Maynooth University
National University of Ireland Maynooth

Climate Action Roadmap

September 2025

Contents

Overview

This document sets out to communicate how MU aims to meet the requirements of the Climate Action Mandate 2024 ("the Mandate") and reach its 2030 carbon and energy efficiency targets.

At Maynooth University ("MU") academics across a range of faculties and departments, in particular the department of Geography and the Icarus Climate Research Institute, are researching climate change and helping guide public policy on the urgency of the adaptation and mitigation measures needed in Ireland and internationally.

MU has always had a strong green agenda and our green focus is a whole community approach and is heavily led by the Maynooth Green Campus Committee ("MGC") which has been in place since 2012. Since the establishment of the MGC the campus has achieved three Green Flags all recently renewed, a National Pollinator award and been accredited to ISO 50001. We have worked hard in the area of energy efficiency and exceeded our 2020 energy efficiency target.

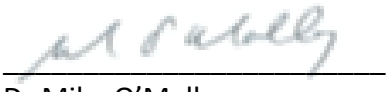
This third iteration of the Climate Action Roadmap ("CAR") builds on the previous iterations and continues to focus primarily on reducing total energy related emissions and fossil fuel related emissions from our operations in line with the targets in the Climate Action Plan 2025 ("CAP").

The projects targeted in this roadmap are primarily on the North Campus and in buildings that are owned by MU with the exception of the JPII pathfinder project which is in the library, a building on which MU has a long term lease.

The focus has also been on the newer buildings that can be upgraded to heat pumps with a minimum of interventions to the building fabric.

It is noted that future iterations of the government's Roadmap Guidance will address how the scope may be expanded to potentially include other non-energy greenhouse gases, indirect emissions, and adaptation to climate change.

The commitment and co-operation of all staff and students at the University is essential for the implementation of this CAR, and I would like to thank you in anticipation for your co-operation in this regard. This roadmap will be reviewed at least annually. The reviews will consider any changes in legislation and when necessary take account of developments at the University and any updates to the CAP.



September 2025

Dr Mike O'Malley
Chief Operating Officer and Climate & Sustainability Champion
Maynooth University

Date

Compliance with legal requirements

The MU Climate Action Roadmap is primarily focussed on meeting or going beyond the requirements of the Climate Action Mandate 2025. However, it is acknowledged that there are legal requirements relating to energy and climate action such as.

- Climate Action and Low Carbon Development (Amendment) Act 2021, which requires all public bodies to perform their functions in a manner consistent with Ireland's climate ambition.

- SI393/2021 Energy Performance of buildings, which requires installation of Building Automation and Control by 2025, for buildings with Heating Ventilation and Air Conditioning rated output over 290kW; requires installation of electric vehicle charging points in carparks for new or refurbished buildings with more than 10 car parking spaces.

- SI381/2021 Clean Vehicles Directive, which sets targets for the procurement of clean light and heavy-duty vehicles, with the first target falling in 2025 and the second in 2030. The definition of clean vehicle changes to zero emission vehicles in 2025.

- SI4/2017 Energy Performance of Buildings, which requires all new public sector buildings built since 2018 to be "nearly zero emissions".

- SI646/2016, which requires that public bodies only procure energy using products and vehicles that are on the 'Triple E register'.

- SI426/2014, which requires the public sector to demonstrate exemplary energy management and requires public bodies to undertake energy audits every four years.

