



## Climate Action Roadmap

March 2023





| President's Foreword                  | 4  |
|---------------------------------------|----|
| The UCD Story                         | 10 |
| Creating a Sustainable Global Society | 12 |
| UCD Commits to Climate Action Mandate | 14 |
| Our Targets                           | 16 |
| Our People                            | 19 |
| Our Ways of Working                   | 26 |
| Our Buildings & Vehicles              | 28 |
|                                       |    |

# President's Foreword



Creating a sustainable global society is one of the four core themes of our strategy, Rising to the Future and we are committed to action across teaching, research, and university operations and activities. UCD aspires to be a global leader in learning innovation and design, research excellence, research-based teaching and curriculum design, and also to provide a wider social and cultural experience that supports the development of active, engaged, and healthy citizens. We are equally committed to our role as a leader, demonstrating through our actions as an organisation and through our campus experience that sustainable living is a priority in the decisive decade ahead.

That is why UCD's strategy and our campus development plan set out an ambitious vision for sustainability. It is time to put our vision and strategies into practice and action.

This is UCD's first Climate Action Roadmap and comes as our Sustainable Development Strategic Group has already undertaken a considerable amount of positive work on the actions we need to take.

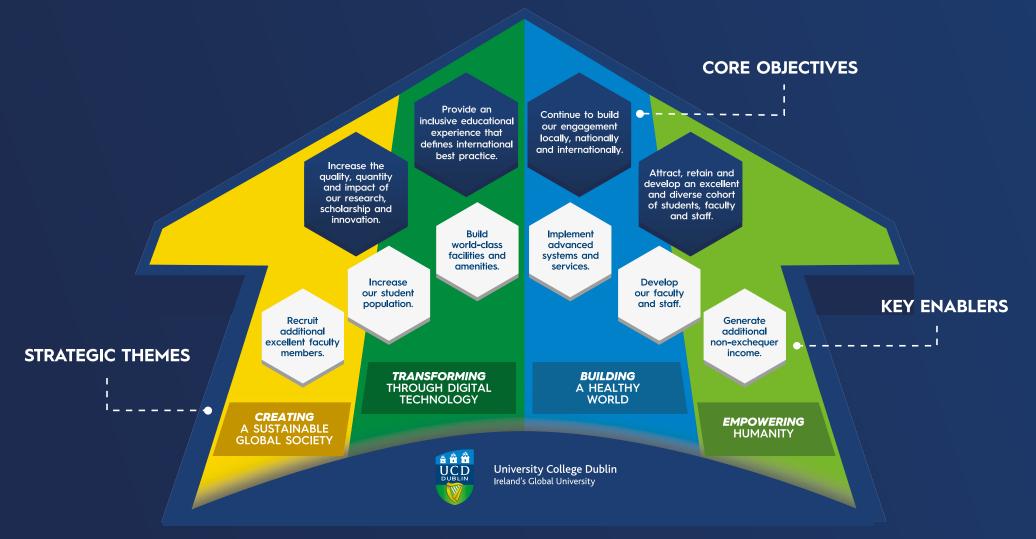
A priority action identified by the group was the appointment of a Vice-President for Sustainability. This process is well underway. The VP will be UCD's Climate and Sustainability Champion and will be responsible for ensuring that the university's culture, structures, environment, governance and support services deliver our sustainability objectives. The VP will be responsible for UCD's broader sustainability strategy and the programme of actions that ensure its implementation.

UCD has a long track record of successfully reducing its energy usage and managing its resources sustainably and effectively. Through this, our first Climate Action Roadmap we commit to meeting or exceeding targets set by Government for public sector bodies under the Climate Action Plan 2021.

This is a critically important decade for our university and its community, our country and our planet. There is much that UCD can do to play its part in meeting the challenges ahead and we are fully committed to doing so.

Professor Mark Rodgers, Acting President UCD





Climate Action Roadmap



## The UCD Story

**Founded** in 1854

by John Henry Newman



**133 Hectares** Belfield campus, in active use as a

Living Laboratory`



€626 million

won in externally

funded research in

last 5 years

Ranked within top 1% of higher education institutions world-wide



€566 million annual turnover

10,931 awards conferred each year













32,211 registered students based in Ireland



1,900,000 Approximate number of annual visits to library facilities

## Creating a Sustainable Global Society

Theme 1 of the UCD Strategy 2020 - 2024 Rising to the Future is the creation of a global sustainable society. As a matter of urgency, humanity must learn to live sustainably without degrading its shared planet.

