



# UCD Climate Action Roadmap

Update 2024

## Table of Contents

President's Foreword	03
1. Our Targets	04
1.1 Achieving the energy related CO2 emissions target (51% reduction by 2030)	04
1.2 Achieving the energy efficiency target (50% improvement by 2030)	07
Summary Table – Our Targets	09
2. Our People	10
2.1 Leadership and governance for climate action	10
2.2 Engaging and training staff	12
Summary Table – Our People	15
3. Our Ways of Working	17
3.1 and 3.2 Reporting requirements	17
3.3 Achieve formal environmental certification	17
3.4 Green Public Procurement	17
3.5 Construction	17
3.6 Food Waste	17
3.7 Paper	17
3.8 Water	18
3.9 Single Use	19
3.10 Other Materials	19
Summary Table – Our Ways of Working	20
4. Our Buildings and Vehicles	23
4.1 Promote the use of bicycles and shared mobility options	23
4.2 Phase out use of parking	24
4.3 Display an up-to-date Display Energy Certificate in every public building	24
4.4 Do not install heating systems that use fossil fuels after 2023	24
4.5 Existing buildings	26
4.6 Procure only zero-emissions vehicles from end of 2022	27
Summary Table – Our Buildings & Vehicles	28

## **President's Foreword**

Climate action and sustainability constitute the most complex and pressing challenges of our time. UCD is committed to maximising its contribution to the achievement of the Sustainable Development Goals (SDGs) by 2030. It has recently been ranked in the top 50 worldwide and number one in Ireland in the QS World University Rankings for Sustainability and will be an SDG Champion in 2024-25.



It is my pleasure to present below UCD's Climate Action Roadmap update 2024. It outlines a set of important commitments by the university to meet the requirements specified in the updated Public Sector Climate Action Mandate 2024 and is structured accordingly.

Since last year's update, further progress has been made in meeting our core carbon and energy efficiency targets and a list of potential projects to close the gap to target are provided below. Progress, achievements and commitments are also laid out in relation to our ways of working, our people and our buildings and vehicles. Among those achievements is the attainment of a Gold Smarter Travel Mark, a level achieved by only two universities to date.

Nevertheless, it is important to note that this document does not represent the full scope of UCD's ambition and action in relation to climate and sustainability. UCD is currently developing its strategy to 2030 and is engaging extensively with internal and external stakeholders in doing so. Sustainability will form a central component of that strategy, as it was in Rising to the Future 2020-24.

Our Vice-President for Sustainability has now established UCD Sustainability, which includes a small Sustainability Unit and a set of Core Working Groups with diverse membership and a brief to engage within and outside the university to develop robust recommendations for further initiatives on climate action and sustainability. It is also working closely with UCD groups such as Smarter Travel, Green Campus, the UCD Sustainable Research Initiative and the UCD Sustainable Energy Community, each of which has contributed and will continue to contribute to our compliance with the Climate Action Mandate and the wider sustainability agenda.

The high level of commitment of members of the UCD staff and student community and their collaborators and stakeholder partners is being supported by a new seed funding programme for sustainability research and initiatives to help UCD fulfil its potential as a living lab and as a thought and action leader at local, national and international levels.

ILL L

Professor Orla Feely President

# 1. Our Targets

#### 1.1 Achieving the energy related CO2 emissions target (51% reduction by 2030)

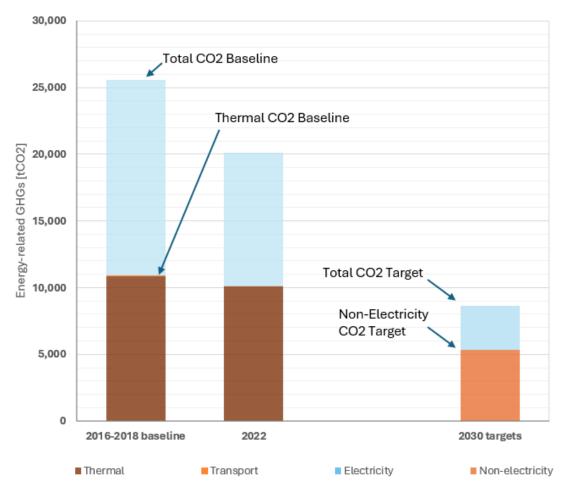
#### Baseline and CO<sub>2</sub> Gap

UCD's total energy related carbon emissions baseline, the average of 2016-2018 emissions, is 25,563 tonnes CO2 (Figure 1.1). This combines purchased electricity and direct (thermal) emissions (see previous CAR update for details). Given that decarbonisation of grid electricity is being addressed at a national level, the primary focus of UCD's decarbonisation is on direct thermal emissions. UCD's target for reduction of direct thermal emissions is 5,347 tonnes of CO2 which represents a 51% reduction from the baseline of 10,911 tonnes of thermal CO2 in 2016-2018 (Figure 1.1).

UCD's expected CO2 emissions in 2030 would be approximately 13,000 tonnes if no reduction projects were to be implemented after 2022. Note: 2022 is the latest year for which outputs were available from the SEAI Monitoring and Reporting (M&R) system at the time of publishing this Climate Action Roadmap (CAR) update.

#### Closing the CO<sub>2</sub> Gap

Multiple Energy Efficiency and CO2 reduction measures have been modelled into the SEAI Gap to



## Figure 1.1: Overview of CO<sub>2</sub> baseline, 2022 CO<sub>2</sub> performance and 2030 CO<sub>2</sub> targets taken from the most recent figures available from the SEAI Gap to Target Tool

Target Tool to ensure an achievable pathway can be identified and actioned. The Gap to Target analysis also includes the projected effect that new buildings will have over the period to 2030.

UCD has identified a decarbonisation pathway to offset fossil fuel-based energy currently consumed on our campuses in order to meet 2030 targets relating to reductions in GHG emissions and improvements in energy efficiency (Table 1.1). This involves longterm planning for capital investment and ongoing measures, including planned building efficiencies, along with deployment of heat pumps to migrate heating inputs from fossil fuel to non-fossil fuel sources over time.

## Table 1.1: UCD's Potential Project Pathway to meet 2030 targets (all projects subject to capital funding and approvals)

Energy efficiency gains from retrofits and other decreases in consumption	Potential savings tonnes of CO2 by 2030
Reduce district heating standing losses through additional insulation and lower temperature operation	140
Quinn BER B retrofit (HEA)	200
Library fabric upgrade reduce heat requirement by 10%	50
Newman fabric upgrade improve by 10%	50
Engineering building – connect to district heating for space heating (gas to lower CO2 district heating)	170
Structured building by building BMS controls and ventilation optimisation upgrade and maintenance check 5% energy savings	900
Heat / fossil fuel boiler to heat pump	
Energy centre heat pump no. 1	800
Conway gas boiler system to heat pump	110
Vet Science gas boilers to heat pump	380
SLLS gas heating to heat pump(s)	830
Blackrock main gas boiler system to heat pump	130
District heating heat pump 2 & 3	1,000
Health Science gas boiler(s) to heat pump upgrade	200
CSCB replace gas boilers with heat pump	220
Ashfield Student Residences gas boiler to heat pump upgrade	80
Campus wide DHW heat pump and advanced water control(s)	80
Electricity / grid electricity to 100% renewable	
Large solar PV 1,000kW eg. Rosemount / Lyons Farm Estate	110
Multiple small solar PV installations (starting in 2025)	80
Total carbon saving potential from scenario(s) above	5,530

Note: projects above are subject to further evaluation, planning and funding approvals.

Implementation of the measures listed in Table 1.1 in combination with the carbon efficiency improvement in the national grid will enable UCD to close the gap required to meet the 2030 target (Figure 1.2).

