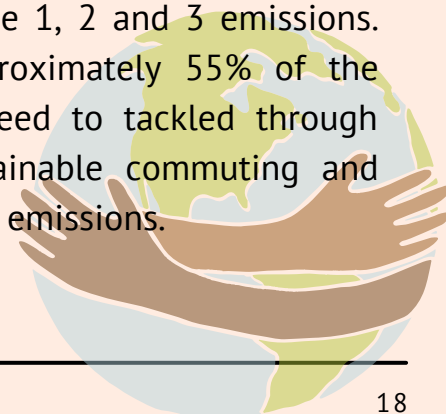
In response to this mandate the University is putting in place a comprehensive Climate Action Plan which will detail the pipeline of projects that need to be implemented in order to achieve this reduction.



UCC's Climate Action Plan will include targets for scope 1, 2 and 3 emissions.



We know that Scope 3 emissions account for approximately 55% of the University's overall carbon emissions and therefore need to be tackled through reductions in academic travel, more active and sustainable commuting and working with our suppliers to reduce supply chain carbon emissions.





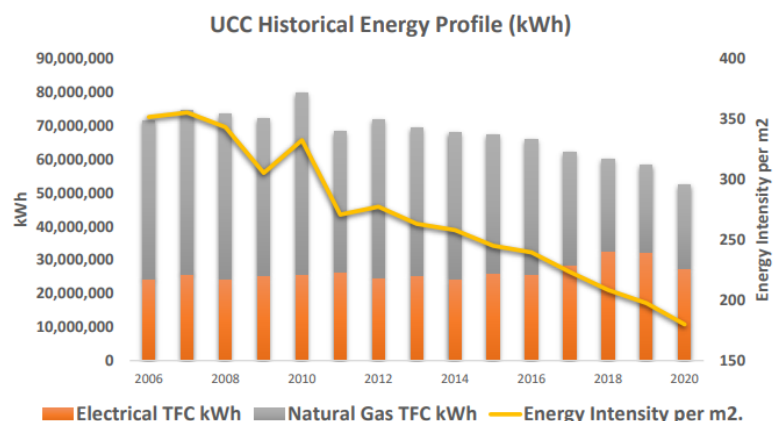
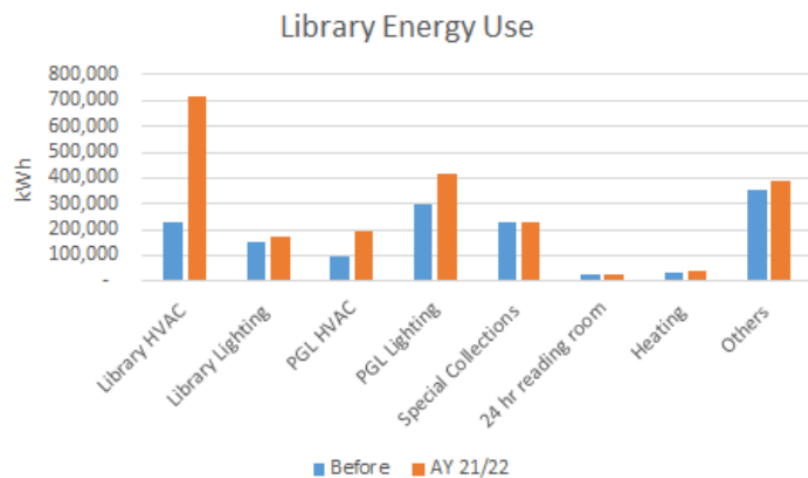
Needless to say the closing of the campus in March 2020 due to the COVID pandemic had a big impact on our energy performance for the AYs 19/20 and 20/21. While electrical consumption remained lower in 20/21, gas consumption increased due to the increased ventilation requirements following the reopening of campus and introduction of new Covid protocols.