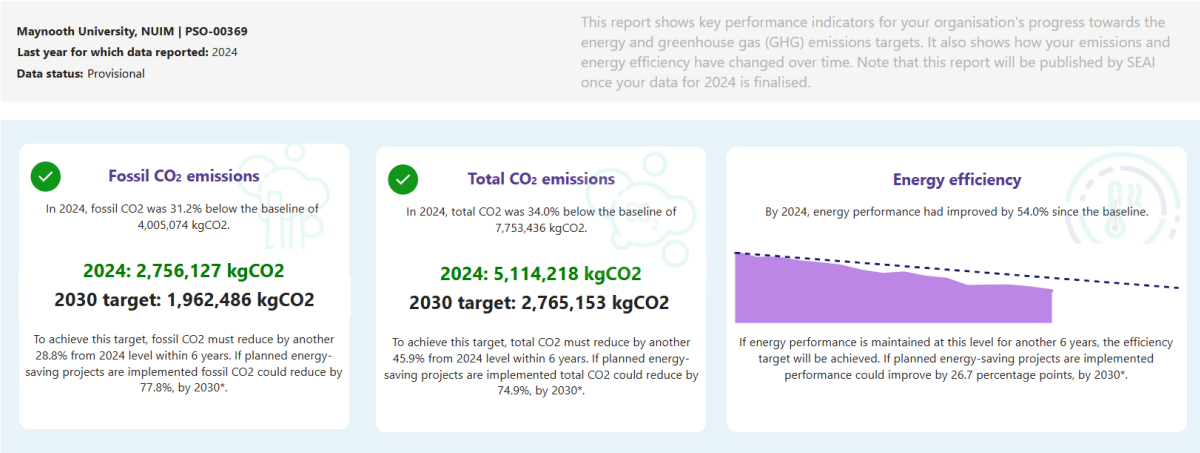
1 Our Targets

Overview

MU has two overarching objectives in relation to climate action in this decade, first to reduce energy related Green House Gas ("GHG") emissions by 51% by 2030 and second to Improve energy efficiency by 50% by 2030 compared to the baseline year of 2009.

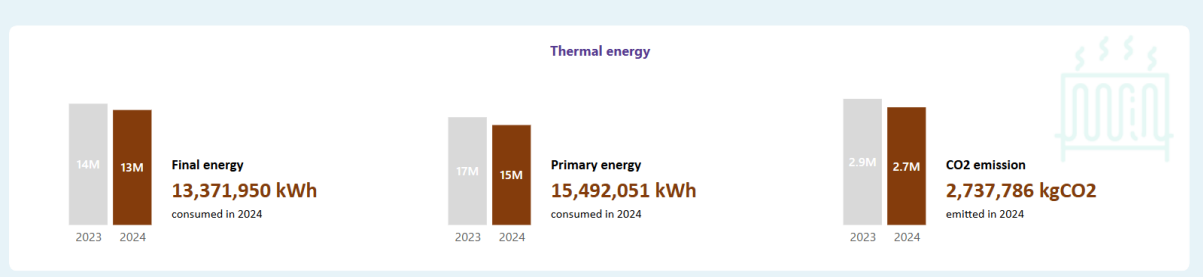
Our latest Sustainable Energy Authority of Ireland ("SEAI") Monitoring & Reporting tool (M&R) 2024 -using the new M&R 2030 - and modelling using the SEAI Gap to Target Tool ("GTT") indicates that the university is currently on target to achieve its 2030 objectives.

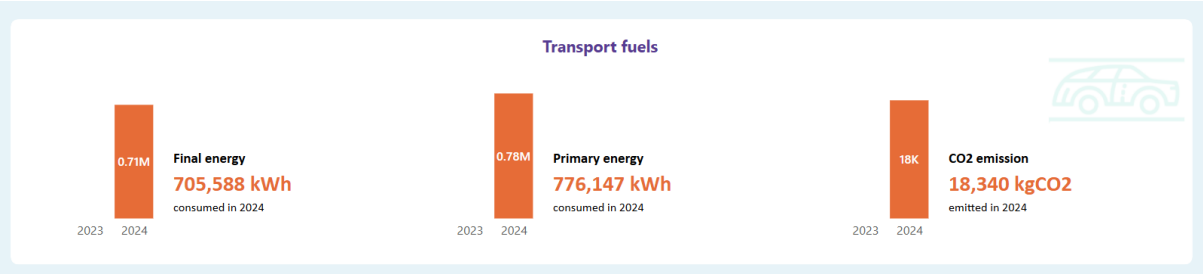
The graphics below taken from the M&R indicate the baseline and progress achieved so far; these 2024 emissions numbers would be the emissions in 2030 if no new projects were implemented.

