

Climate Action Roadmap

September 2023





FOREWORD

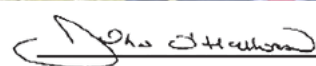
UCC has a long history of leading on sustainability and climate action; in 2010 we were the first university in the world to be awarded a green flag from the Foundation for Environmental Education while just last year, 2022 we were named most sustainable Large Organisation by PWC and the Sunday Business Post, the Sustainability Institution of the Year UK & Ireland by the Environmental Association of Universities and Colleges, and the SEAI Energy Team of the year. In 2023 UCC were named the Sustainability Institution of the Year at the International Green Gown Awards 2023

We were the first University outside of North America to be awarded a STARS Gold rating from the Association for the Advancement of Sustainability in Higher Education in 2018 and in 2022 we were designated co-hosts (with Queen’s University Belfast) of an All Island Sustainable Development Solutions Network.

This year we have renewed our commitment to sustainability in our new University Strategy “UCC 2023: Securing our Future” and its supporting Sustainability and Climate Action Plan 2023-28, which commits the University to reach net zero by 2040.

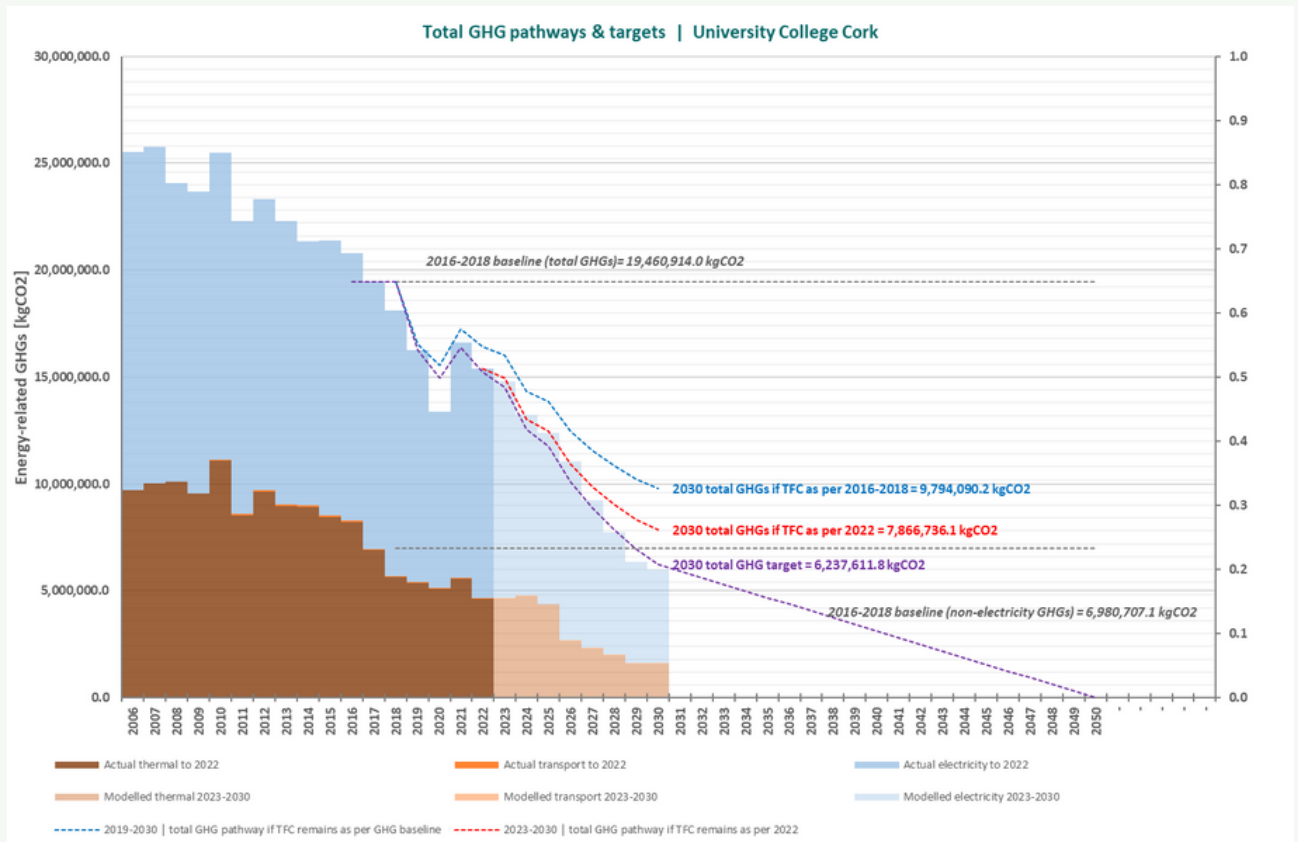
This **updated roadmap** sets out our plan to deliver on these ambitions. It details the significant infrastructural projects we have committed to delivering to reduce our absolute carbon emissions as well as our plans to engage with our staff and students to support and empower them during what will be a period of major societal transition. It also sets out the governance structures that will ensure that our ambitious, yet realistic, targets are achieved.

This roadmap is another key milestone in UCC’s journey to becoming a sustainable University, building on previous significant accomplishments to deliver a better future for everyone



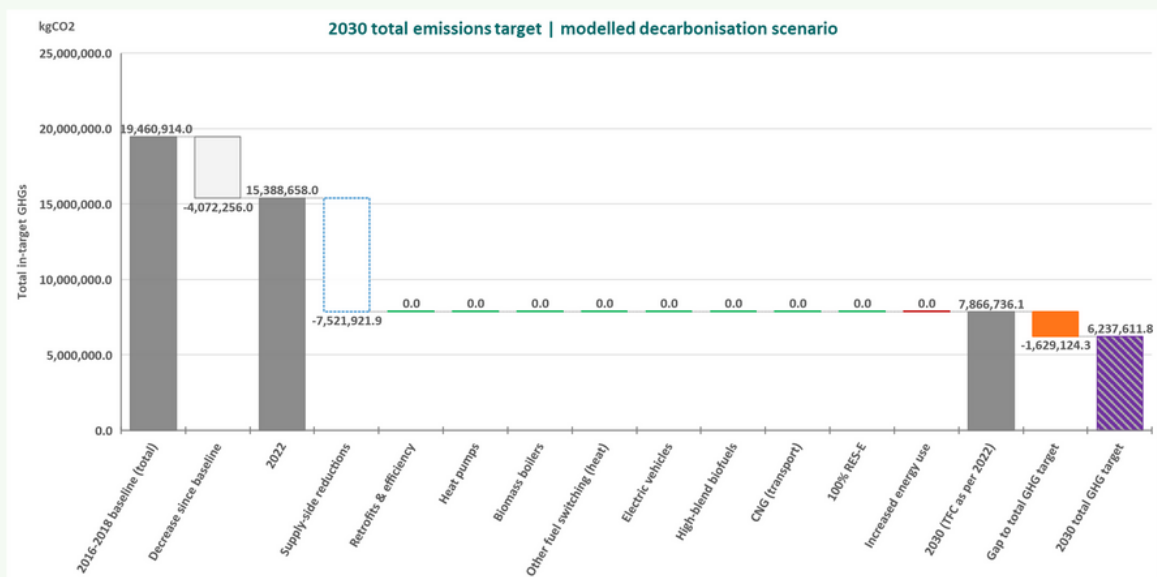
*Prof John O'Halloran, President,
University College Cork.*