Food must be produced sustainably to feed a stable human population. Energy must be provided from renewable sources, and the processes of generating and storing that energy must not impact negatively on the environment. Material goods of all types must be made from recycled and/or renewable materials. There must be reduced levels of inequality within and between communities. These goals require significant development of technologies and infrastructure, and changes in human behaviours and institutions.

UCD has a long-standing commitment to sustainability. Members of the UCD community have been to the fore in shaping the UN Sustainable Development Goals. We have led in research areas such as the bioeconomy, agrifood and renewable energy and have developed education programmes in sustainable development and humanitarian assistance. We will now build on this expertise to deliver a holistic response to the challenges of sustainability that spans and unifies our activities in this area.

We will embed the principles of a sustainable society in our university community. Undertaking research which advances the 17 UN Sustainable Developments Goals through generating, sharing and applying knowledge for maximum impact, we will deliver interdisciplinary educational programmes which support our students and graduates to contribute most effectively to the development of a sustainable society.



### UCD Commits to the Government's Climate Action Mandate

The following are the requirements for public sector bodies as set out in the Mandate:



### **Our Targets**

- Reduce GHG emissions by 51% by 2030
- Increase the improvement in energy efficiency in the public sector from the 33% target in 2020 to 50% by 2030
- Put in place a Climate Action Roadmap by the end of March



### **Our People**

- Nominate a member of the Management Board as the Climate and Sustainability Champion with responsibility for implementing and reporting on the mandate
- Incorporate appropriate climate action and sustainability training (technical and behavioural) into learning and development strategies for staff
- Establish and resource Green Teams, reporting to senior management, to become integrated drivers of sustainability in every public sector body



### **Our Ways of Working**

- Report GHG emissions and sustainability activities in the annual report
- Review any paper-based processes, and evaluate the possibilities for digitisation so it becomes the default approach



### **Our Buildings**

- Create bicycle friendly buildings for employees and visitors, by putting bicycle parking in place by 2022 - which is secure, accessible, and simple for cyclists to recognise and use
- Display an up-to-date Display Energy Certificate in every public building that is open to the public to clearly show energy use
- The public sector will not install heating systems that use fossil fuels after 2023
- Purchase only zero-emission vehicles where available and operationally feasible from end of 2022



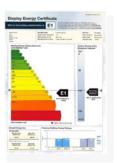
**READ MORE** 



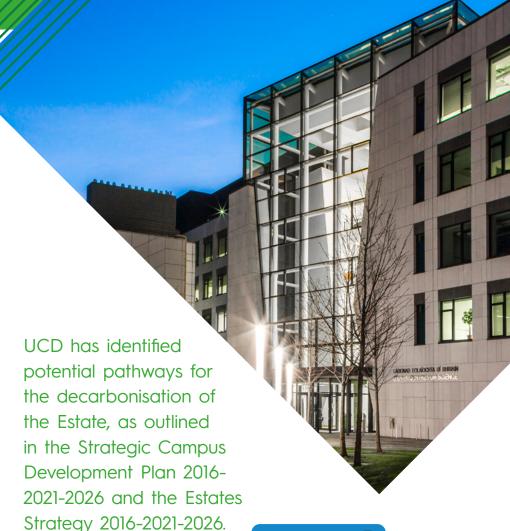
## Our Targets

#### UCD commits that it will:

- Adopt and integrate applicable climate plan targets in decision making, planning and operation of the university.
- Develop new buildings to near-zero energy building standard, with a BER of A and energy efficient design (EED) techniques incorporated.
- Set a minimum target of BER B or better for building refurbishment or deep retrofit projects and deliver significant carbon savings as both fabric and plant are upgraded.
- Review and update the sustainable travel targets in the UCD Travel Plan 2016-2021-2026.
- Review and update the Display Energy Certificates in UCD buildings.
- Measure utilisation and set space efficiency targets under the UCD Space Policy to ensure efficient use of university buildings, offices and spaces in an evolving campus-based university environment.
- Identify and implement a de-carbonisation pathway to eliminate c. 5,400 tonnes of CO2 from our carbon-energy mix to achieve our 2030 targets.
- Install no new fossil fuel based energy systems.
- Re-certify ISO50001 accreditation annually.
- Update our Climate Action Roadmap annually.