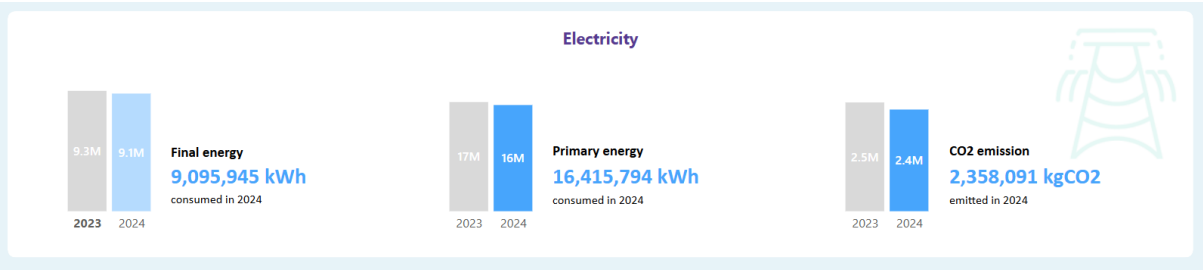


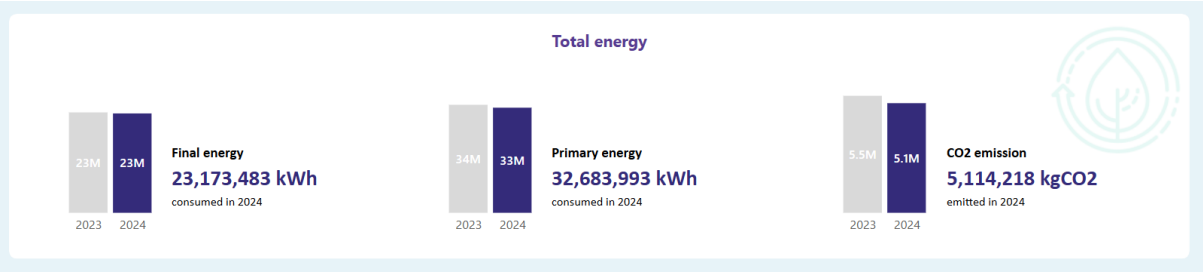
This progress has been achieved during a time of significant growth (since 2009 baseline year) for the university where student numbers have grown by over 50% to almost 16,000 and the built environment has also grown by 42% or 34,000m^2 over the period.

The following graphs indicate the change since 2023 and all show reductions except transport.