CURRENT PERFORMANCE



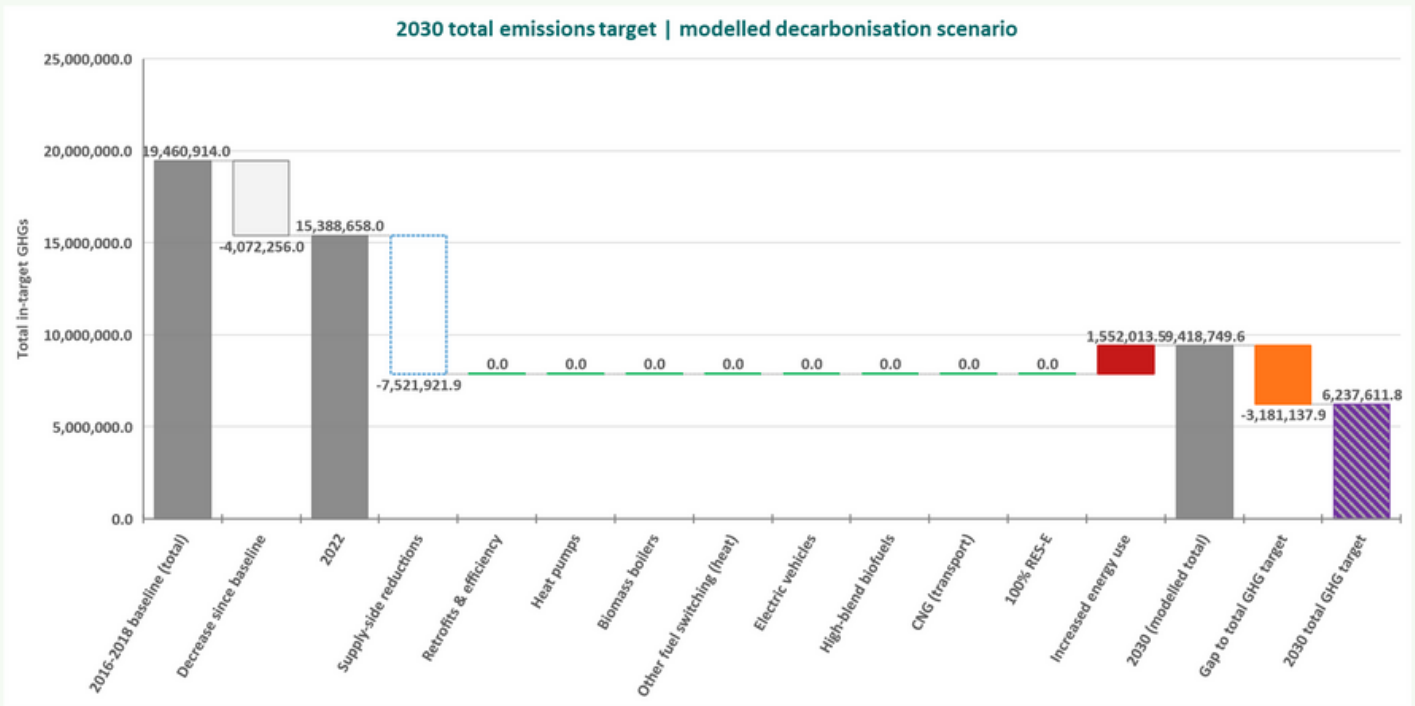
UCC GHG PATHWAY

At the end of 2022, UCC achieved a **21% reduction** in GHG emissions, against a baseline of 2016-2018 and a 45% improvement in energy efficiency. Through ongoing energy management campaigns and decarbonisation projects the University reduced the GHG emissions from its thermal sources by 33%. Electrical consumption has remained relatively steady since the baseline and the 14% reduction in GHG emissions from our electrical use can be attributed to supply-side decarbonisation. When modelled for 2030, UCC’s gap to target is calculated to be **1,629 tCO2**.



UCC 2030 BUSINESS AS USUAL GAP TO TARGET

PLANNED GROWTH



UCC GHG PATHWAY - GROWTH SCENARIO

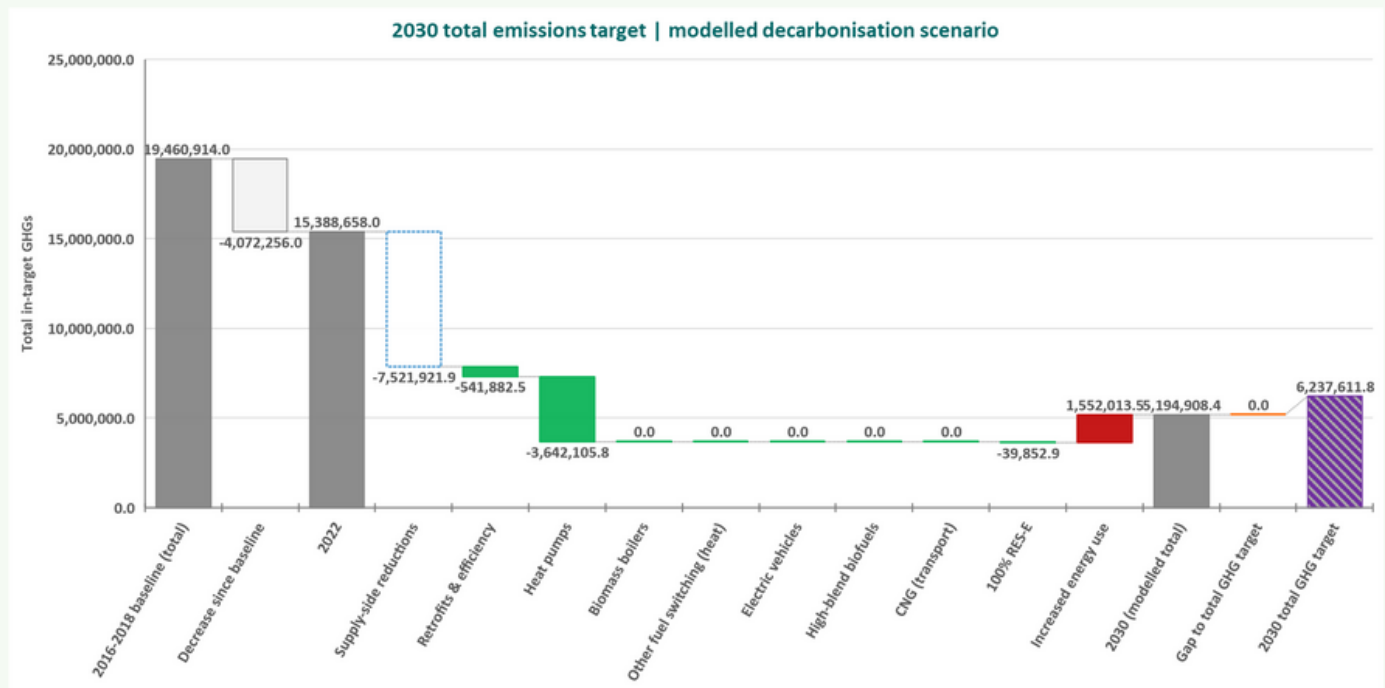
For the period 2023 to 2030 the University has committed to a number of expansion projects. While sustainability is a key design element of the projects, the planned buildings will add **1,388 tCO₂** to the GHG emissions of the University. In addition to the planned growth UCC's goal to be a **research intensive** University will lead to an **additional 170 tCO₂** of annual emissions by 2030, increasing our gap to target to **3,181 tCO₂**.