Since April 2023, an industrial scale 1 MW heat pump has been supplying low carbon heat into the UCD District Heating scheme. This project was supported financially by the HEA/SEAI Pathfinder Programme. This was a milestone project for UCD in developing its capabilities and understanding how best to incorporate heat pump technology onto the campus. It will inform future heat pump projects within and beyond UCD.

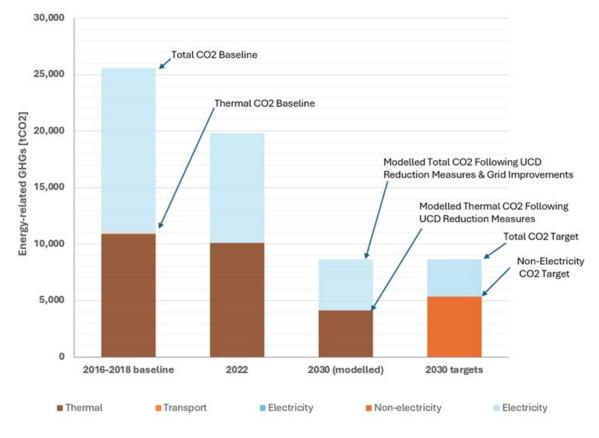
#### Significant Emitters / Energy Users

UCD engages with appointed specialist energy services providers to analyse consumption on a

campus wide & building basis and, by extension, significant energy users (SEUs), effectively 'significant emitters', within the University.

UCD's SEUs, which make up the majority of energy consumption on site, have been broken into succinct groups with similar characteristics (Table 1.2). These SEUs are managed in line with our ISO 50001 certified Energy Management System to deliver continual improvement and meet 2030 targets.

Analysis of our SEUs is extended to teams involved with building operations and teaching & research activities in order to enable operational, technical and behavioural efficiencies, including fault detection and correction, thereby contributing to overall energy efficiencies for the University.



## Figure 1.2: UCD's carbon dioxide emissions target and post CO2 reduction project modelled 2030 emissions (from SEAI Gap to Target Tool).

#### Table 1.2: UCD's six Significant Energy User groups

#### UCD Significant Energy User (SEU) Groups

- 1 Traditional Heating Ventilation and Air Conditioned (HVAC) Buildings
- 2 Residence Villages
- 3 Science District Buildings
- 4 Student Learning, Leisure, and Sports Complex (SLLS)
- 5 Conway Institute
- 6 Blackrock Campus Buildings

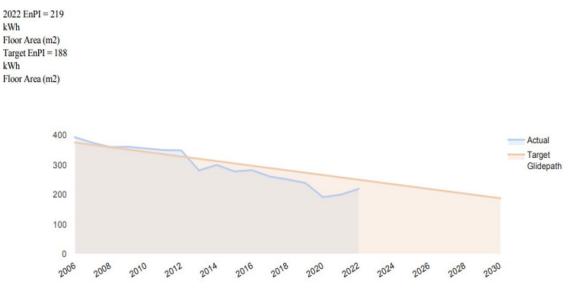
## 1.2 Achieving the energy efficiency target (50% improvement by 2030)

The UCD Total Primary Energy Efficiency baseline is the average of the years 2006-2008. The most recent SEAI score card (2022) shows that since the baseline UCD has already improved energy efficiency by 41.7% /m<sup>2</sup> towards a 2030 target reduction of 50%. Demonstrating continual energy efficiency improvement is a requirement of UCD's ISO 50001 certified Energy Management System. In parallel with the annual M&R scorecard report, this metric is tracked carefully with an expectation of meeting the 50% energy efficiency target in advance of meeting the 2030 CO2 target.

UCD is continuously improving its energy efficiency (Figure 1.3) and this continuous improvement in efficiency is achieved through:

- a) improving operations of the university and the ways in which it uses its building stock,
- b) planned investment in existing buildings to improve their efficiency – for building refurbishments and deep retrofits a minimum target of BER B or better is set which will deliver significant carbon savings as both fabric and plant are upgraded,
- c) designing all new buildings to near-zero energy building standard with BER A and energy efficiency design (EED) techniques incorporated and
- d) establishing further measures to promote individual behavioural change.





#### Figure 1.3: 2022 Energy Performance Indicators and target glidepath (Source: SEAI M&R Reporting Tool)

9.5% worse than 2021 41.7% better than energy efficiency baseline 16.6% improvement required by 2030

Note: The 2023 M&R Scorecard Report was not available at the time of finalisation and approval of the UCD CAR 2024 update.



### Summary Table: Our Targets

Our Targets 2023 requirements	Our Targets 2024 requirements	Comment	UCD Response 2024
Reduce GHG emissions by 51% in 2030	Reduce GHG emissions by 51% in 2030.	No new mandate requirements.	UCD is committed to maintaining our ISO 50001 certified Energy Management System and to continual progress towards this target.
			The UCD Energy Centre heat pump is now supplying low CO2 heat to campus buildings.
Increase the improvement in energy efficiency in the public sector from the 33% target in 2020 to 50% by 2030.	Improve energy efficiency in the public sector by 50% by 2030.	No new mandate requirements.	UCD is committed to maintaining our ISO 50001 certified Energy Management System and to continual progress towards this target.
Update Climate Action Roadmaps annually in line with updated Public Sector Climate Action Mandate.	Update Climate Action Roadmaps annually within 6 months of the publication of the Climate Action Plan. Develop Climate Action Roadmaps if none are in place.	No new mandate requirements.	UCD is committed to annual updates of its Climate Action Roadmap.
	Ensuring the public sector body's consistency with Section 15(1) of the Climate Action and Low Carbon Act 2021.	New requirement – not listed among Our Targets but present in SEAI guidance.	While UCD is committed to ensuring that it acts consistently with Section 15(1) of the Climate Action and Low Carbon Act 2021, DECC officials confirmed that guidance was not available for reporting in this section at the time of finalisation and approval of this CAR update. A more detailed response will be provided in the 2025 UCD CAR update once guidance is available.

# 2. Our People

## 2.1 Leadership and governance for climate action

In 2023, Professor Tasman Crowe was appointed UCD's Vice President for Sustainability. Professor Crowe is a member of the University Management Team (UMT) and acts as UCD's nominated Climate and Sustainability Champion, responsible for implementing and reporting on the requirements set out in the Public Sector Climate Action Mandate.

UCD's Sustainability Unit has been established comprising a Sustainability Manager, a Sustainability Communications Officer and administrative support.

To ensure synergy between the University's broader climate action and the organisation's strategic energy management, the Vice President for Sustainability and the Sustainability Unit work closely with Tadgh Corcoran, Director of Campus Development, Energy and Sustainability in UCD Estates Services and the wider UCD Estate Services team. Tadgh Corcoran is UCD's appointed Energy Performance Officer and is responsible for leading the development of UCD's energy management plan and driving the implementation of the actions and projects agreed under this plan.

#### 2.1 Establish and resource Green Teams, reporting to senior management, to become integrated drivers of sustainability in every public sector body.

The UMT Sustainability Group (UMT SUS), a subgroup of the UMT, has been established and acts as UCD's Green Team. UMT SUS is responsible for advancing sustainability across the University and for making recommendations to the UMT to support this advancement.