Scope	2020/21 Target	2020/21 Actual	2019/20	2018/19 Baseline
Electrical GWh	19.5	17.3	17.1	19.98
Gas GWh (normalised)	20.3	23.3	18.6	20.6
Total	39.8	40.6	35.7	40.58

In Academic Year 2020-21, electricity consumption remained at 14% below 2018/19 levels. However When it comes to gas, consumption was 11% above 18/19 levels. 8 buildings accounted for 76% of total energy use, and the Boole Library increased it's consumption for the first time in a number of years. This was primarily related to increased ventilation requirements and longer opening hours. UCC's energy manager is working closely with the Library team to minimise these impacts.

A number of conservation projects have been undertaken over the last year including BMS optimisation, lighting control upgrades, boiler upgrades and space utilisation projects. All of these projects, combined with behavioural change initiatives have seen energy intensity in UCC reduce by 27% since 2006.





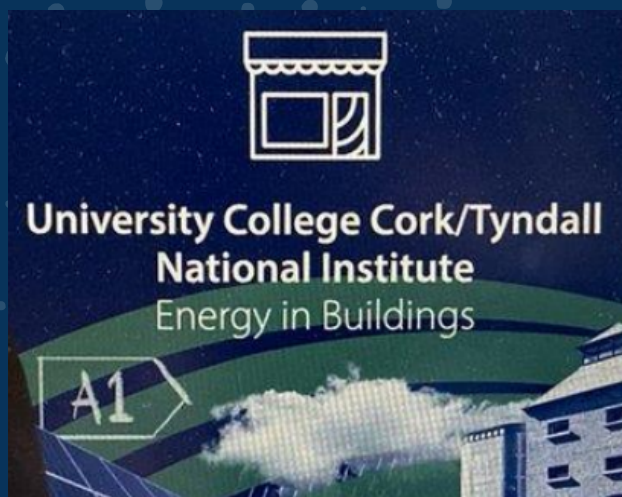
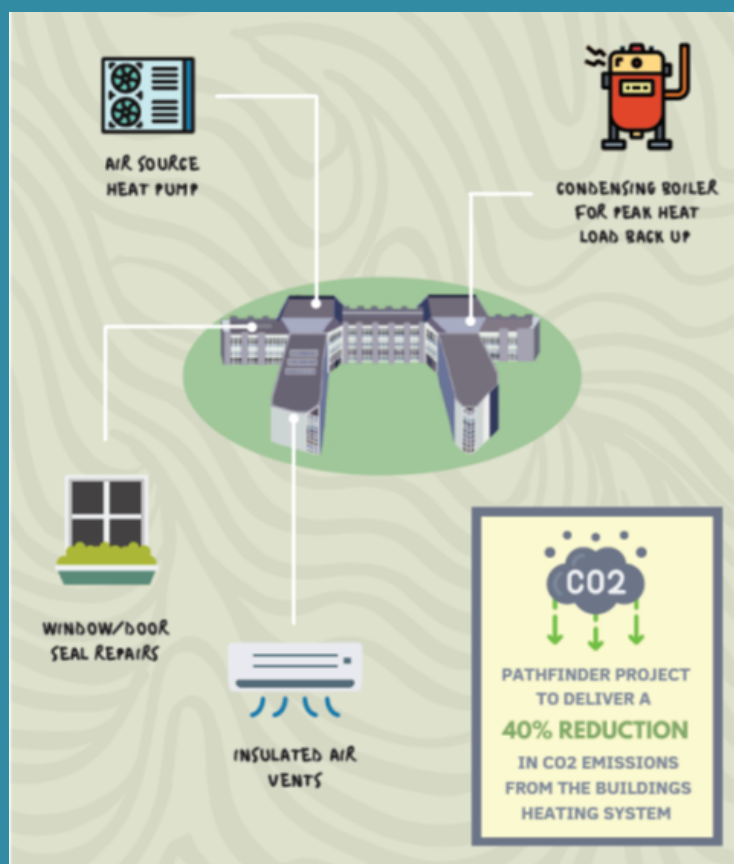
2020/21 ENERGY HIGHLIGHTS