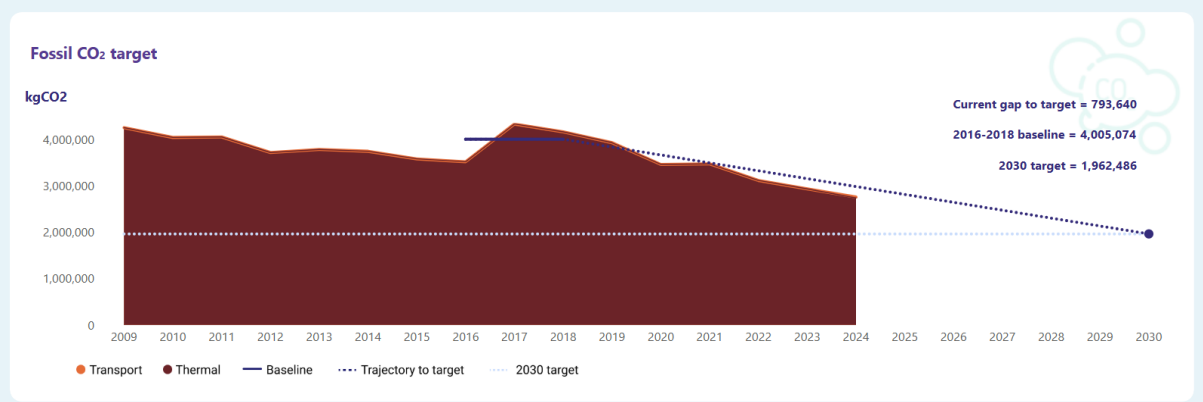






1.1 Reducing energy related GHG emissions by 51% by 2030.

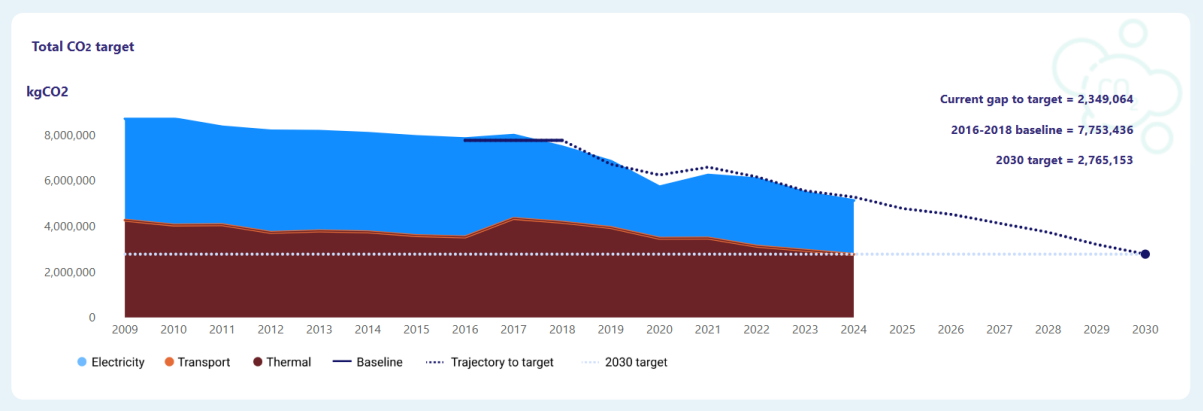
MU has been actively working on this target and has recently procured a framework with obligated parties to implement energy efficiency and decarbonisation related projects. In this, our fourth CAR, the project list has been updated to reflect new opportunities identified and learnings from existing projects.



In the last year the fabric upgrade of arts, the final phase of the original John Paul II library upgrade and the decarbonisation of Rye Hall heating projects were all completed.

The latest M&R report shows that the university is currently on target and below the glidepath

However meeting this will require that funding is available for the projects identified and all completed on time delivering the expected results.