The following are members of UMT SUS:

UMT Sustainability Group Membership June 2024			
Role Name			
Vice-President for Sustainability (Chair)	Professor Tasman Crowe		
Registrar or nominee	Professor Colin Scott		

#### UMT Sustainability Group Membership June 2024

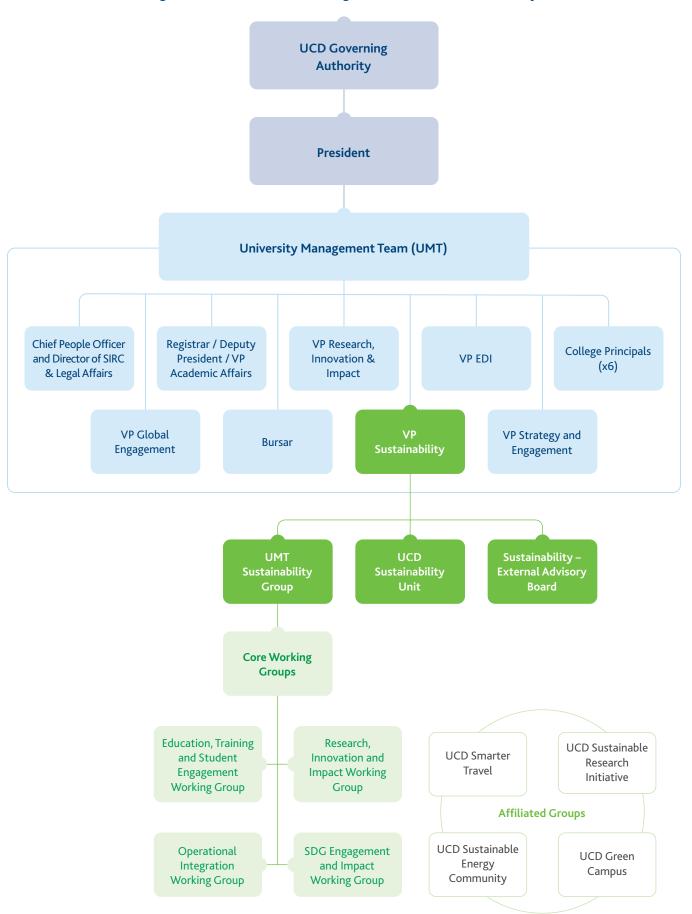
Role	Name
Director of Campus Development, Energy & Sustainability	Tadgh Corcoran
Bursar or nominee	Eamonn O'Neill
Chief People Officer or nominee	Tristan Aitken
Chief Technical Officer appointee	Gwyneth MacMaster
Vice-President for Research, Innovation & Impact or nominee	Professor Kate Robson Brown
Vice-President for Strategy and External Engagement or nominee	Triona McCormack
Students' Union President (or nominee)	Miranda Bauer
Sustainability Unit appointee	Louise Griffin

Full Terms of Reference for UMT SUS are available **here**.

To support the participatory development and implementation of UCD's strategic priorities in sustainability, four Core Working Groups have been established in key areas:

- 1. Education, Training and Student Experience
- 2. Research, Innovation and Impact
- 3. Operational Integration
- 4. SDG Engagement and Impact

Membership includes students, technical and administrative staff as well as academic representatives from each College. Half of the members were identified via Expressions of Interest.



#### Figure 2.1: UCD Governance & Management Structures for Sustainability

All four Core Working Groups report into the UMT SUS (Figure 2.1) and will take into account the Mandate requirements when setting out annual work programmes. The establishment of the four Core Working Groups marks an important step in establishing UCD governance structures in support of sustainability.

UCD Smarter Travel, UCD Sustainable Energy Community, UCD Sustainable Research Initiative and UCD Green Campus are long established initiatives and groups that actively work to address and advance key sustainability challenges in the University. To ensure a high level of engagement and collaboration with these groups, all are represented on the Operational Integration Core Working Group.

#### Figure 2.2: Overview UCD Spring Campus Lunchtime Walks

## **UCD Spring lunchtime walks**

Explore the UCD campus this spring on our researcher and academic-led lunchtime walks hosted by the UCD Earth Institute – all welcome, no booking required!

Visit <u>www.ucd.ie/earth</u> for more info

BIRDS!

TREES!

SOIL!\*

33354

LOOKING!

**PLANTS!** 

Weds 3 April Weds 10 April Tues 16 April Weds 24 April Weds 1 May Weds 8 May Weds 15 May

> UCD Earth

Institute

 
 place
 Chess garden next to the UCD lake and the Science Centre

 Time
 1pm-2pm \*(except the soil walk which

**BUILDINGS!** 

runs from 2pm-3pm)

Walks led by Éireann Lorsung (School of English, Drama and film), Tancredi Caruso, Adam Kane, Darren O'Connell (all School of Biology and Environmental Science), Thomas Cummins, Barry McMahon, Noeleen Smyth, Dara Stanley, Brian Tobin (all School of Agriculture and Food Science), Sophia Meeres, Ellen Rowley (both School of Architecture, Planning and Environmental Policy)

#### 2.2 Engaging and training staff

Climate Action Leadership Training has been provided for both the University Management Team (UMT) and the Extended Leadership Group (ELG). The University Management Team comprises the President, Bursar, Registrar, College Principals, Vice Presidents and senior Heads of Unit. The ELG is made up of Heads of School, Directors of Research Institutes and Heads of Unit. Training for the UMT consisted of the topics below with an emphasis on transformational leadership and effective communication and engagement to drive behavioural change:

- Climate fundamentals
- Climate impacts and adaptations
- Climate scenarios and timing the transition
- Climate leadership
- Climate governance

The ELG training consisted of the following with an emphasis on the organisation's legislative requirements and the ELG's role in supporting the University to meet these requirements:

- Climate fundamentals
- Climate legislation and obligations
- Public Sector Climate Action Mandate and the UCD Climate Action Roadmap
- Sustainability reporting
- What does climate action leadership in UCD look like and what can we do together?

Online resources were also provided to UMT and ELG to complement and support the training delivered.

The Sustainability Unit is liaising with UCD Learning and Development to build on the training delivered to the UMT and the ELG and to incorporate climate action and sustainability into development programmes and training modules for all UCD staff.

Staff in the central UCD Procurement and Contracts function are already fully versed in Green Public Procurement (GPP) requirements. However, over 3,000 individuals in Schools, Colleges and other Units are also responsible for requisitioning and purchasing goods and services. A programme of training and staff development for them will be developed. It is envisaged that guidance resources will be provided, and training workshops will be run to clarify and discuss approaches and procedures. The development of the UCD strategy to 2030 is currently underway and has presented a significant opportunity for staff engagement on sustainability and climate action challenges and opportunities. The strategy development is a collaborative, consultative process that is drawing on insights and ideas from every part of UCD's community around the future direction for the University. Community and stakeholder engagement is ongoing through a variety of forums, including world cafés, town halls and an open feedback platform.

In support of this community and stakeholder engagement phase of the University strategy development, Professor Crowe (VP for Sustainability) hosted the Sustainability World Café. Both academic and professional staff participated in the World Café and shared their considered and ambitious insights on how UCD can further its contribution to a more sustainable future.

Other types of staff engagement on sustainability and climate issues has been actively underway for a number of years through Colleges, Schools and Research Institutes such as the UCD Earth Institute (Figure 2.2) and the UCD Energy Institute, SFI Research Centres such as BiOrbic, iCRAG and Insight as well as through initiatives such as UCD Smarter Travel, UCD Sustainable Energy Community, UCD Sustainable Research Initiative and UCD Green Campus.

A interinstitutional workshop on Higher Education Institution Sustainable Energy Communities (HEI SECs) was led by the UCD Sustainable Energy Community to explore the opportunities for HEI SECs and to identify common opportunities and challenges (Figure 2.3).

UCD Green Week 2024 took place in March and had a schedule of activities including tree planting, plastics workshops, UCD woodlands 'walk and talk' and bike workshops. The aim of UCD Green Week is to raise awareness and stimulate discussion among students and staff on environmental action. See Figure 2.4 Overview of UCD Green Week, March 2024.