*Image of the planned Tyndall National Institute expansion
A new 16,000 m² research intensive facility expected to be completed in 2025.*

Building / Activity	Additional t Co ₂ (2030)
Crows nest student accomodation	176
Mardyke Squad Gym	21
Tyndall National Institute Expansion	783
CUBS Building	116
Dental School	292
Research Growth	170

PATHWAY TO 2030 51% GHG REDUCTION



UCC GHG DECARBONISATION MODEL

The University has identified a program that will need to be implemented to meet the 2030 climate targets. The program should **exceed UCC's 2030 goals** and has been tailored to suit the short timeframe to 2030.

The planned programs can be grouped into:

Energy Efficiency and Awareness

- Achieve a 2% annual reduction in energy use through awareness and rolling energy upgrades, i.e. lighting, BMS optimisation and pump replacement programs.
- Expand Saver Saves Scheme and Green Labs Programme.

Decarbonisation of Heating Systems

Change out of heat generation plant to heat pump technology without significant fabric upgrades.

PV Installations

- Roll out of PV installations from 2025 to 2028 to supply 500 MWh of on-site renewables.

Building Retrofit Program

- Complete at least 3 building retrofit programs as part of UCC's 2050 pathway to net zero.

Supply Side Decarbonisation

- The planned decarbonisation of Ireland's electrical grid will assist in decarbonising our remaining electrical loads.

The pathway schedule aligns to Ireland's carbon budget program of 2021-2025 (4.8% per annum) and 2026-2030 (8.3% per annum)

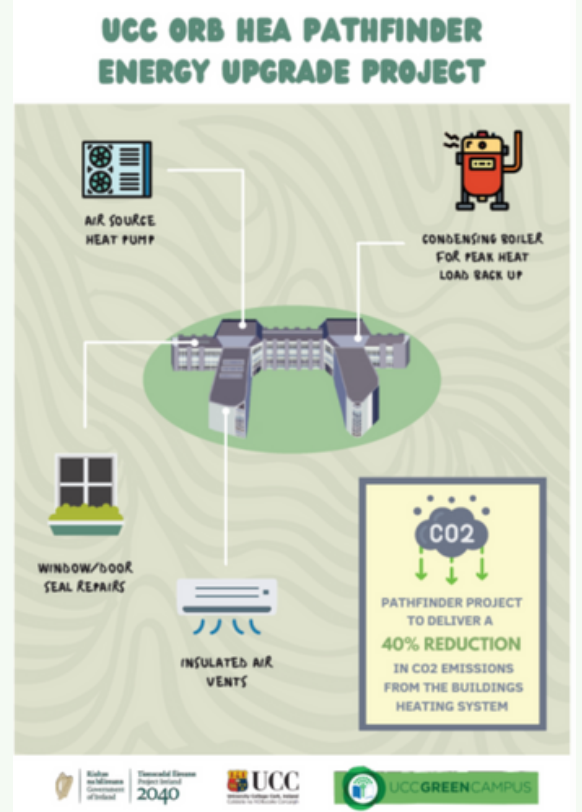
DECARBONISATION PROJECTS COMPLETED

In 2021 the University undertook decarbonisation projects with support from the HEA Pathfinder and SEAI grant programs.

In the O'Rahilly Building a new hybrid heat pump and boiler upgrade project resulted in a 40% reduction in GHG emissions and will meet 1.5% of the GHG reductions required.



ORB 200 KW AHSP



HEA PATHFINDER PROJECT ORB



TYNDALL HT HEAT PUMP

In 2021, Tyndall carried out a project to optimise its low-pressure hot water system and data centre cooling. This project included the consolidation of distribution network pipework and pumps, and the installation of a high temperature heat pump on the sites data centre cooling system. This project has resulted in a reduction in thermal energy demand of over 0.94GWh and a net electrical saving of 0.14GWh. In total, this amounts to an annual carbon reduction 236tCO₂ or 6% of UCC's 2030 target, greatly assisting the Institute and UCC on its decarbonisation journey.

DECARBONISATION PROJECTS IN PROGRESS

In line with our EnMS energy action plans a number of **strategically selected projects** will be undertaken over 2023-2025, as part of UCC's decarbonisation plans.

ENTERPRISE DEEP RETROFIT

Project Objective / Scope

Deep retrofit with geothermal heat pump.

Budget Cost

€4,100,000 (HEA Pathfinder support).

Carbon Reduction

61T CO₂ (2030)

Schedule:

Summer 2023-2024.

Project Readiness

In Construction

UCC ENTERPRISE: HEA Pathfinder Deep Retrofit



PHARMACY ASHP INSTALLATION

Project Objective / Scope

ASHP installation to meet 95% of heat load.

Budget Cost

€410,000

Carbon Reduction

96T CO₂ (2030)