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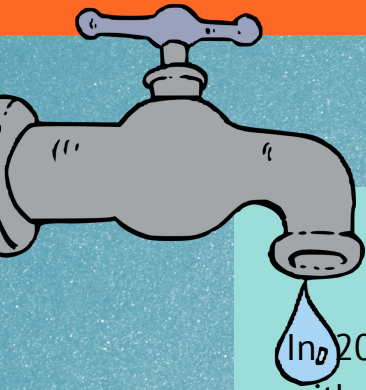
energy projects completed for 2020/21, ranging from lighting controls upgrades to the installation of an air source heat pump in the ORB.

HEA Pathfinder funding secured to install an air source heat pump in the O'Rahilly Building. The pathfinder program was set up to find strategic pathways for energy efficiency and decarbonisation programs within higher education buildings. The new heating arrangement will:

- Utilise the ASHP to provide at least 56% of the buildings annual heating demand.
- Reduce the heating load by 49%, when compared to the existing heating plant.
- Reducing the carbon emissions of the heating system by 40%.
- Maintain comfortable indoor conditions for building users.



UCC Buildings and Estates team picked up an Energy in Buildings award from the Sustainable Energy Authority of Ireland for the Tyndall phase three project which has delivered Ireland's oldest A-rated building. This project demonstrates how universities can act as testbeds for solutions to the climate crisis, demonstrating innovative and effective solutions.

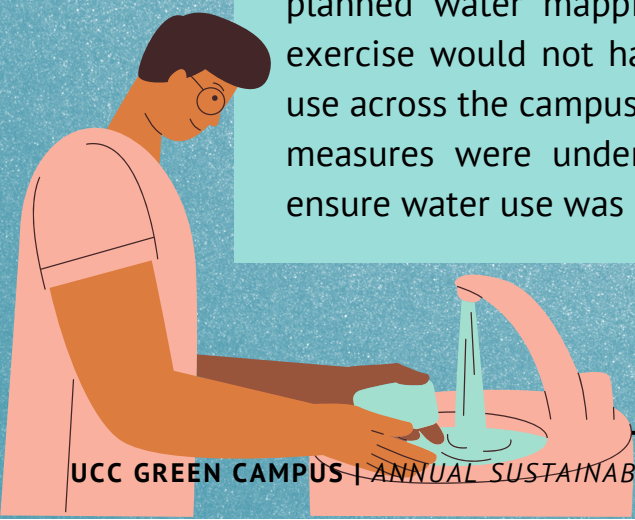


WATER STEWARDSHIP

In 2019 the Estates office became a **Certified Water Steward** with the help and guidance of Irish Water's excellent Water Stewardship Programme. Through the program the Estates office developed a water charter, outlining 12 priority areas for the University to action on. Actions range from creating awareness of water conservation across the University, installation of additional water metering and improved operational controls across the Estate.

In a typical year the University uses 130,000 m³ of freshwater across the estate. The main consumers of water are the cafes, restaurants, toilets systems, drinking fountains, research labs and deionized water generation plants. Our 2019 water study indicated that out of 102 separate water accounts, 6 consume over 81% of our annual water use. Needless to say one of the priorities for this year was focused on mapping out the water users in those buildings and implement water conservation measures, which we had already started with and seen some significant success, **avoiding the use of 1,200,000L of water.**

The closure of campus in response to COVID-19 had a significant impact on our water use, resulting in an **81% reduction in our annual water** use for AY 2020/21 (water usage came in at just over 20,000 m³ for the year). Because of this, planned water mapping exercises had to be delayed as the exercise would not have presented a true picture of the water use across the campus. However a number of water conservation measures were undertaken while the campus was closed to ensure water use was minimised.