The four sustainability Core Working Groups that have been established constitute an additional, perennial opportunity for consistent staff engagement on sustainability. Together with the UCD Sustainability Unit, the Core Working Groups will identify opportunities to continue to bring both staff and students together to discuss key sustainability challenges and climate issues, to co-create and contribute to potential solutions. To deliver on

Figure 2.3: UCD Sustainable Energy Community led workshop on opportunities for Higher Education Institution Sustainable Energy Communities



University College Dublin Ireland's Global University

Sustainable Energy Communities Programme

### Higher Education Institution Sustainable Energy Communities

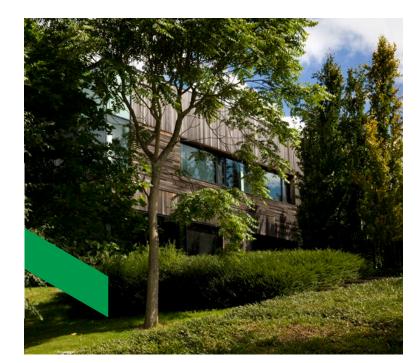
Friday 31st May 10.00 - 12.00 In-person Quinn School of Business, University College Dublin and Online



Mandate requirements, a focus on decreasing the organisation's carbon footprint will be incorporated into staff engagement activity.

To showcase the work of the Core Working Groups, an annual symposium will be held to share the activity and outputs of the Working Groups, and to platform other sustainability efforts ongoing across the University. Staff and students will be invited to participate with a view to engage UCD's community on the University's legislative commitments and wider sustainability journey.

To increase wider staff engagement with the University's sustainability and climate actions commitments, and to enhance the University's broader communications and engagement about sustainability, dedicated LinkedIn and Twitter accounts have been created to engage both our internal and external communities and there is an active sustainability thread in UCD's newly adopted internal communication platform WorkVivo. The UCD Sustainability podcast has also launched to engage both our internal and external communities and to showcase sustainability research stories. Furthermore, the UCD Sustainability website is in development and will provide a central location for information on sustainability at a UCD, local, national and global level.



#### Figure 2.4: Overview of UCD Green Week, March 2024



Green Week is an initiative organised by staff and students working together to develop awareness and encourage sustainable actions on campus.

#### MONDAY 4th

#### 08:00 UCD Mail Roo

The Mail Room will be distrib internal mail system five sma Ireland battery recycling boxe School Office on campus. Rec for home can be collected fro



00-14:00 rge Merville s Car Park

ree Planting ing your boots and help create a new wildlife corridor mpus by planting a tree alongside Merville Student Re

#### **TUESDAY 5th**



Join us for a walk the House history growth and r



Merville B Woodland Part 1 to

Bring your boots and join us at the back of Merville Re to plant trees and thicken the existing woodland.



Inter Flatting
 Inter Flatting
 Clean of your boots for the last time this week and help thicken
 Woodland Part 2
 another section of the Merville Residences woodland.
 I3:00-14:00
 Bike Workshop
 Join the team at UCD Bikes for a bike maintenance workshop

where you can learn some skills for yourself on maintaining ar caring for your bike! Places limited and booking essential!

#### FRIDAY 8th

#### UCD Village Auditorium

Creenland Story\* Exploring the impact of rapid cultural and imate change on Greenlandic communities, intimate stories weal a country and people at a crossroads between tradition di modernity.

### Summary Table: Our People

Our People 2023 requirements	Our People 2024 requirements	Comment	UCD Response 2024
Establish and resource Green Teams, reporting to senior management, to become integrated drivers of sustainability in every public sector body.	Establish and resource Green Teams, reporting to senior management, to become integrated drivers of sustainability in every public sector body.	No new mandate requirements.	The UMT Sustainability Group (UMT SUS), a subgroup of the UMT, has been established and acts as UCD's Green Team. Four Core Working Groups have also been established in key areas and act as integrated drivers of sustainability in UCD. All Groups report into the UMT SUS and will take into account the Mandate requirements when setting out annual work programmes.
Nominate a member of the Management Board as the Climate and Sustainability Champion with responsibility for implementing and reporting on the Mandate.	Nominate a member of the Management Board as the Climate and Sustainability Champion with responsibility for implementing and reporting on the Mandate.	No new mandate requirements.	Professor Tasman Crowe has been appointed Vice President for Sustainability and is a member of the University Management Team. Professor Crowe also acts as UCD's Climate and Sustainability Champion.
Incorporate appropriate climate action and sustainability training (technical and behavioural, including green procurement training) into learning and development strategies for staff.	Incorporate appropriate climate action and sustainability training (technical and behavioural, including green procurement training) into learning and development strategies for staff.	No new mandate requirements.	Climate Action Leadership Training has been provided for both the UMT and the ELG. The Sustainability Unit is liaising with UCD Learning and Development to build on this training and to incorporate climate action and sustainability into development programmes and training modules for all UCD staff. With regards to green procurement
			training, staff in the central UCD Procurement and Contracts function are fully versed in GPP requirements. However, over 3,000 individuals in Schools, Colleges and other Units are also responsible for requisitioning and purchasing goods and services. To meet the Mandate requirements, a programme of training and staff development for these individuals will be developed.

### Summary Table: Our People (continued)

Our People 2023 requirements	Our People 2024 requirements	Comment	UCD Response 2024
Organise staff workshops (at least annually) to engage on climate issues, including a focus on decreasing the organisation's carbon footprint.	Organise staff workshops (at least annually) to engage on climate issues, including a focus on decreasing the organisation's carbon footprint.	No new mandate requirements.	Opportunities to continue to bring both staff and students together to discuss key sustainability challenges and climate issues, to co-create and contribute to potential solutions will be identified. To deliver on Mandate requirements, a focus on decreasing UCD's carbon footprint will be incorporated into staff engagement activity.
			To showcase the work of the Core Working Groups, an annual symposium will be held to share the activity and outputs of the Working Groups, and to platform other sustainability efforts ongoing across the University.
Ensure all senior management (P.O. level or equivalent and above) complete a climate action leadership training course in 2023, similar to the Local Authority training course as delivered by the CAROs.	Ensure all senior management (P.O. level or equivalent and above) and members of State Boards complete a climate action leadership training course in 2023.	No new mandate requirements.	Climate Action Leadership Training has been provided for both the UMT and the ELG. The Sustainability Unit is liaising with UCD Learning and Development to build on the training delivered to the UMT and the ELG and to incorporate climate action and sustainability into development programmes and training modules for all UCD staff.



# 3. Our Ways of Working

#### 3.1 and 3.2 Reporting requirements

In its Annual Report, UCD will report on GHG emissions; implementation of the mandate; sustainability activities; compliance with Circular 1/2020: Procedures for offsetting the emissions associated with official air travel.

UCD is also committed to reporting on implementation of the individual mandate requirements using the SEAI's Public Sector M&R system and a "comply and explain" approach.

## 3.3 Achieve formal environmental certification

The UCD Energy Management System (ENMS) is accredited to the ISO 50001 standard for the management of energy and water consumption on site. This system is regularly audited and provides a structured methodology for continually improving energy and water management and performance on site.

#### **3.4 Green Public Procurement**

In tendering for goods, services and equipment the University's Procurement and Contracts Function applies green public procurement criteria by using the EPA's Green Procurement Guidance and the GPP criteria. All tenders advertised by the University have as a standard evaluation criterion 'Environmental / Sustainable / Social Considerations' which mirrors the approach of the Office of Government Procurement. The weighting attached to this criterion depends on the goods, services or equipment that is the subject of the tender process and the importance of environmental and sustainable considerations. Further details were provided in the 2023 update.

The UCD Energy Management System (ENMS) is accredited to the ISO 50001 standard for the management of energy and water consumption on site. This system is regularly audited and provides a structured methodology for continually improving energy and water management and performance on site \_\_\_\_\_ Goods and services are also requisitioned by staff in Schools, Colleges and other Units. As indicated in Section 2.2 Engaging and training staff, UCD is committed to a programme of training to ensure that those staff are familiar with the principles and practice of GPP.

In the coming year, UCD will investigate the establishment of a system to gather and record data on GPP implementation and the measurement of environmental and climate benefits achieved through the application of green criteria.