Schedule

Summer 2023-2024

Project Readiness

In construction



PROJECT 2030 PIPELINE

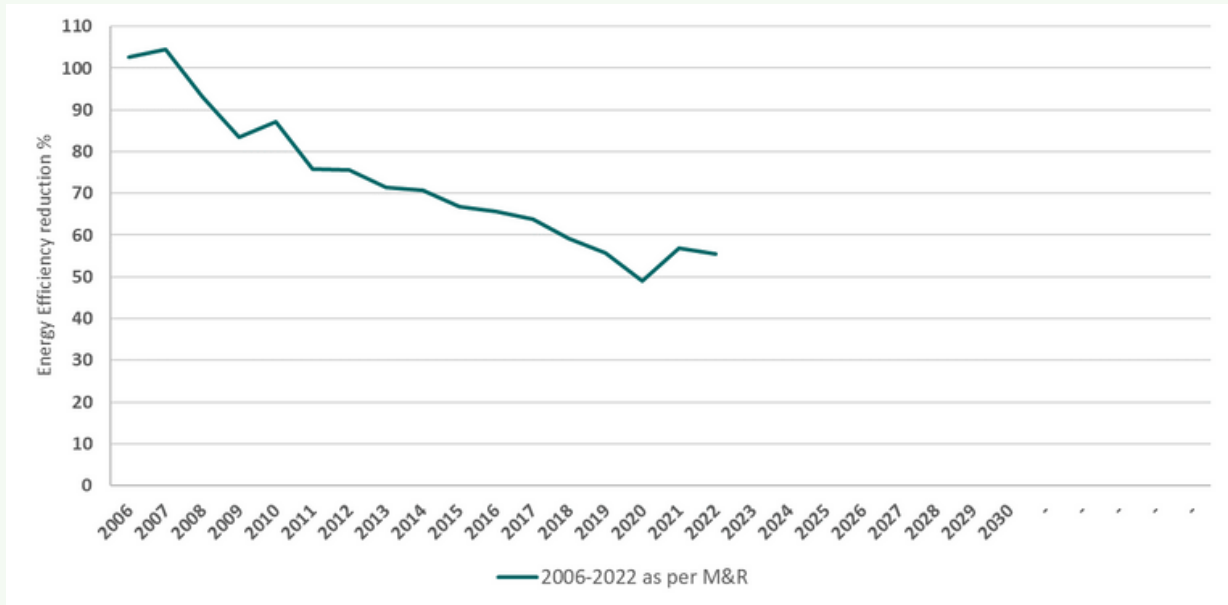
Project	2030 tCO2 reduction (inc supply side)	Status	Planned Year	Cost (M/€)
Energy Conservation Campaigns / projects	1,576	Ongoing	Annual	4.0
Boole Library ASHP	813	Design	2026	5.5
Tyndall Decarbonisation	767	Design	2025	3.0
Mardyke Arena Decarbonisation	683	Concept	2028	3.0
Brookfield HP	378	Concept	2026	1.0
Green Labs	378	Ongoing	Annual	1
Office Heating Systems	273	Ongoing	2022-2028	0.5
Food Science HTHP	235	Concept	2025	2.0
Pharmacy HP	203	Construction	2024	0.5
WGB BSU	199	Concept	2029	1.5
BSI Heat Pump	178	Design	2025	0.75
PV Installations	132	Ongoing	2022-2029	1.5
Electrical Eng HP	105	Design	2024	0.75
Iris Ashley Cummins HP	105	Design	2024	0.75
Special Collections HP	88	Design	2025	0.75

PROJECT 2030

Project	2030 tCO2 reduction (inc supply side)	Status	Planned Year	Cost (M/€)
Student Hub HP	73	Concept	2027	0.3
Main Rest HP	71	Concept	2029	1.0
CCAIE HP	70	Concept	2027	0.3
Enterprise Deep Retrofit	65	Construction	2024	4.4
Student Centre HP	52	Design	2025	0.75
Beaufort HP	50	Concept	2029	0.5
Pavillion HP	25	Concept	2026	0.3
Lapps Quay HP	23	Concept	2027	0.3
Food Science Block B Retrofit	16	Concept	2025	4.5
Supply Side Reductions on baseload	3,637		2030	0
Total	10,193			39.55

UCC PROJECT LISTING 2020 TO 2030 - NOTE KANE SCIENCE BUILDING SUBMITTED UNDER HSEIF II AND NOT INCLUDED IN THE ABOVE LISTING

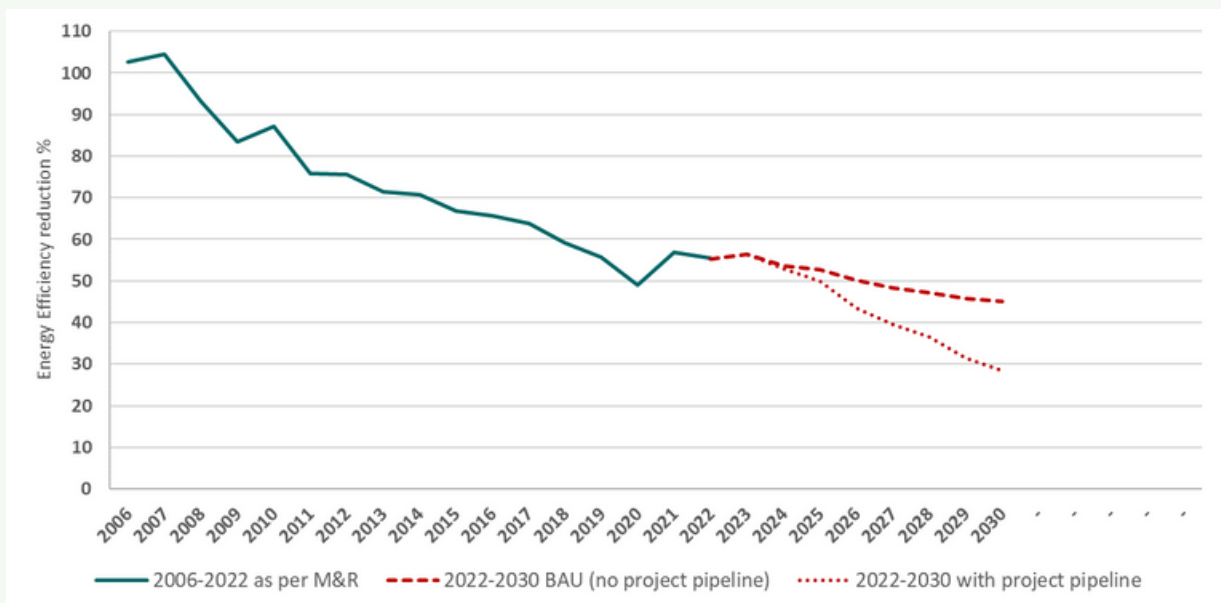
50% ENERGY EFFICIENCY TARGET



ENERGY EFFICIENCY 2006-2022

By the end of 2022 the University reported a **45% improvement** in energy efficiency, against a baseline of 2006-08.

By implementing the pipeline of projects the University will achieve a **71% improvement** in energy efficiency by 2030.



ENERGY EFFICIENCY TO 2030

LEADERSHIP & GOVERNANCE

The Governance and organisational chart for UCC is shown in Fig 1. The Director of Building & Estates, **Mark Poland**, a member of the University Leadership Team (ULT), fulfils the role of **Energy Performance Officer** and is the nominated **Climate and Sustainability Champion**.

Given the criticality of our sustainability objectives to the University’s vision, a Sustainability and Climate Action Office was created in 2022. The Office sits within the President’s Office and the Head of Sustainability and Climate Action Office is tasked with delivering UCC’s **Sustainability and Climate Action Plan** and reports to the President.

In April 2023, Professor Brian Ó Gallachóir was appointed as Associate Vice President for Sustainability and Director of the Environmental Research Institute, further strengthening the governance in climate action at UCC.