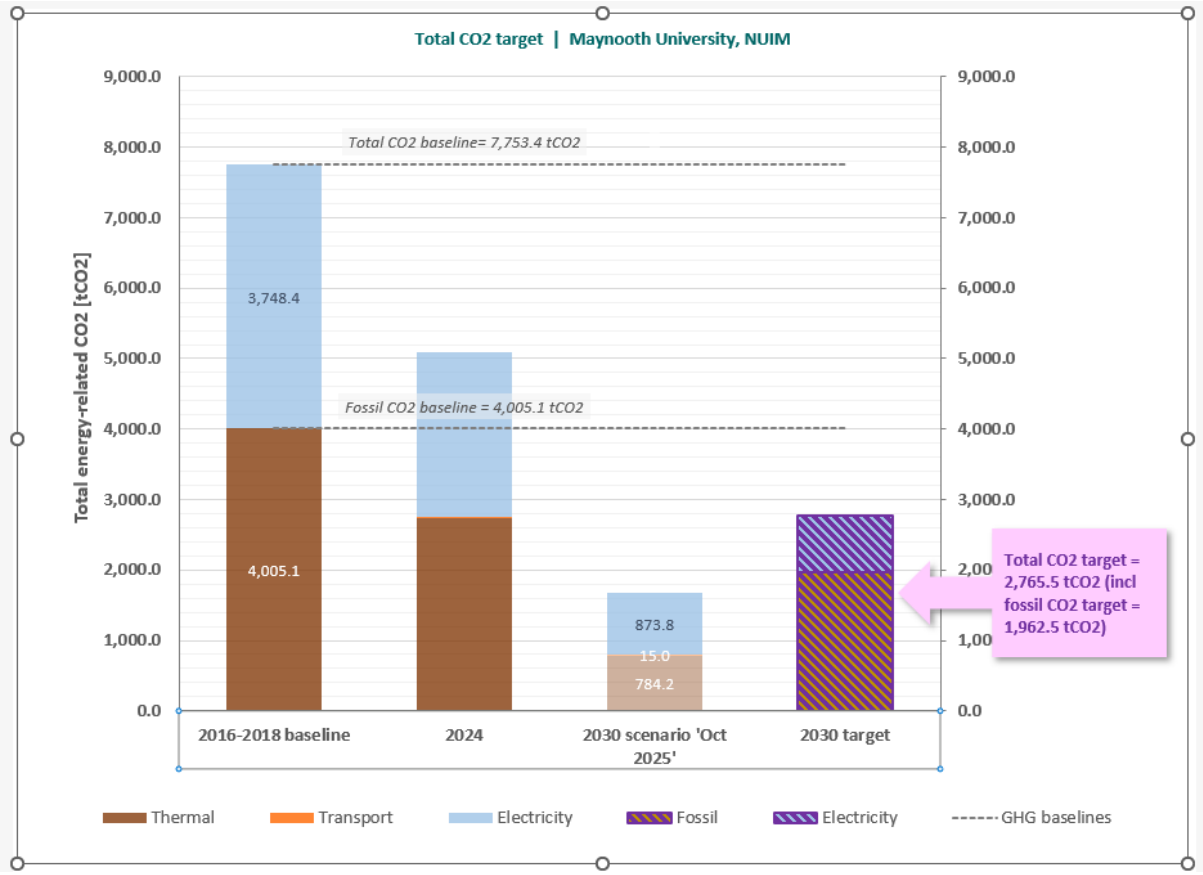
The MU decarbonisation project list focusses on the newer larger buildings as these are the larger emitters and will represent the most significant reductions. These newer buildings can also be decarbonised without significant fabric upgrades and the need for decanting which if required would have made the timeline of 2030 almost impossible to achieve.

The 2030 project list has been updated below and modelled using the SEAI GTT.
The model also incorporates projected student growth and the addition of new buildings planned during this time namely:

1) Buckley House Student Accommodation (116 beds)
2) Sports Extension (3,600m^2)
3) Student Building (Refurb of 1,600m^2 and extension 1,600m^2)

Project	Description	Stage	Planned Delivery
Library Pathfinder Project	Roof insulation, AHU upgrade, Boilers and Heat pumps , and Solar panels	Complete	2022
Auxilia Roof	Upgrade and improve insulation of roof	Complete	2022
Rye Roof	Upgrade and improve insulation of the roof	Complete	2022
BMS Upgrade	BMS upgrade to IQ vision	Complete	2022/3
Eliminate Diesel	Change existing diesel heating systems to HVO	Complete	2023
JPII hot water	change from gas to heat pump	Complete	2023
Arts Upgrade	Fabric upgrade to windows which are currently old single glazing	Complete	2024
JP II	Reading room floors upgrade Heating distribution and lighting	Complete	2024
Rye Hall heating	Rye Hall Electric heating upgrade	Complete	2025
Education House	Windows and electric heating	Sample section complete	2026
Eolas heat Pumps	Changing Eolas heating and cooling to Heat pumps	Designed	2026
Eolas Improved Controls	Improved controls	Designed	2026
Bioscience Controls	improved controls	Designed	2026
Bioscience heat pumps	Changing heating to heat Pumps	Designed	2026
John Hume	Improved Controls	Being designed	2026
John Hume Heat Pumps	replacing boilers with Heat Pumps	Being designed	2026
Eolas Lighting	Change to LED	Assessed / Designed	2027
Library lighting	Change to LED	Assessed / Designed	2027
Bioiscience Lighting	Change to LED	Assessed / Designed	2027
Solar Car Park	1.3 Mw solar car park	Designed / being evaluated	2027
Courtyard heat pumps	Replacing boilers with heat pumps	District heating consideration	2028
Callan Heat pumps	Changing heating to heat Pumps to carry most pof the load with gas boilers retained for top up in e	Under consideration	2028
Rowan House	heat pumps	Planned	2028
School Of Education Heat Pumps	Changing Heating and Cooling to heat Pumps	Engineering assessment complete	2029
Iontas Controls	Improved Controls	Detailed assessment planned	2029
Iontas heat Pumps	Changing heating to heat Pumps	Detailed assessment planned	2029
JP 2 Extn	Heat Pump to carry most of the load and existing gas boilers left for top up in extreme weater conditions	Detailed assessment planned	2029
Complete			