#### **3.5 Construction**

UCD is in compliance with the GPP criteria for construction and renovation works. Through its design teams, UCD develops detailed construction and site waste management plans which are submitted to the local authority as part of the planning process. These plans along with any planning compliance requirements are implemented during the construction phases of capital projects.

#### 3.6 Food Waste

UCD is working with its caterers to measure and monitor food waste generated on our premises from 2024 using the standardized approach set out in the EPA Protocol/Pathway. We will liaise with our caterers and UCD Estate Services for all food services including events and conferences, to include measures targeting food waste prevention and segregation.

Furthermore, the sustainability Core Working Group on Operational Integration has been designated by UMT SUS to review and make recommendations in relation to food waste prevention.

UCD will Support National Stop Food Waste, share Stop Food Waste resources with staff and make canteen operators aware of the Food Waste Charter and encourage them to sign up.

#### 3.7 Paper

As indicated in the 2023 CAR update, UCD sources its paper from the Office of Government Procurement, which complies with a range of stated environmental standards. The university has already moved many of its major processes to digital formats and is committed to progressing further towards elimination of paper-based processes. A further review will be undertaken to identify additional opportunities for paper-free processes.

UCD's paper is purchased in bulk by CopiPrint, which then distributes it to schools, units and to copying and printing facilities for students and staff members. As such, data on total paper consumption and on the breakdown in consumption across the university is readily available. This data will be collated and summarized as part of the review of paper-based processes and to assess effectiveness of measures to reduce paper consumption and refine plans and actions accordingly.

#### 3.8 Water

UCD's water consumption is reflective of a researchintensive university with over 3,900 bed spaces on campus (Table 3.1). UCD tracks its water consumption from the UCD Water Tower on a continuous basis via automated systems and meters which deliver readings at 15-minute intervals. UCD Estate Services monitors usage and conducts investigations and repairs when necessary to the campus water network in addition to identifying and implementing measures to reduce water consumption by the UCD Community. Table 3.1 Annual water consumption on the Belfield campus over the past seven years (Source – ESB/UCD Active Energy – UCD Water Tower)

Year	Consumption (litres)
2018	231,353,620
2019	234,668,080
2020	175,705,130
2021	202,117,300
2022	346,840,080
2023	383,018,000
2024*	170,611,000

#### \*YTD-06/06/2024

On the Belfield Campus, there are 55 drinking water refill points publicly available in buildings throughout campus, strategically positioned to meet demand. This provision is under review, and it is envisaged that further refill points will be installed to ensure ready access for all. These refill points/fountains are not individually metered and as such the consumption of



In a typical year UCD generates over 2000 tonnes of municipal solid waste. In partnership with specialist service providers all waste produced on campus is accounted for with annual reports on the processing facilities and end destination of the materials \_\_\_\_\_

> water across the 55 locations is not currently measured. Initiatives to monitor usage and extrapolate the consumption will be examined in Q4 2024 potentially via student-led projects observing usage through time at a representative sample of fountains.

#### 3.9 Single Use

UCD will work with our caterers to cease the use of disposable cups, plates, and cutlery in any public food area and to progressively eliminate all single-use items from University food areas and events.

#### **3.10 Other Materials**

3.10.1 Support Ireland's Producer Responsibility Initiatives in the collection and recycling of products.

UCD has collection facilities for WEEE materials and also supports the recently introduced Deposit Re-Turn Scheme on site.

#### 3.10.2 Use waste collection services that are segregated into a minimum of 3 streams – residual/general waste, recycling waste and organic/biowaste.

In a typical year UCD generates over 2000 tonnes of municipal solid waste. In partnership with specialist service providers all waste produced on campus is accounted for with annual reports on the processing facilities and end destination of the materials.

Within the on campus residences, waste segregation facilities are provided in each student apartment and are accompanied with dedicated external residential waste disposal facilities, segregated into general, organic and recycling streams within the immediate footprint of apartment blocks.

UCD Estate Services has begun to implement source segregation in communal areas within academic

buildings segregated into general, recycling and organic waste streams while also setting up "binless offices" with a local opt-in approach for Schools and Units within the University. In operation, the occupants of "binless offices" utilise the communal segregated facilities within their buildings. Further segregation of all waste, including waste that is segregated at source by campus users into the aforementioned communal facilities takes place off campus at the waste provider's site.

As indicated and illustrated in the 2023 update, comprehensive communication, awareness and waste segregation campaigns are run annually to the UCD community including student resident on campus regarding best waste management practices. Furthermore, each year at the end of the academic year pop-up recycling centres with additional capacity for general, recycling and organic waste are established at each student residence to facilitate quality waste management & segregation practices.

Engagement and communication will be further enhanced through the new UCD Sustainability website and communications platform WorkVivo.

UCD Estate Services promote awareness of the waste hierarchy, which gives guidance on how individuals can reduce the impact of waste on our environment. This hierarchy is detailed below:

- Refuse
- Reduce
- Reuse
- Repurpose
- Recycle

In addition to the waste segregation and recycling initiatives described above, UCD continues to build emphasis on the first four items to make the greatest impact on our institutional waste and carbon footprint – encouraging avoidance as a primary principle of waste management.

In this regard, UCD Estate Services has run information awareness campaigns including recycling and waste quizzes to build community knowledge. Further initiatives have been promoted and supported including furniture recycling programmes, zero waste cooking demonstrations and clothes swaps.

### Summary Table: Our Ways of Working

Our Way of Working 2023 requirements	Our Way of Working 2024 requirements	Comment	UCD Response 2024
<ul> <li>Report on the following in the Annual Report: <ul> <li>GHG emissions</li> <li>Implementation of the mandate</li> <li>Sustainability activities report</li> <li>Compliance with Circular 1/2020: Procedures for offsetting the emissions associated with official air travel.</li> </ul> </li> <li>Using SEAI's Public Sector Monitoring and Reporting System, public bodies are to report annually on implementation of the individual mandate requirements using a 'comply or explain' approach.</li> </ul>	<ul> <li>Report on the following in the Annual Report: <ul> <li>GHG emissions</li> <li>Implementation of the mandate</li> <li>Sustainability activities report</li> <li>Compliance with Circular 1/2020: Procedures for offsetting the emissions associated with official air travel.</li> </ul> </li> <li>Using SEAI's Public Sector Monitoring and Reporting System, public bodies are to report annually on implementation of the individual mandate requirements using a 'comply or explain' approach.</li> </ul>	No new mandate requirements.	In its Annual Report, UCD will report on GHG emissions; implementation of the mandate; sustainability activities; compliance with Circular 1/2020: Procedures for offsetting the emissions associated with official air travel. UCD is also committed to reporting on implementation of the individual mandate requirements using the SEAI's Public Sector M&R system and a "comply and explain" approach.
<ul> <li>Achieve formal environmental certification for large public sector bodies, such as ISO50001 (Energy Management Standard) or ISO 14001 (Environmental Management System), with a view to going beyond ISO 14001 to adopting EMAS (Eco Management and Audit Scheme). Specifically:</li> <li>All public sector bodies with an energy spend greater than €2m per annum to achieve ISO 50001 certification by end-2024;</li> <li>All remaining public bodies to implement energy management programmes as per SEAI's energy management guidance (S.I. 426 of 2014) and report to SEAI annually on M&amp;R.</li> </ul>	<ul> <li>Achieve formal environmental certification for large public sector bodies, such as ISO50001 (Energy Management Standard) or ISO 14001 (Environmental Management System), with a view to going beyond ISO 14001 to adopting EMAS (Eco Management and Audit Scheme). Specifically:</li> <li>All public sector bodies with an energy spend greater than €2m per annum to achieve ISO 50001 certification by end-2024;</li> <li>All remaining public bodies to implement energy management programmes as per SEAI's energy management guidance (S.I. 426 of 2014) and report to SEAI annually on M&amp;R.</li> </ul>	No new mandate requirements.	The UCD Energy Management System is certified to ISO 50001. UCD is committed to maintaining this certification.