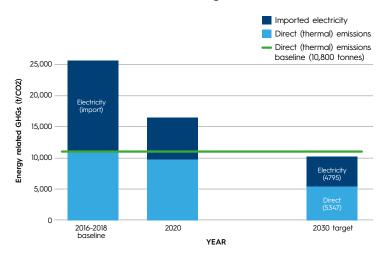




READ MORE >

## रिह्नित Our People

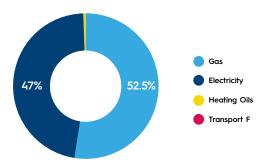
### UCD 2030 Carbon Dioxide Emissions Targets



Direct emissions in UCD predominantly relate to thermal energy (natural gas consumption), used for heating buildings and water.

UCD's target for reduction of direct (thermal) emissions is 5,347 tonnes of CO2, to achieve a 51% reduction from the average baseline figure of 10,800 tonnes of thermal CO2.

### Energy-related C02 Emissions - 2021



Phased decarbonisation of the Belfield District Heating System is already underway, with a 1MW high-temperature heat pump installed in 2022 and commissioned in 2023, and further phases planned for the future. This Climate Action Roadmap was proposed by the President, who is the Climate and Sustainability Champion for UCD, in consultation with the University Management Team (UMT) and endorsed by the Governing Authority in March 2023.

A new leadership role of Vice President for Sustainability is currently in recruitment and will be in place by April 2023.

The VP will report to the President and be a member of the UMT.

Once appointed they will become the Climate and Sustainability

Champion for UCD.



The new VP for Sustainability and their team will provide a visible point of contact and focus as well as clear leadership in this area, helping to mainstream sustainability and to move it firmly to the centre of the organisation as a cross-cutting priority.

The VP for Sustainability will promote a culture of sustainability across all the organisation's activities, mobilising the UCD community of students, staff and alumni to contribute towards it, such that it becomes a primary driver underpinning everything that the university does.

UCD Estate Services and the Energy Performance Officer, (Director of Estates) are responsible for the implementation of the water and energy management and space management policies of the university. They actively monitor energy and water usage on an estate wide basis, taking actions to improve performance. They also manage strategic energy and renovation projects for the university.

READ MORE >

By engaging our whole community and all its resources, UCD can make a significant impact on achievement of sustainability targets.

UCD believes that our engaged community can reduce our collective impact through individual actions. The SEAI estimates that up to 10% of energy use could be saved through behavioral change alone! Our Roadmap encourages us all to examine our everyday choices through a lens of sustainability.



READ MORE

### Sustainable Development Strategic Group for Theme 1

During 2022, a cross university thematic group was established to develop recommendations on how UCD can better deliver on its sustainability ambitions. Membership was across all areas of UCD and numbered approximately 40 members. Over the course of 2022, the group developed a set of 29 recommendations for the organisation across teaching and learning; research; governance and organisation; campus and operations and communications. Its priority recommendation that the university establish a new leadership role of VP for Sustainability is already in train.

### Raising awareness with staff and students

The university has an engaged cohort of communities and groups focused on the promotion and research of sustainable activities across functions of the university and estate. Some of these groups are integrated with external bodies including the National Transport Authority, SEAI (through their Sustainable Energy Communities) and An Taisce.

Examples of groups currently working and volunteering in these fields:

- UCD Green Campus
- Green Labs, a Sustainable Research Initiative
- WarpIt-UCD Estates Furniture Reuse Programme
- UCD Sustainable Energy Community
- UCD Spatial Dynamics Lab
- UCD Smarter Travel Group
- UCD Commuting Review Group, in partnership with the NTA and Dun Laoghaire Rathdown County Council

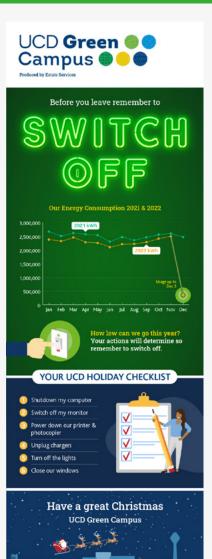


The UCD Green Campus initiative has been the integrating banner for improvements in biodiversity; waste reduction and recycling; water conservation, energy efficiency and sustainable commuting. Through a range of workshops, communications to students and staff and engagement with champions and the wider community, they have raised awareness of what UCD is doing as an organisation and the actions that each of us can take to promote greater sustainability at UCD.