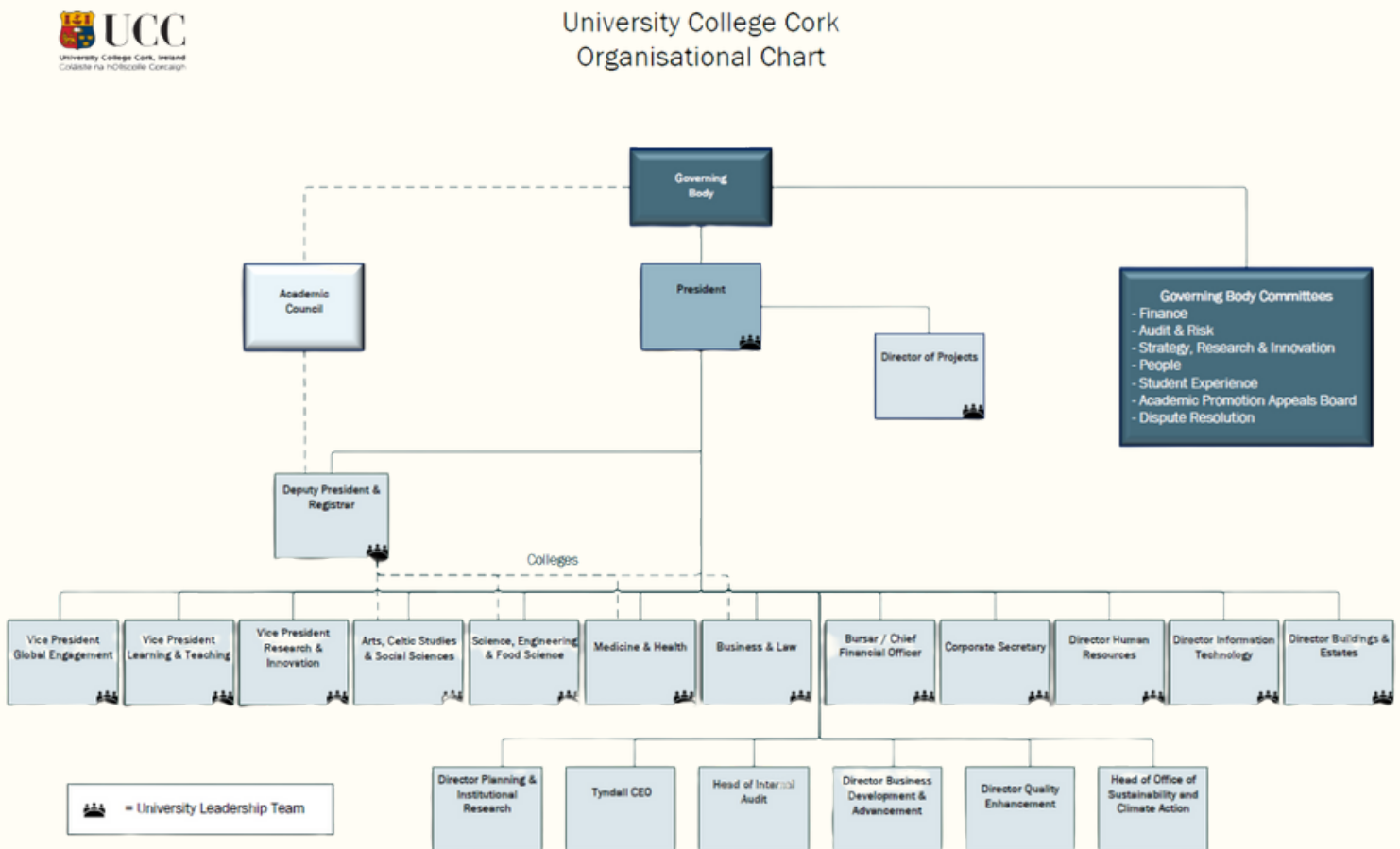


Figure 1: UCC Governance Structure 2023

Last updated: 07 DEC 2022

The **ULT subgroup on Sustainability and Climate Action** is a university-level committee, led by the President to:

- Support the University's management of Sustainability and Climate Action from a strategic and operational perspective and monitor the implementation of the Sustainability and Climate Action Plan and any associated policies and procedures.
- Ensure that sustainability and climate action remain a strategic priority for the university and are considered at all levels of decision-making.
- Agree prioritisation of resources and ensure an agile response to issues that might impact the delivery of the Sustainability and Climate Action Plan.
- Provide leadership and direction within respective areas of responsibility, promoting a culture of sustainability and climate action across the whole organisation.
- Monitor performance against agreed internal KPIs and external benchmarks.
- Ensure a whole-institution approach to sustainability and climate action at UCC, identifying opportunities for collaboration across functional areas and in particular between the Associate VP for Sustainability and Climate Action, the Office of Sustainability and Climate Action, President's Office, Learning and Teaching and Research.
- Review Sustainability and Climate Action policies and recommend as appropriate to the University Leadership Team, for approval.
- Assist with raising the awareness, profile and commitment to Sustainability and Climate Action within the University. Support communication of the sustainability and climate action agenda across all functional areas.
- Provide leadership in rolling out cross university initiatives including for example:
 - The development of a carbon budget and guideline system for academic travel.
 - The development and implementation of reporting systems at functional area level.
- Report to the University Leadership Team regularly any strategic decisions and/or risks to implementation of the sustainability and climate action plan.
- Provide oversight and support for a university-wide approach to sustainability reporting, ensuring that all sustainability related activities are captured in an annual UCC Sustainability Report.
- Lead by example, through participation in, and support of, cross-university events and initiatives related to the delivery of the sustainability and climate action plan.
- Undertake horizon scanning of the Higher Education sector and wider external environment and identify opportunities and potential impact on the University in relation to sustainability and climate action

See Appendices for terms of reference and membership of the Sustainability and Climate Action Sub Committee

UCC's energy management team is chaired by the Director of Estates (EPO) and is made up of representatives from the Capital Projects Office, the Estates operational team as well as the Academic Community.

The energy team provides resources and support to the utilities manager to implement the agreed energy actions plans while also promoting energy efficient practices within their departments. The team convenes quarterly to review the energy performance and the progress made against the energy action plan.

The utilities manager is responsible for promoting energy efficiency and conservation across the University community as well as the management and implementation of UCC's ISO 50001 energy management system.

Under UCC's ISO 50001 Energy Management System (EnMS) the ULT

- Participate in the annual management reviews.
- Provide support and resources required to ensure our EnMS is effective.
- Provide the resources to invest in the infrastructure required.
- Ensure that the legal and other obligations placed on the University from an energy efficiency aspect are complied with.
- Ensure that the EnMS supports and enhances UCC's Sustainability and Climate Action plan.
- Ensure that the EnMS contributes to the strategic plan of the University

UCC ENERGY POLICY

UCC is committed to continuous energy performance improvement to enhance the environment of the university community in which we work, teach and carry out research. The university is committed to responsible energy management as part of our overall environmental strategy.

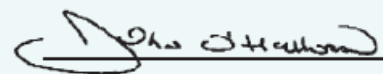
Our Energy Management System (EnMS) will help us to:

- R**educe energy use in all aspects of our activities.
- E**ducate our staff and students in the importance of energy conservation.
- D**ocument and provide energy information to achieve performance improvement objectives.
- U**phold legal and other requirements regarding our energy use.
- C**ontinuously improve our energy performance.
- E**ffectively utilise energy efficient products and services.