### Summary Table: Our Ways of Working (continued)

Our Way of Working 2023 requirements	Our Way of Working 2024 requirements	Comment	UCD Response 2024
<ul> <li>Implement Green Public Procurement (GPP), in line with the EPA Green Public Procurement Guidance and using GPP Criteria Search where appropriate. All public bodies shall:</li> <li>Cease using disposable cups, plates and cutlery from any public sector canteen or closed facility, excluding clinical (i.e., non-canteen healthcare) environments;</li> <li>Specify low carbon construction methods and low carbon cement material as far as practicable for directly procured or supported construction projects from 2023.</li> </ul>	<ul> <li>Implement Green Public</li> <li>Procurement, using the EPA</li> <li>Green Public Procurement</li> <li>Guidance and criteria/Office</li> <li>of Government Procurement's</li> <li>online Green Public</li> <li>Procurement Criteria Search</li> <li>tool as resources.</li> <li>Cease using disposable cups, plates and cutlery from any public sector canteen or closed facility, excluding clinical (i.e., non-canteen healthcare) environments</li> <li>Progressively eliminate all single use items within the organisation and from events organised, funded, or sponsored</li> <li>Specify low carbon construction methods and low carbon cement material as far as practicable for directly procured or supported construction projects from 2023.</li> </ul>	Additional requirement to progressively eliminate all single use items within the organisation and from events organised, funded, or sponsored.	GPP is being applied centrally and its wider implementation will be accelerated. Regulations on disposable items are incorporated in the tendering process for concessionaires that operate food outlets on campus. UCD will work with its caterers to cease use of disposable cups, plates and cutlery and single use items will be progressively eliminated from events. UCD is in compliance with the GPP criteria for construction and renovation works. Detailed construction and site waste management plans are implemented in capital projects.
Review any paper-based processes and evaluate the possibilities for digitisation so it becomes the default approach. Eliminate paper- based processes as far as is practicable. Where paper must be procured, ensure that recycled paper is the default.	Review any paper-based processes and evaluate the possibilities for digitisation so it becomes the default approach. Eliminate paper- based processes as far as is practicable. Where paper must be procured, ensure that recycled paper is the default. Measure and monitor	Additional requirement to measure and monitor paper consumption.	In addition to the approaches to paper procurement, management of printers and printing and the digitisation of many UCD processes that were outlined in 2023's update, a further review of remaining paper- based processes will be undertaken, and digitisation will be adopted wherever possible. A system will be established
	consumption.		to measure and monitor paper consumption.

### Summary Table: Our Ways of Working (continued)

Our Way of Working 2023 requirements	Our Way of Working 2024 requirements	Comment	UCD Response 2024
	Provide suitable drinking water refill points for all staff and in any premises accessed by the public and measure and monitor usage of the refill points.	New requirement.	On the Belfield Campus, there are 55 drinking water refill points publicly available in buildings throughout campus, strategically positioned to meet demand.
	F		Initiatives to monitor and extrapolate the consumption will be examined in Q4 2024 potentially via student led projects.
	Other materials <ul> <li>Support Ireland's Producer</li> <li>Responsibility Initiatives in</li> <li>the collection and recycling</li> </ul>	New requirement.	UCD has collection facilities for WEEE materials and also supports the recently introduced Deposit Re- Turn Scheme on site.
	of products. • Use waste collection services that are segregated into a minimum of 3 streams: residual/general waste, recycling waste and organic/biowaste		Waste segregation takes place in an expanding range of locations on campus and is supported by extensive awareness campaigns. Waste that is not segregated on campus is segregated subsequently by the waste contractor.



# 4. Our Buildings and Vehicles

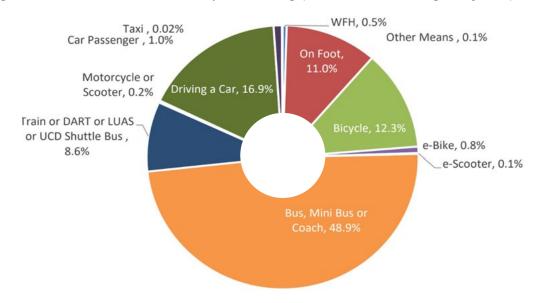
UCD's CO2 emissions are directly linked to its activities in supporting and delivering education and research. UCD has ambitious student growth targets to meet increasing demand from domestic and international students. We are projecting increased faculty numbers to support this demand, and this will also increase our research activities. This population growth will also lead to growth in on campus accommodation. UCD's estate incorporates circa 442,000 sq. metres 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.

## 4.1 Promote the use of bicycles and shared mobility options

UCD remains committed to promoting active and sustainable travel choices to our campuses. In 2023, we further exceeded our UCD Travel Plan target of In 2023, we further exceeded our UCD Travel Plan target of achieving 81% of journeys to campus to be taken by sustainable means by 2026

achieving 81% of journeys to campus to be taken by sustainable means by 2026 (Figure 4.1). UCD measures our progress against these targets via the annual Travel Survey which has run for over twenty years, collecting data on staff and student travel patterns, desires and needs. The findings from the Travel Survey are collated into an annual report from which actions are derived.

Sustained transport modal shift has been enabled in part through the provision of over 5,000 cycle parking spaces on our main Belfield and Blackrock campuses and the provision on site of secure cycle parking facilities on campus in close proximity to buildings. The provision of high-quality mass transit services is critical to the continued success of UCD's transport aims. Through transport partnership with local authorities and statutory bodies additional



#### Figure 4.1 UCD travel mode share for campus commuting. (Source: UCD Commuting Survey 2023)



\_\_\_\_\_ The provision of improved public transport services and infrastructure is critical to the continued mode shift and by extension the longer-term change of use or decommissioning of parking spaces on campus. UCD will continue to work in partnership towards this goal \_\_\_\_\_

> public transport bus services have been delivered to UCD in 2023 via the BusConnects network redesign programme, further enhancing the available options for UCDs staff, students and visitors. Under the BusConnects infrastructure programme, it is planned to construct a new bus interchange on campus in proximity to O'Reilly Hall and the centre of campus in the coming years.

> In 2024, UCD applied for and was awarded the Gold level Smarter Travel Mark. This award will be leveraged across the organisation to highlight our

progress and alternative options to the private car to current and incoming staff and students and visitors to UCD.

#### 4.2 Phase out use of parking

Regarding the reduction of parking spaces for locations well served by public transport, UCD has historically taken a holistic community and campus wide approach to the provision of parking spaces available to staff, students and visitors to the University, taking account of the long commuting distances undertaken by many staff and students on a daily basis, and transport needs of the UCD community outside of the daily work & study commute for example child care and other care requirements. In this regard, UCD works in partnership with the National Transport Authority and Dun Laoghaire-Rathdown County Council on long term strategic transport planning across all transport modes, including the provision of parking spaces on campus with a current agreed cap of 3,600 total parking spaces on campus.

In 2015, UCD introduced additional parking demand management measures in the form of parking charges for staff, students and visitors to campus. The impact of these measures in addition to the provision of viable transport alternatives can be seen in the transport mode share evolution for staff & students detailed below (Figures 4.2, 4.3). The provision of improved public transport services and infrastructure is critical to the continued mode shift and by extension the longer-term change of use or decommissioning of parking spaces on campus. UCD will continue to work in partnership towards this goal.

#### 4.3 Display an up-to-date Display Energy Certificate in every public building

UCD has Display Energy Certificates on display in each campus building which is open to the public. Certificates are publicly accessible and will be updated as required.