10. PROCUREMENT & CONTRACTS



Strategic Aims:

- *To systematically include sustainability criteria in the selection criteria for the purchase of goods and services for the University;*
- *To consider life cycle perspectives during the selection of goods and services wherever practical and appropriate.*



SDG 12.7 specifically targets the promotion of sustainable public procurement practices. But how and where UCC spends its money, as an extension of the organisations operations, can impact on numerous other Sustainable Development Goals.

The 2021 Climate Action Plan highlighted the necessity to include public procurement in climate action planning in public sector organisations. Specifically the Plan mandates "the inclusion of green criteria in all procurements using public funds, introducing requirements on a phased basis and providing appropriate support to procurers".

The new Waste Action Plan for a Circular Economy also emphasises how public procurement should be used to lead the transition to the "circular economy" which is aimed at maintaining the value of products and materials for as long as possible and when a product reaches the end of its life, it is used again to create further value.

RECENT PROGRESS:

10. PROCUREMENT & CONTRACTS

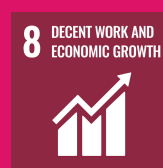


Since May 2020, **100% of electricity purchased by UCC is supplied from a renewable source.** If accounted for would significantly reduce UCC's Scope 2 emissions, and the overall carbon footprint. However, because this renewable electricity is supplied through the national grid, is considered more appropriate to use a grid average carbon intensity in calculating the carbon footprint, instead of "taking credit" for this renewable electricity.