The funding for some of these works is largely in place as projects move through detailed design there may be changes to the funding required and new approvals sought. Some of these may be 2050 projects.

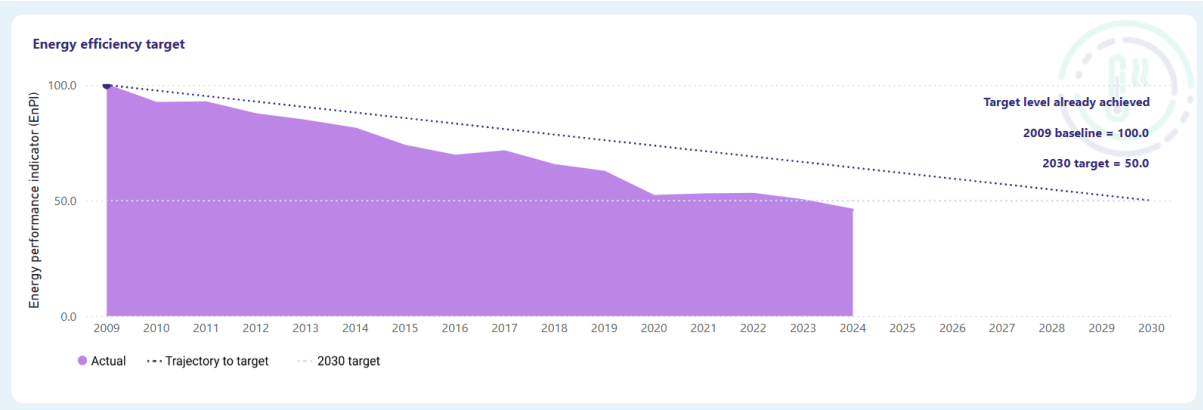


The modelling above using the SEAI GTT indicates that the University will meet its 2030 targeted reduction in GHG emissions based on the implementation of these projects and projected growth.

1.2 Improving energy efficiency by 50% by 2030.

For MU the energy performance indicator is (EnPi) = kWh / FTE Students

The graph below is taken from the SEAI M&R, this shows that the university has already achieved this target and is currently well below the 2030 glidepath having achieved a 54% improvement in efficiency to date.
This will be further helped by increasing student numbers and energy efficiency projects but negatively impacted by new buildings.



The years 2020 and 2021 were both affected by Covid 19 as normal campus activity ceased in March 2020 and did not resume until September 2021. In 2022 an additional 10,500m^2 (Approximately 10% of the non-residential estate) was added.

1.3 Consistency with Section 15(1) of the Climate Action and Low Carbon Act 2021

MU shall, in so far as practicable, perform its functions in a manner consistent with—

(a) the most recently government approved CAP,
(b) the most recently government approved national long term climate action strategy,
(c) the most recently approved national adaptation framework and approved sectoral adaptation plans,
(d) the furtherance of the national climate objective, and
(e) the objective of mitigating GHG emissions and adapting to the effects of climate change in the State.