## 4.4 Do not install heating systems that use fossil fuels after 2023

UCD has committed through procurement and design processes to the measures outlined in the Climate Action Mandate to not install heating systems that

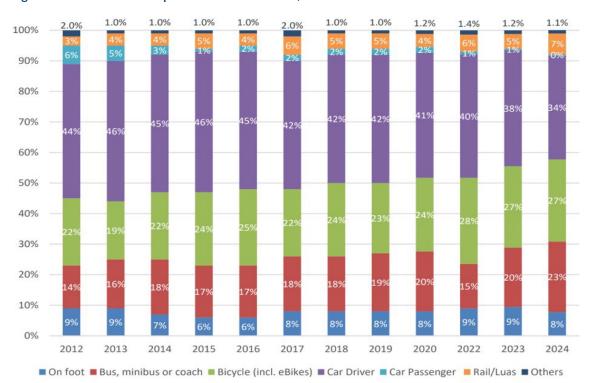
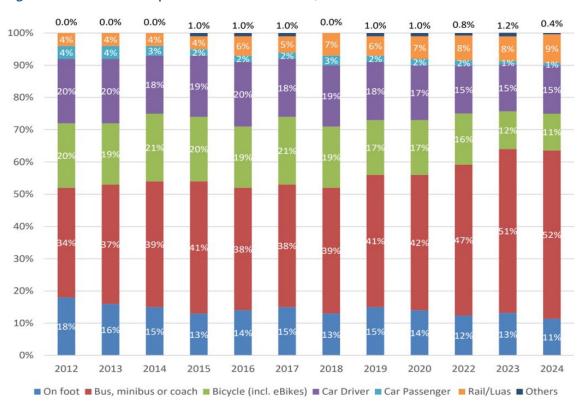


Figure 4.2 Evolution of transport mode share for staff, 2012-2024



#### Figure 4.3 Evolution of transport mode share for students, 2012-2024

use fossil fuels after 2023, unless such an installation is required for operational or technical reasons or results in a net final reduction in CO2 emissions in comparison to renewable systems, as outlined as exceptions within the Mandate.

#### 4.5 Existing buildings

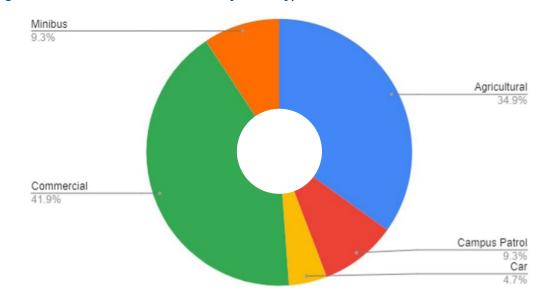
4.5.1 Public sector bodies and sectoral groups with a large estate should commence a deep retrofit of at least one building in 2024 in pursuit of the 2030 51% emissions reduction target. The UCD O'Brien Centre for Science Phase 3 project is currently underway and constitutes UCD's major retrofitting project for 2023/24. This project will deliver approximately 14,500 sqm of refurbished

In a typical year UCD generates over 2000 tonnes of municipal solid waste. In partnership with specialist service providers all waste produced on campus is accounted for with annual reports on the processing facilities and end destination of the materials space within the Science West and Science North buildings which were among the first buildings of the modern Belfield campus to be constructed in the 1960s. The refurbished buildings, along with an additional ~8,500sqm of new spaces will incorporate low-carbon, energy-efficient designs as standard.

4.5.2 Public sector bodies and sectoral groups with a large estate should develop a portfolio building stock plan (including determining the buildings necessary for their activities), in line with guidance published by SEAI, by end 2024 to mobilise large scale programmes towards meeting the Climate Action Plan targets.

4.5.3 As part of the building stock plan, large public sector bodies and sectoral groups with a large estate should undertake data gathering and consider the long term (to 2050) retrofit key performance indicators to upgrade their building stock to Nearly Zero Energy Buildings or Zero Emission Buildings as outlined in the EPBD proposal and recast Energy Efficiency Directive. In line with reporting requirements UCD has submitted its Stage 1 Building Stock Plan to the SEAI. In summary, the Building Stock plan details the status





#### Figure 4.4 Overview of UCD's vehicle fleet by vehicle type

of all UCD owned properties and details planned campus expansion of on and off campus facilities to 2030. In 2023, no campus buildings were earmarked for exit/disposal. As noted above, UCD's energy reporting system monitors the energy performance of campus facilities and the individual significant energy users (buildings/facilities) within the campus. Through our Energy Management System opportunities for efficiency improvements and reductions in emissions are identified. These are then added to a register of opportunities and projects reviewed and if appropriate assessed and modelled into the SEAI Gap to Target Tool.

## 4.6 Procure only zero-emissions vehicles from end of 2022

The University operates a fleet of 31 vehicles which are in use across the estate in a variety of roles, spanning commercial vehicles, the security fleet i.e., campus patrol, minibuses, cars and agricultural vehicles in use on the Belfield campus and UCD Lyons Research Farm (Figure 4.4).

Some vehicles within the fleet offer a greater opportunity for decarbonisation than others. For example, a reliable low carbon alternative for the University's agricultural vehicles can be difficult to source, however, electric vehicles have been acquired to replace aging diesel vehicles in the security fleet i.e. campus patrol. The University has been proactive in transitioning to more sustainable transportation options and since 2020 five electric vehicles have been purchased for use within the campus and wider estate. In 2024, it is planned to further reduce the number of diesel vehicles in the UCD fleet by two. Operational measures to improve vehicle efficiency remain in place including regular maintenance and tyre pressure checks, which aside from good fleet management practices can contribute an incremental reduction in fleet related emissions.

Continued efforts to promote sustainable transportation practices and explore alternative fuels will be essential in achieving the University's decarbonisation goals. Where possible, UCD will endeavour to go beyond the EU directive on the promotion of clean and energy-efficient road transport vehicles and will aspire to act as an international leader in this area.

### 4.6.1 Develop a plan for installation of charging infrastructure in relevant locations.

In tandem with the decarbonisation of UCD fleet vehicles, charging infrastructure for fleet vehicles has been installed on the Belfield campus and UCD has dedicated electric vehicle charging stations for the UCD fleet and third-party service providers.

### Summary Table: Our Buildings & Vehicles

Our Buildings & Vehicles 2023 requirements	Our Buildings & Vehicles 2024 requirements	Comment	UCD Response 2024
Promote the use of bicycles (including push bikes, electric bikes, and cargo bikes) and shared mobility options as an alternative to car use among employees and visitors by creating and maintaining facilities (both inside and outside of buildings) that support such options, including secure and accessible bicycle parking, shared mobility parking, and charging stations, as appropriate, with a view to achieving the Smarter Travel Mark, which is currently being developed as part of the Sustainable Mobility Pathfinder Programme.	Promote the use of bicycles (including push bikes, electric bikes, and cargo bikes) and shared mobility options as an alternative to car use among employees and visitors by creating and maintaining facilities (both inside and outside of buildings) that support such options, including secure and accessible bicycle parking, shared mobility parking, and charging stations, as appropriate, with a view to achieving the National Transport Authority's Smarter Travel Mark.	Achieve the Smarter Travel Mark.	In 2023, UCD further exceeded its UCD Travel Plan target of achieving 81% of journeys to campus to be taken by sustainable means by 2026. In 2024, UCD applied for and was awarded the Gold level Smarter Travel Mark. This award will be leveraged to highlight our progress and alternative options to the private car to current and incoming staff and students and visitors to UCD.
Phase out the use of parking in buildings that have access to a range of public transport services and active/shared mobility options for the majority of staff/visitors while providing that sufficient accessible parking is maintained for those with physical mobility issues.	Phase out the use of parking in buildings that have access to a range of public transport services and active/shared mobility options for the majority of staff/visitors, while providing that sufficient accessible parking is maintained for those with physical mobility issues.	No new mandate requirements.	UCD works in partnership with the NTA and DLRCC on long term strategic transport planning across all transport modes. In 2015, UCD introduced additional parking demand management measures. UCD recognises the requirement for accessible parking for staff and students with mobility issues and maintains accessible parking close to buildings for this purpose. The provision of improved public transport services and infrastructure is critical to the continued mode shift and by extension the longer-term decommissioning or change of

extension the longer-term decommissioning or change of use of parking spaces on campus. UCD will continue to work in partnership towards this goal.