We will achieve this by encouraging our staff, students and suppliers to:

- Understand and commit to the UCC energy policy and energy management processes as applicable to their roles.
- Suggest improvements for reducing or eliminating energy consumption in our activities.
- Support our efforts to improve UCC's overall sustainability strategy.

Signed:



Prof John O'Halloran

www.ucc.ie/en/build/energy

Suggestion and Comments are welcome to p.mehigan@ucc.ie

AWARENESS, ENGAGEMENT & TRAINING

In 2010 UCC became the first University in the world to be awarded a Green Flag from the Foundation for Environmental Education.

The **Green Campus** Programme in UCC has evolved significantly since its inception. Strong commitment and support from the highest levels in the university have contributed to embedding sustainability across our operations, teaching, research and outreach.

The student-led Green Campus Committee, chaired by the Student's Union Deputy President, meets regularly to discuss ideas and campaigns to improve our campus. These meetings feed into biannual meetings of the Green Campus Forum, which takes its membership from across all functions within the University.

The forum ensures continuity and strategic oversight throughout the academic cycle.

UCC Green Campus invites you to join us in

THE GREEN ZONE

a series of lunchtime talks covering sustainability and Climate Action themes.

Next up:

"Modelling Ireland's Decarbonisation Targets"

Dr Hannah Daly
Lecturer in Sustainable Energy and Energy Systems
Modelling at University College Cork

A special talk as part of Green Campus Ireland's national Green Week and open to all Green Campus registered institutions.

Once again we'll give an overview of what's happening in UCC, after which our speaker will cover the national situation.

Thurs 10th March, 1.10pm, Teams

 **UCC GREEN CAMPUS** 

The Green Campus program is used to communicate climate action and sustainability awareness throughout the UCC community and beyond, to encourage sustainable behaviours and to run programs such as Living Labs, Energy awareness campaigns, carbon literacy courses and eco grief awareness training.

Building on the training and sustainability awareness campaigns implemented over the last decade, Section 4 of UCC's Sustainability and Climate Action Plan, Sustainability Citizenship, has a strategic aim to *"support, enable and influence our staff and wider community in the achieving the SDG's and establish sustainability citizenship as a core ethos of UCC."*

With a population spread across 131 buildings UCC utilises a number of methods to engage with its community on climate action awareness and energy conservation. Our **'Saver Saves Scheme'**, which runs in a number of our significant energy use buildings, rewards departments for any energy savings made by devolving the financial savings to the department, which are then spent on environmental projects within that department.

Since 2016 the University has offered a **University Wide Module on Sustainability** which is free and open for all to participate, and the module is completed over 12 weeks. In 2022 the University also launched its **Carbon Literacy program** to further enhance the knowledge of our students and staff on climate change and carbon footprints.

In 2022 the University commenced the **LEAF program** to promote energy efficiency and sustainability in Labs.

An **SDG toolkit** was developed in 2022 to support our teaching staff in integrating the UN SDG's into their teaching modules and learning outcomes, ensuring that our students leave the University with a heightened sense of awareness and understanding of sustainability and the UN SDG's. The toolkit has been internationally recognised as best practice in integrating the SDGs within the Teaching and Learning. It was featured as a case study by the UN Academic Impact and was the basis of an Erasmus funding grant with a number of Universities in Greece and the Mediterranean region.



Mandate	Status	Indicator of Conformity
<p>Establish and resource green teams, reporting to senior management, to become integrated drivers of sustainability.</p>	<p>Complete</p>	<p>ULT Sub committee on Sustainability in place. Cross functional energy management team in place. Green Forum and Green Campus team active.</p>
<p>Nominate a member of the Management Board as the Climate and Sustainability Champion with responsibility for implementing and reporting on the mandate</p>	<p>Complete</p>	<p>Mark Poland, Director of Estates and member of University Leadership team appointed.</p>
<p>Incorporate appropriate climate action and sustainability training (technical and behavioural including green procurement training) into learning and development strategies for staff.</p>	<p>Ongoing</p>	<p>The following training programs in place (1) Carbon Literacy training program (2) SDG toolkit for embedding UN SDGs into teaching and research. (3) CPD module in Sustainability (4) eco-grief program (5) Graduate Attributes Programme. (5) Greenshots programme designed to engage students in pro-environmental actions and behaviours on campus.</p>
<p>Organise staff workshops (at least annually) to engage on climate issues, including a focus on decreasing the organisations carbon footprint</p>	<p>Ongoing</p>	<p>(1) Green Forum held bi-annually and provides an open forum for all staff & students to contribute and engage in UCC's sustainability goals. (2) Periodic 'Green Zone' lunchtime talks on climate issues and (3) Podcast series with staff/students and suppliers on initiatives across the University.</p>
<p>Ensure all senior management (P.O. level or equivalent and above) complete a climate action leadership training course</p>	<p>In progress</p>	<p>UCC's Strategic Plan commits us to "Radically reform our practices and use of space and technology to meet our ambitious sustainability and climate action goals." The training course for the University Leadership team has been designed to explore what these ambitions mean for schools and units across UCC. Training is scheduled to be completed by the end of 2023.</p>

Summary of Progress made under 'Our People'

REPORT GHG EMISSIONS AND SUSTAINABILITY ACTIVITIES

In line with our **ISO 50001 EnMS**, UCC produces an annual energy performance review which is presented to the ULT for noting and approval. A summary of the reports and UCC's GHG (Scope 1&2) are publicly available on the UCC website.

The UCC Climate Action office produce an **annual sustainability report**, highlighting the progress made over the 12 months against the Climate action plan, including energy performance.



REVIEW PAPER BASED PROCESSES AND MOVE TO DIGITALISATION

UCC SUSTAINABLE PRINT POLICY

In 2019 our Procurement Office tendered for a managed printing service with sustainability as a key service deliverable.

The positive environmental impact of the tender approach, coupled with value for money, just shows what can be achieved when we put sustainability to the fore.

<p>Tender Outcome:</p> <p>The print management service was awarded to Cantec Ireland who:</p> <ul style="list-style-type: none"> Will help realise an 80% reduction in the number of printing devices across the University. Only install reconditioned printing devices. Set all printers to duplex and mono printing settings. Deployed network print management software to give insight into UCC's printing consumption. 	<p>Sustainability Impacts:</p> <p>Through the new service, we have:</p> <ul style="list-style-type: none"> Avoided the manufacture of new printing machines. Reduce our CO2 emissions attributed to printing by 60%. Eliminated unnecessary printing through user authentication. Reduced the energy consumption of printing by 50%. Inspired Cantec to move to electrification of their fleet. 
<p>Our Printing Policy:</p> <p>Developed by the Procurement Office our new policy promotes:</p> <ul style="list-style-type: none"> Printing only when no practical alternatives exist. Duplex and mono printing as the default settings. Single source service provider for all printing devices. Recycling program for used toners. Visibility on the Universities printing needs and quantities. Use of automated processes to further reduce the need for printing. 	

Thank you!