In 2020 our cleaning contract with Bidvest Noonan was renewed. The supplier was tasked with incorporating an environmental & sustainability proposal into its tender. Actions taken to date include switching to alternative mopping systems to reduce water and chemical consumption, and waste generated. A chemical free cleaning system has also been adopted. The Tersano system converts oxygen from the air into aqueous ozone when infused with tap water to become a safe & effective disinfectant (see case study below).

Other significant procurement exercises incorporating sustainability have included:

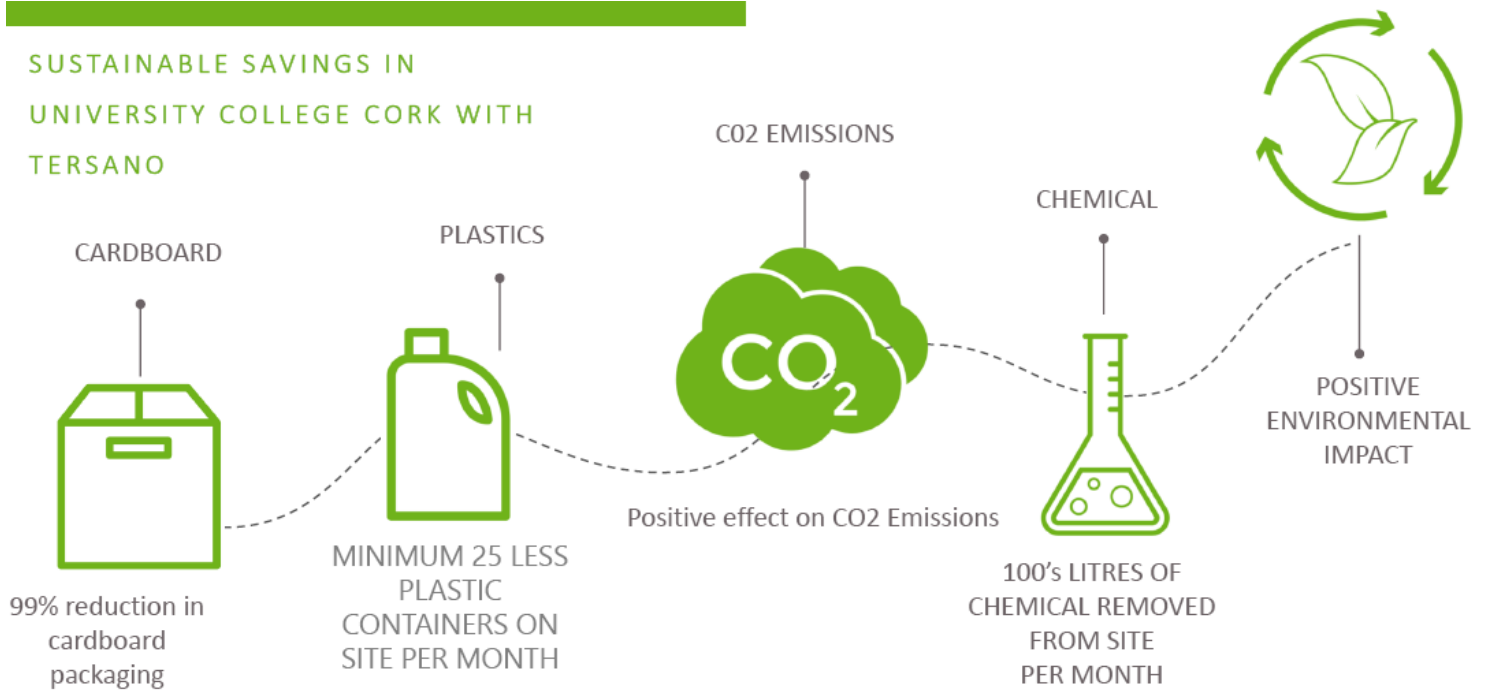
Tender	Sustainability Inclusion
Security Services Tender	Proposal includes new EV patrol vehicle, EV bike & energy efficient torches Environmental awareness upskilling of team Eco & practical driving assessment
Book sorter for Boole Library	Requirements include Take back arrangement, recycling/responsible disposal of existing sorter, energy saving, company environmental & sustainable practices.
Untrasound Research Equipment	Energy & environmental criteria included. Outcome – equipment proposed with a longer lifecycle, low running cost, removal of packaging & takeback arrangement for end-of-life.
Fire and gas alarm maintenance	AC – Environmental –5% 1) Support UCC's Sustainability Strategy 2) Disposal of components