The Green Campus initiative aims to encourage students and staff to work together to implement projects and initiatives and is focused on delivering projects where students can become actively involved.

www.Cycleclinic.ie







UCD uses LinkedIn learning as a platform to offer a broad range of courses in sustainability to its staff.

UCD has access to international experts in many aspects of sustainability within our faculty. Faculty seminars and events on sustainability provide our staff with opportunities to enhance their knowledge and we offer a range of programmes, certificates and CPD in the area of sustainability that our staff and faculty also have access to. Many of our faculty contribute to Ireland's Climate Action Plan through involvement in national policy working groups.



Climate Action Roadmap Climate Action Roadmap

## Our Ways of Working

UCD through the leadership of the VP for Sustainability and the wider UCD community will embed sustainability into our decision making, culture and ways of working.

UCD provides an on campus experience, taking a holistic approach to the student experience encompassing student accommodation, research and study, sport, wellness and recreation and a wide range of campus amenities in use on a 12 month basis.

The university is a research intensive institution, evidenced by €626 million won in external research funding in the past five years. Furthermore, the university estate is home to over 4,000 students across the Belfield and Blackrock campuses. This large residential component of the estate makes a significant contribution to university life, but also to its energy and carbon impact.

UCD recognises the impact its community and activities has on its carbon footprint and energy consumption and has embedded consistent energy management practices into its operational activities and annual institutional reporting. UCD reports annual energy efficiency data to the Sustainable Energy Authority of Ireland (SEAI) via the SEAI Monitoring & Reporting (M&R) System.

FUROPE

UCD is certified in the international standard in Energy Management, ISO500001.

### **Green Procurement**

UCD spends approximately €130M annually on goods and services. Our buying power is a significant lever for change. We adopted a Sustainable Procurement Policy in 2021 which supports the procurement of products and services produced and delivered in a socially responsible way. This policy embeds the values of social equity, human health and environmental concern into the daily operational needs of the university community, from teaching and research to laboratory equipment, office purchases and capital projects.

### **Digital Transformation**

The Programme for Operations and Services Transformation (UCD POST) will create a seamless service experience for all members of our community by identifying and tackling inadequacies/ pain points in the processes and systems we use across the university. We will introduce a new digital platform to join up the services provided, creating a one stop shop for how students and staff interact with the university. It will move all processes online and enable greater integration and efficiency of service delivery across the organisation.

Our digital transformation programme will include capability development in the transformation and digitalisation of operations in the organisation. The programme will run for five years, to 2027.

READ MORE >



## Our Buildings & Vehicles

UCD's CO2 emissions are directly linked to its activities in supporting and delivering education and research.

UCD has ambitious student growth targets to meet increasing demand from domestic and international students. We are projecting increased faculty numbers to support this demand and this will also increase our research activities. This population growth will also lead to a growth in accommodation.

UCD's estate incorporates circa 442,000 sq.m of building floor area including residential accommodation. The UCD Space Policy aims to optimise the efficient and sustainable use of the existing estate such that we reduce the requirement for new accommodation. This will assist in remaining within emissions target limits while supporting projected growth.

UCD's buildings energy performance reflects the age profile of the estate. The Estates Strategy and Campus Development Plan 2016-2021-2026 sets out our plans for developing a more sustainable estate through a series of deep and shallow retrofit opportunities to meet the 2030 and 2050 targets.

READ MORE >

UCD is committed to achieving its active and sustainable travel targets. The current UCD Travel Plan 2016 - 2026 sets a target of 81% of journeys to be taken by sustainable means by 2026.

The university community is making good progress. The 81% target was achieved in 2022, through engagement by the community with their travel choices, and significant investment in cycling and sustainable travel infrastructure within the campus and its surrounds by local authorities and the National Transport Authority.

UCD is fully committed to creating a cycle friendly campus and culture. The university is one of the largest cycling destinations in Ireland, currently providing over 5,000 cycle parking spaces in close proximity to our buildings.