A big Thank You to the procurement office, IT services, Cantec Ireland and our staff who together ensured the successful roll out of our new printing policy.

You can read more about the project [here](#).

Several initiatives have already been implemented over the last decade including the installation of managed print services for students and staff which reduced the annual printing demand by 21 million pages for students and 13 million for staff.

The Digital Master Plan, 2022, sets out a pathway for the University to transform our digital services to support students' and staff's needs for flexibility and accessibility to UCC, while also transforming our services and processes to eliminate barriers and strengthening connectivity.

OUR ISO 50001 MANAGEMENT SYSTEM

In November 2011, UCC became the **first third level institution worldwide** to achieve the **ISO 50001 standard**. UCC was also the first public sector body in Ireland to be certified to the standard.

The University is wholly committed to responsible energy management as part of our overall environmental strategy and has a long track record in energy management, assisted with grant and technical support from the Sustainable Energy Authority of Ireland (SEAI) to support energy saving initiatives.



2022 SEAI Energy Team of the Year.



Our ISO EnMS has enabled the University to achieve a **22% absolute reduction** in energy use despite a **43% growth** in the campus footprint over the same period.

Tyndall National Institute, which accounts for 13% of UCC's energy footprint, operates under its own ISO 50001 management system and recently received **global recognition** for their efforts in energy conservation from the Clean Energy Ministerial (CEM).

Tyndall 2022 CEM Global Winners for Excellence in Energy Management

GREEN PUBLIC PROCUREMENT

Seen as a critical stakeholder under UCC's Sustainability and Climate Action Plan, the UCC **procurement office** plays a significant role in reducing UCC's environmental impact. Using **Green Public Procurement** criteria the office has already delivered significant results for the University in the catering, printing and cleaning contracts.



UCC has become a recognised leader in Green Procurement nationally and internationally. Over the past year UCC Procurement Officer, Fiona Thompson has been working with Maria Kirrane and postdoctoral researcher Alexandra Revez to write a scientific publication on the experience of UCC in this area.



In July 2023, this work was featured in an RTE Brainstorm Article "Is the Government climate-friendly when buying goods and services?".

PLASTIC FREE UCC

In January 2023 a new Single-use plastic-free policy was implemented and specifically focussed on the use of plastic bottles, plastic cutlery, and all disposable cups (including those that are biodegradable). New water refilling stations were installed across the estate, a cup deposit scheme was introduced and a social media and communications campaign was rolled out to support the changes.

Since its implementation, the University has avoided over 1,000,000 single-use cups and over 70,000 plastic bottles while waste levels and contamination rates have decreased significantly.

A working group meets periodically to review the effectiveness of the policy and to identify opportunities to broaden the policy to prohibit the purchasing of other single-use products such as electronic vapes.

LOW CARBON CONSTRUCTION METHODS

Guided by our internal design policies and guidelines as well as current statutory building regulations the University requires that all new buildings and significant refurbishment projects meet the Near Zero Energy Building (NZEB), achieve a minimum Building Energy Rating of A3 and a BREEAM Excellent Standard.

From the conceptual stage to construction and building operation Sustainability is considered at every phase of the project. The orientation and form of the building as well as the materials to be used are chosen at the concept stage and specified to give the most sustainable design for the purpose and location of the building. Designers are also tasked with achieving and/or incorporating as many Passive House Institute principles as possible into the building design.

In July 2023, the Mardyke Arena's new Strength and Conditioning Squad Gym was officially opened.

The gym served as a pilot project for low-carbon design and construction. During the design process, every material was challenged from a cost and carbon aspect.

From the outset, much consideration was given to the design of the building fabric, and a life-cycle analysis of the embodied carbon was conducted to compare building fabric options to minimise embodied carbon in the construction.

The result was the construction of a building with a 60% reduction in the embodied carbon over a traditional building approach. The low-carbon approach had additional benefits in accelerating the construction schedule while also reducing the amount of construction waste that would be generated using traditional construction methods.



Mandate	Status	Indicator of Conformity
<p>Annually Report GHG emissions, progress against the roadmap, activities and business travel</p>	<p>On going</p>	<p>GHG emissions via SEAI M&R report. Annual sustainability report issued. Sub working group formed in Q3 2023 to look at Academic / Business travel.</p>
<p>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.</p>	<p>On going</p>	<p>350% reduction in printing volume following implementation of new print policy. Research Thesis Submissions moved to digital copies only. Significant number of administrative processes moved to electronic submissions, i.e. expense claims, tender submissions etc. Examination answer books now REACH free, FSC and PEFC chaging of custody certified, biodegradable inks and VOC free.</p>
<p>Achieve formal environmental certification , such as ISO 50001 (Energy Management Standard) or ISO 14001 (Environmental Management System), with view to going beyond ISO 14001 to adopting EMAS (Eco Management and Audit Scheme).</p>	<p>Ongoing</p>	<p>ISO 50001 certified since 2011. UCC climate action plan 2023-2028 commits the University to achieving Achieve ISO certification for carbon accounting, reporting and management, water management and environmental management.</p>
<p>Implement Green Public Procurement (GPP), in line with the EPA Green Public Procurement Guidance and using GPP Criteria Search where appropriate.</p>	<p>Ongoing</p>	<p>UCC's single-use policy implemented in 2023 led to the banning of disposable items in our catering and campus shop outlets. GPP used for cleaning, catering, waste management and printing contracts, resulting in significant environmental benefits.</p>
<p>Specify Low carbon construction methods and low carbon cement materials as far as practival for directly procured or supported construction projects from 2023</p>	<p>Ongoing</p>	<p>Mardyke Arena Strength and Conditioning gym was designed and constructed using low-carbon methods in 2023, resulting in a 60% reduction in embodied carbon over traditional methods.</p>

Summary of Progress made under 'Our Way of Working'

4. BUILDINGS & VEHICLES

DISPLAY ENERGY CERTIFICATION

UCC, as a public body, displays an Energy certificate at all our publicly accessible buildings that qualify under the regulations.

The process is undertaken annually by a qualified DEC assessor and the outcomes of the assessments are considered for action, as part of our annual energy management review.