### Summary Table: Our Buildings & Vehicles (continued)

required for an emergency maintenance purpose.

Our Buildings & Vehicles 2023 requirements	Our Buildings & Vehicles 2024 requirements	Comment	UCD Response 2024
Display an up-to-date Display Energy Certificate in every public building that is open to the public to clearly show energy use.	Display an up-to-date Display Energy Certificate in every public building that is open to the public to clearly show energy use.	No additional content/change. NB Guidance/Best practice 2024 notes DECs are required for buildings >250sqm. Relevant exemptions for UCD include protected structures, places of worship & temporary buildings.	UCD has Display Energy Certificates on display in each campus building which is open to the public.
<ul> <li>The public sector will not install heating systems that use fossil fuels after 2023, in (1) new buildings, and (2) "major renovation" retrofit projects (as defined in the Energy Performance of Buildings Directive (EPBD)) unless at least one of the following exceptions applies:</li> <li>The fossil-fuel use is only using electricity from the grid;</li> <li>There is no technically viable non-fossil alternative (generally only related to applications for a purpose other than space heating);</li> <li>The installation of a renewable space heating system would increase final CO2 emissions;</li> <li>The fossil-fuel use is provided for backup, peaking, or operational purposes (and makes up less than 10% of annual heating energy);</li> <li>Where the direct replacement of existing fossil fuel heating is</li> </ul>	<ul> <li>The public sector will not install heating systems that use fossil fuels after 2023, in (1) new buildings, and (2) "major renovation" retrofit projects as defined in the Energy Performance of Buildings Directive (EPBD) unless at least one of the following exceptions applies:</li> <li>The fossil-fuel use is only through using electricity from the grid.</li> <li>There is no technically viable non-fossil alternative (generally only related to applications for a purpose other than space heating).</li> <li>The installation of a renewable space heating system would increase final CO2 emissions.</li> <li>The fossil-fuel use is provided for backup, peaking, or operational purposes (and makes up less than 10% of annual heating energy).</li> <li>Where the direct replacement of existing fossil fuel heating is required for an emergency maintenance purpose.</li> </ul>	No new mandate requirements.	UCD commits to the measures outlined in the Climate Action Mandate to not install heating systems that use fossil fuels after 2023, unless such an installation is required for operational or technical reasons or results in a net final reduction in CO2 emissions in comparison to renewable systems, as outlined as exceptions within the Mandate.

### Summary Table: Our Buildings & Vehicles (continued)

Our Buildings & Vehicles 2023 requirements	Our Buildings & Vehicles 2024 requirements	Comment	UCD Response 2024
<ul> <li>In relation to existing buildings:</li> <li>Large public sector bodies and sectoral groups with a large estate should commence a deep retrofit of at least one building in 2023</li> </ul>	<ul> <li>In relation to existing buildings:</li> <li>Public sector bodies and sectoral groups with a large estate should commence a deep retrofit of at least one building in 2024 in pursuit of the 2030</li> </ul>		The UCD O'Brien Centre for Science Phase 3 project is currently underway and constitutes UCD's major retrofitting project for 2023/24.
<ul> <li>in pursuit of the 2030 51% target;</li> <li>All public sector bodies should develop a building stock plan, in line with the EPBD, by end-2023 for</li> </ul>	51% emissions reduction target. The planning of deep-retrofit building measures will be undertaken at sectoral level for homogenous sectors, e.g., in relation to the Civil Service, the		In line with reporting requirements UCD has submitted its Stage 1 Building Stock Plan to the SEAI. UCDs Energy Management System monitors the energy performance of campus facilities and the
<ul><li>retrofitting their building stock to meet CAP targets;</li><li>As part of the building stock</li></ul>	<ul> <li>OPW will plan the deep retrofit of Government Departments' building stock.</li> <li>Public sector bodies and sectoral groups with a large estate should</li> </ul>		individual significant energy users within the campus. Through this system and the SEAI
<ul> <li>plan, public sector bodies</li> <li>should undertake data</li> <li>gathering and consider the</li> <li>long-term (to 2050) retrofit</li> <li>key performance indicators</li> <li>to upgrade all their building</li> <li>stock to Nearly Zero</li> <li>Energy Buildings (NZEB)</li> <li>or Zero Emission Buildings</li> <li>(ZEB) as outlined in the</li> <li>EPBD proposal and Energy</li> <li>Efficiency Directive;</li> <li>In 2023, SEAI will work</li> <li>with sectoral groups with</li> <li>a large estate to develop a</li> <li>renovation target.</li> </ul>	<ul> <li>develop a portfolio building stock</li> <li>plan (including determining the</li> <li>buildings necessary for their</li> <li>activities), in line with guidance</li> <li>published by SEAI, by end</li> <li>2024 to mobilise large scale</li> <li>programmes towards meeting</li> <li>the Climate Action Plan targets.</li> <li>As part of the building stock plan,</li> </ul>		Gap to Target Tool, opportunities for efficiencies and reductions in emissions are identified.
	large public sector bodies and sectoral groups with a large estate should undertake data gathering and consider the long term (to 2050) retrofit key performance indicators to upgrade their building stock to Nearly Zero		
	Energy Buildings or Zero Emission Buildings as outlined in the EPBD proposal and recast Energy Efficiency Directive. Zero Energy Buildings or Zero Emission Buildings as outlined in the EPBD proposal and recast		
	<ul> <li>Energy Efficiency Directive.</li> <li>Small public sector bodies should include a basic building stock analysis or statement as part of their Climate Action Roadmap, in line with the</li> </ul>		

guidance published by SEAI.

### Summary Table: Our Buildings & Vehicles (continued)

Our Buildings & Vehicles 2023 requirements	Our Buildings & Vehicles 2024 requirements	Comment	UCD Response 2024
Procure (purchase or lease) only zero-emission vehicles from the end of 2022, enabling Ireland to go beyond the requirements of the EU Directive, amending Directive 2009/33/EC on the promotion of clean and energy- efficient road transport vehicles (EU Directive 2019/1161, the Clean Vehicle Directive) and act as an international leader in this area. An exception applies where the vehicle is exempt under European Communities (Clean and Energy-Efficient Road Transport Vehicles) (Amendment) Regulations (S.I. 381 of 2021). Public sector procurement contracts for delivery and haulage should specify zero emissions vehicles where possible.	Procure (purchase or lease) only zero-emissions vehicles from the end of 2022, enabling Ireland to go beyond the requirements of the EU Directive, amending Directive 2009/33/EC on the promotion of clean and energy- efficient road transport vehicles (EU Directive 2019/1161, the Clean Vehicle Directive) and act as an international leader in this area. An exception applies where the vehicle is exempt under European Communities (Clean and Energy- Efficient Road Transport Vehicles) (Amendment) Regulations (S.I. 381 of 2021). Public sector procurement contracts for delivery and haulage should specify zero-emissions vehicles where possible. As an enabler for the switch to zero-emissions vehicles and meeting Climate Action Plan targets, in 2024 public sector bodies with a vehicle fleet should develop a plan for installation of charging infrastructure in relevant locations. The plan should align installation of infrastructure with	Additional content required: develop a plan to align decarbonisation of vehicle fleet with the development of onsite EV charging infrastructure	In tandem with the decarbonisation of UCD fleet vehicles, charging infrastructure for fleet vehicles has been installed on the Belfield campus for the UCD Fleet and third-party service providers.

timelines for decarbonisation of the body's fleet. The plan should be included in the body's Climate

Action Roadmap.



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