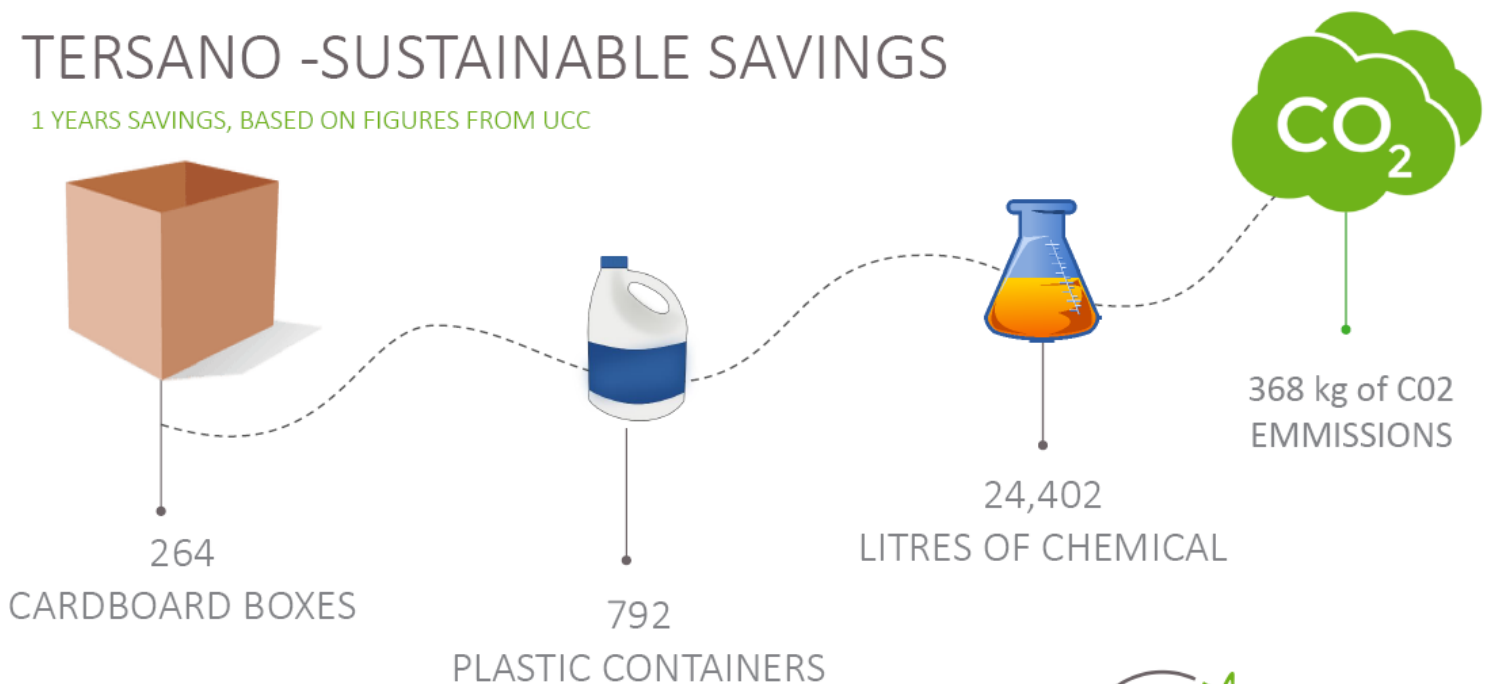
THE TERSANO CLEANING SYSTEM

SUSTAINABLE SAVINGS IN UNIVERSITY COLLEGE CORK WITH TERSANO



TERSANO -SUSTAINABLE SAVINGS

1 YEARS SAVINGS, BASED ON FIGURES FROM UCC



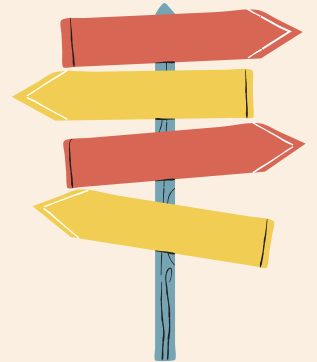
Reliable People,
Innovative Know-how

11. COMMUTING & BUSINESS TRAVEL

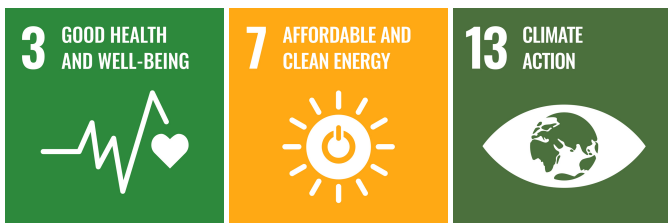


Strategic Aims:

- To minimise the local, regional and global environmental impacts of our educational, research, and ancillary operations, and infrastructural development in relation to transport;
- To promote and encourage the use of sustainable modes of transport for staff and student commuting, and minimise associated impacts of commuting on University neighbours and the wider city community, and the climate.



The commuting activities of UCC are directly linked to SDG 11 (Target 11.2) which states “By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations...”.



It also has clear links to SDG 3 in that active mobility is key to good health and wellbeing, but also SDG 3.6 aims to improve road safety. Of course sustainable transport also contributes to targets on Affordable & Clean Energy (SDG 7) and Climate Action (SDG 13), as discussed below.

CARBON FOOTPRINT OF UCC'S COMMUTING & BUSINESS TRAVEL:



The combined contribution of commuting and business travel to UCC's carbon footprint is greater than the electricity consumed on campus annually. The pandemic significantly reduced commuting emissions and in 2021 the University developed a blended working pilot policy where staff can determine the best mix of remote working in their area. This is expected to result in a reduction in commuting emissions.