FOSSIL FUEL HEATING SYSTEMS

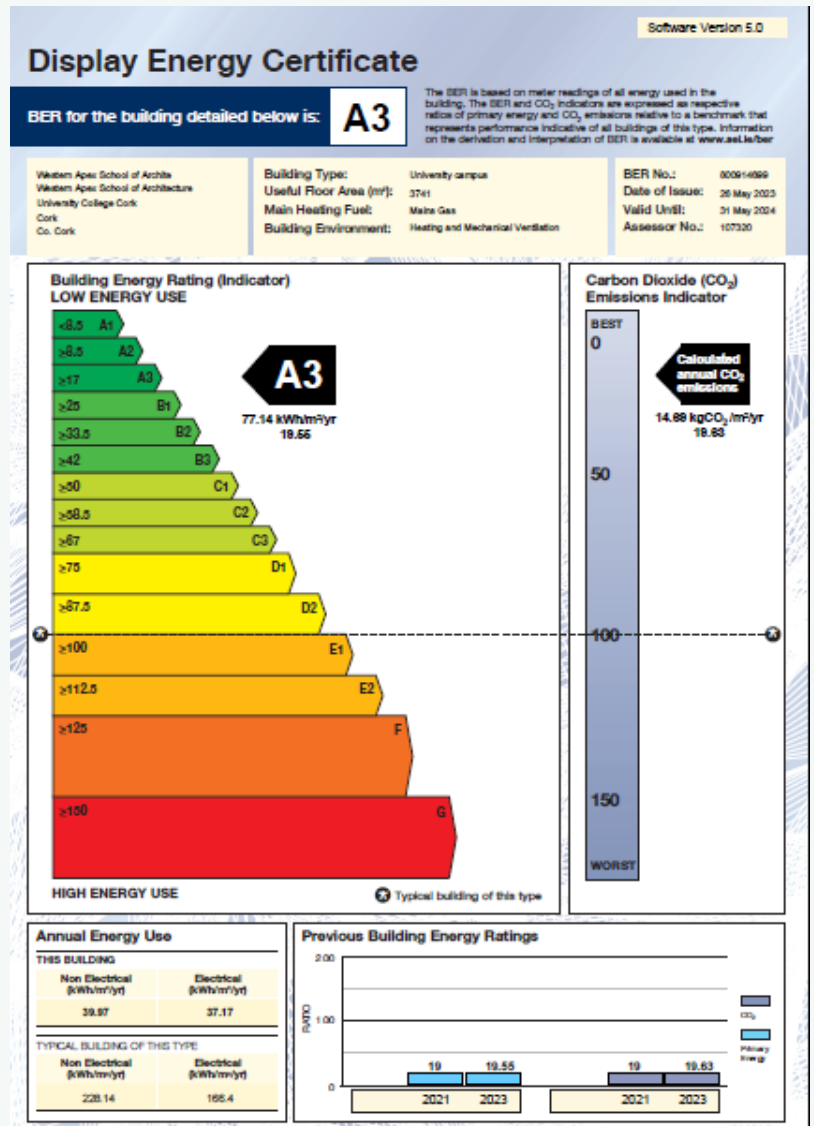
Our Capital Project design guidelines prohibit the use of fossil fuel based heating systems in our new buildings or buildings that will undergo significant refurbishment.

VEHICLES

While the University has a limited vehicle fleet, a number of the vehicles have already been retired from service or replaced with a zero emission electric unit.

The University has already changed out its petrol driven landscaping equipment, such as lawnmowers, trimmers and blowers to zero emission electrical units.

As vehicles near end of life the opportunity to replace with a zero-emission unit will be implemented, subject to the operational needs and availability of a suitable zero emission unit.



DEC FOR SCHOOL OF ARCHITECTURE



PRE-LOVED E-VAN FOR LIBRARY SERVICES

CYCLING INFRASTRUCTURE

A commuter manager has been in place **since 2006** and UCC has continuously improved the pedestrianisation and cycling facilities around the campus. The strategy of UCC's **commuter management plan** is to promote sustainable travel options to campus as well as improving the on campus facilities to support **sustainable travel**.

Bicycle parking and shower facilities are available throughout the campus and under UCC's climate action plan, section 9, a new covered bike parking facility north of the new Student hub building was opened in June 2022 with 70 spaces, including cargo bike friendly spaces

At the South Lodge courtyard 20 spaces have been created with 50% covered and swipe locked access. 3 self-service pumps/repair stations (North Mall, HUB (Main Campus) and WGB), have been created and UCC Campus bike scheme now has its 9th location at Crow's Nest.

Since 2020 the University have been running an **E-bike scheme** where staff can trial an e-bike for a period of time to encourage them to consider an alternative means of travelling to the campus. Over 180 staff members trialled the bikes with more than 15 then going on to purchase an e-bike through the Government "Bike to Work Scheme" administered through UCC.



UCC E-Bikes

@BikesUcc

President John O'Halloran and Students Union President Asha Woodhouse presented with E-Bikes for their use during AY 21/22 For more on this story follow the link ucc.ie/en/greencampus...



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In September 2022 a **"No-Idling Policy"**, for all UCC premises and UCC owned/operated combustion engine vehicles, was formally adopted by the University Leadership Team in September 2022 and rolled out in 2023

Under UCC's sustainability and climate action plan the University has committed to identifying and promote the use of more sustainable methods of commuting amongst our staff and students and to capitalise on the opportunities presented by the blended working policy.

The University has submitted a sustainable travel pathfinder project for the Further and Higher Education sectors in the Cork and Kerry regions. The project aims to understand the travel patterns of the sector and promote multi modal travel options for daily and weekend travel.

Mandate	Status	Indicator of Conformity
<p>Promote the use of bicycles and shared mobility options as an alternative to car use. Create and maintain facilities that support sustainable travel such as secure and accessible bicycle parking, shared mobility parking and charging stations.</p>	<p>On going</p>	<p>Increase in the number of bicycle parking facilities. 14 EV charging stations deployed. Car pooling program in place. Park & ride facilities in place. Bicycle space and facility requirements incorporated into capital project design guidelines.</p>
<p>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</p>	<p>On going</p>	<p>Detailed submissions made to support Bus Connects Cork project. Submission made to reduce speed limit on the public road routes around the University to 30 km/h. Phase out of parking spaces in buildings well served by public transport services to start.</p>
<p>Display up-to-date Display Energy Certificate in every public building that is open to the public to clearly show energy use</p>	<p>Complete</p>	<p>DEC's posted in applicable buildings and valid until May 2024</p>
<p>Public sector will not install heating systems that use fossil fuels after 2023 in (1) new buildings and (2) major renovation retrofit projects.* with limited exceptions</p>	<p>Ongoing</p>	<p>Requirement included in Capital Project guidelines - both CUBs and Tyndall projects will be heat pump buildings. Enterprise building retrofit will be fed by heatpump. Houses / offices currently transitioning to electrical heating.</p>
<p>Commence at least one deep retrofit by 2023. Develop a building stock plan for retrofitting by the end of 2023.</p>	<p>Ongoing</p>	<p>Deep retrofit underway at the Enterprise building. Building stock plan in development and awaiting full guidance from SEAI on the format and approach for the plan.</p>
<p>Procure only zero emission vehicles from the end of 2022</p>	<p>In place</p>	<p>UCC procurement office using the EV direct drawdown tender process established. Pre market consultation in place to provide low / zero emission vehicles for the park & ride services.</p>

UCC Sustainability and Climate Action Plan 2023-2028.

UCC Strategic Plan 'Securing our Future'(2023-28).

UCC Sustainability and Climate Action Sub Committee Terms of Reference.

Useful links/references:

<https://www.ucc.ie/en/sustainability-climate-action/>

<https://www.ucc.ie/en/president/strategy2028/>

<https://www.ucc.ie/en/greencampus/>

<https://www.ucc.ie/en/sustainability-climate-action/sustainability-module/>

<https://www.ucc.ie/en/sdg-toolkit/>