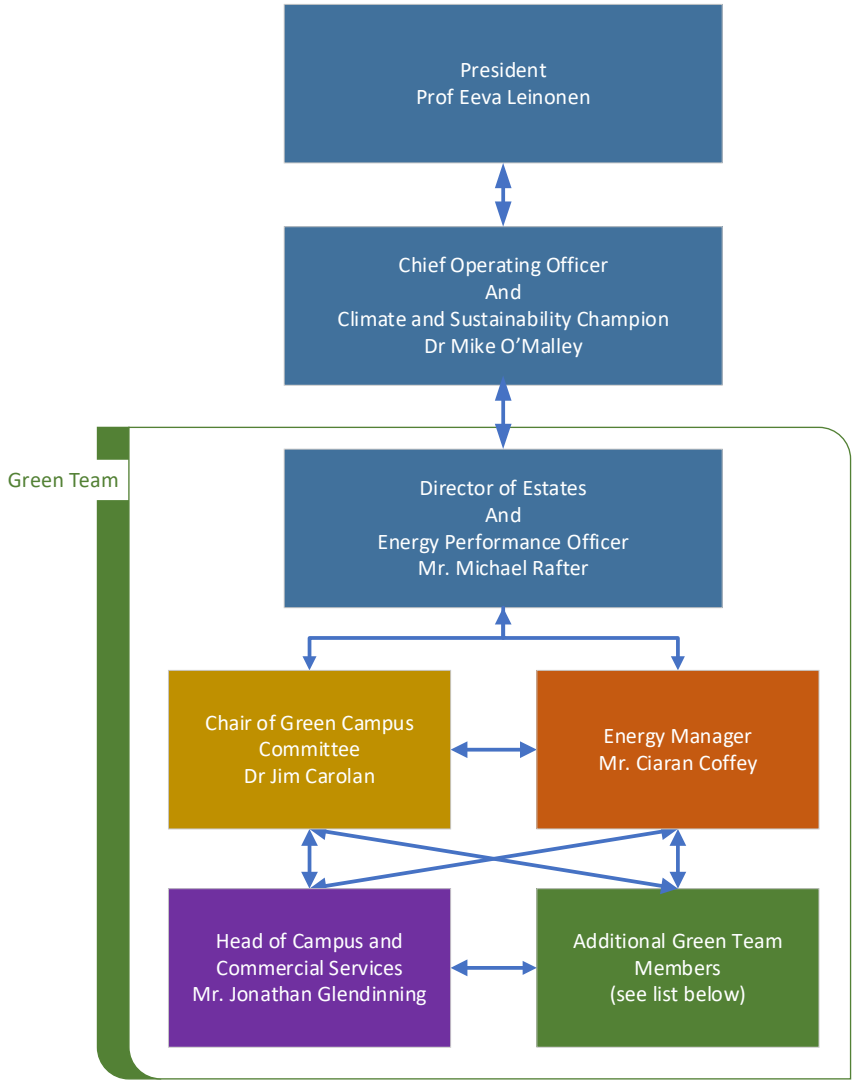
Evidence of this approach are:

- The MU Climate Action Roadmap 2025
- The MU Framework for the Management of Capital Works
- The work of the Icarus Climate Research Institute
- The work of the MGC (Maynooth Green Campus)

2. Our People

2.1 Leadership and Governance for climate action

The chart below outlines the Maynooth University structure for leadership and governance in respect to climate action.



The MU President Professor Eeva Leinonen is the Chief Officer of the University, she is accountable to the MU Governing Authority and is the Chair of the University Executive (UE).

The Chief Operating Officer, Dr Mike O'Malley, is the Bursar and Secretary of the University and a member of University Executive. He is the nominated Climate and Sustainability Champion and is the UE member with responsibility for the Estates, Information Technology, Human Resources, Finance and Governance functions of the University. As Bursar, he can champion the project budgets required to advance this plan.

The Director of Estates Mr. Michael Rafter is the director responsible for the functional and capital estate. He is a member of the senior management team and is the Energy Performance Officer. In his role he has decision making powers with regard to estate facilities, budgets and procurement. The Director of Estates leads the MU Green Team.