2020/21 COMMUTING HIGHLIGHTS

UCC engages in significant lobbying on behalf of its staff, students and local community to encourage more investment in sustainable commuting. In 2020/21 UCC lobbied for inclusion of the Lee to Sea Greenway in the Cork Metropolitan Area Transport Strategy and for more sustainable transport options to campus in the Cork City and Council development plans. UCC was also involved in organising the annual Transport and Mobility Forum seminar on commuting post-Covid.



Additional bike parking has been installed across campus including a new secure bike parking facility in the underground BioSciences car park, where 3 car parking spaces have been converted into space for 45 bikes plus 18 wet gear lockers. In addition, 30 new spaces at the Kane Building, Student Centre and Brighton Villas. More covered bike parking spaces are planned for South Lodge and at the Student Hub.

Following significant lobbying, the TFI Bike-sharing scheme is being expanded to College Road and further to CUH and MTU.

UCC Green Campus popular e-bike trial, in collaboration with the Bike Shed, continues in spite of the pandemic. 75 staff trialed e-bikes as an alternative to their commute and 6 people have taken the leap and switched from their car to an e-bike as their permanent mode of transport. It is hoped to continue the trial into the future and deliver more "taster" sessions for staff as well as bicycle skills training and bike repair workshops.





11. COMMUTING & BUSINESS TRAVEL



Some happy staff trialled the UCC Green Campus E-Bikes over the summer. Many thanks to our friends at The Bike Shed for their support.

12. KEY ACTIONS FOR AY 2021-2022

SUSTAINABILITY CITIZENSHIP

- Build more student engagement particularly with green space in the light of Covid restrictions.
- Organise a second climate assembly to review progress and make recommendations on sustainability at UCC.

LEARNING & TEACHING

- Launch the SDG Toolkit and seek to further embed SDGs within the curriculum through supporting teaching staff.
- Work with academic staff in UCC and other universities to develop further microcredential offerings for university staff.

RESEARCH

- Further develop UCC's 'Green Labs' programme with a university wide community of lab users.
- Complete mapping UCC research activities to the SDGs.

FOOD, HEALTH & WELLBEING

- Conduct on space design & use for wellbeing, with emphasis on the co-benefits of our green spaces.
- Identify opportunities to support sustainability in food & catering outlets when they reopen after lockdown.

RECYCLING & WASTE MANAGEMENT

- Work with the EPA & IUA to explore food waste reduction initiatives and reuse.
- Work towards obtaining ISO140001- 'Environmental Management' accreditation.



12. KEY ACTIONS FOR AY 2020-2021

LANDSCAPE, HERITAGE & NATURAL RESOURCES

- Expand the use of UCC grounds as a tool for biodiversity conservation, wellbeing, research, teaching & learning.
- Collaborate with researcher community to assess impact of pollinator plan

ENERGY, WATER & CLIMATE CHANGE

- 18 energy projects including light control upgrades & installation of air source heat pump.
- Develop Carbon Management Plan, including provision for carbon mitigation and onsite renewable technologies

PROCUREMENT & CONTRACTS

- Continue to embed sustainability criteria into procurement & contracts.
- Engage with national networks to learn from and share best practice and contribute to national policy development.

COMMUTING & BUSINESS TRAVEL

- Commence delivery of newly published Commuter Plan, expanding facilities for cycling & active travel.
- Expand provision of electric vehicle charging stations and build on the success of the E-Bike trial scheme.





Any queries concerning the content of this report can be directed to Sustainability Officer, Dr Maria Kirrane (m.kirrane@ucc.ie).

The report was prepared on behalf of the UCC Green Forum, chaired by Professor John O'Halloran (Interim President) and Mark Poland (Director of Buildings and Estates).

Further information can be found at the UCC Green Campus website (greencampus.ucc.ie) and the UCC STARS report.

Visitors to UCC campus are invited to download the UCC Green Tours App, available on the Android and Apple stores.



UCC GREEN CAMPUS