The Green Team Includes the following:

Michael Rafter	Director of Estates and Capital Development (Energy Performance Officer) and member of MGC
Jim Carolan	Associate Professor MU Department of Biology and Chair of MGC
Jonathan Glendinning	Head of Campus and Commercial Services which includes Powerhouse who look after mechanical and electrical plant including the Building Management System. He is also a member of the MCG
Ivan Griffin	General Services Manager, which includes waste management, traffic management, security and maintenance personnel. He is also a member of the MCG
Ciaran Coffey	University's Energy Manager and member of MGC
Mireia Guardino Ferran	Estates Green Campus Co-ordinator and member of MGC
Stephen Seaman	Grounds Supervisor and member of MGC
Dorena Bishop	Administrator in MU Department of History and Member of MGC
Sarah Coughlan De Silva	Administrator in MU Department of Ancient Classics
James Cotter	Technician in MU Department of Computer Science
Karen Jago	Manager in MU Information Technology Services Department

The Green Team is primarily focussed on energy targets and reducing use where possible to achieve reductions. They are particularly focused on the 15% 'reduce your use' target over the winter.

Initiatives being targeted include:

- Adjusting heating set points to 19^{o}
- Adjusting heating schedules to reflect core hours (some exceptions made for research needs that take place outside of these times).
- Moving all evening and out of hours classes to just two locations (our newest and most efficient buildings).
- Working with Timetable Office to match lecture theatre AHUs to usage times.
- Switching off computer equipment when not in use, particularly the labs (central controls by IT Services and Departments).

- Reviewing freezer set points with technicians/research groups.
- Security lock up procedures to check lights.
- Plug in Heaters removed from the procurement system and staff offices.
- Regular reviews of BMS (Building Management System) to cut down physical plant usage where possible.

2.2 Engaging our people

MU has been engaging the campus in energy reduction and climate action significantly since 2009 as indicated by the glide slope in energy reduction per student to achieve our 2020 energy reduction target of 33% and subsequent 50% target for 2030.

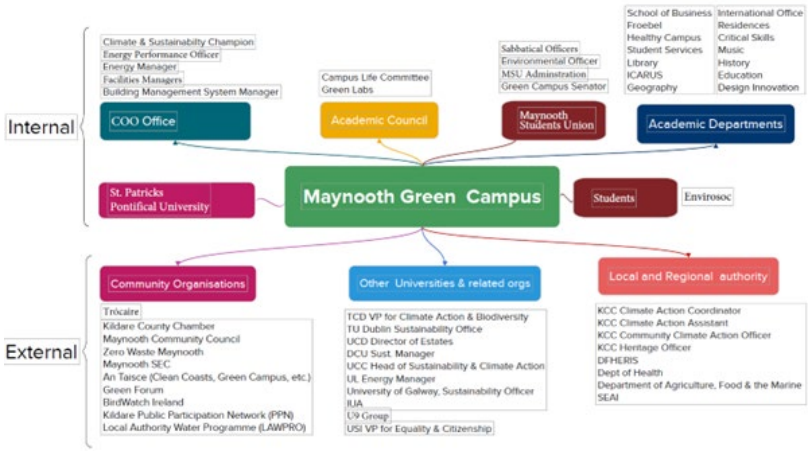
As a campus we have the MGC which was officially launched in 2012. It is a partnership of the three entities on the shared campus: MU (by far the largest entity), St. Patrick's Pontifical University ("SPPU" who own substantial property on the South Campus which are leased by MU at a cost of €1.7m per annum), and the development organisation, Trócaire who are also based on the campus and bring first-hand knowledge and expertise in the area of climate justice. .

The MGC is made up of the campus community with representatives from administrative staff, academic staff, Maynooth Students Union, MU Enviro Student Society, MU Estates Department, SPPU and Trocaire. The MCG roles include Chairperson, co-ordinators, working group leaders and student leaders.

The working groups are:

- Biodiversity
- Energy
- Climate Justice
- Travel and Transport
- Waste
- Water
- Sustainable Food and Urban Agriculture
- Health & Wellbeing
- Green labs

The diagram below shows some of the internal and external links of the MGC.



Since its establishment in 2012, the MGC has been a vigorous agent for bottom-up and top-down change on the environment. The committee has cross-campus representation and has achieved widespread buy-in from staff and students in a broad range of actions. The actions link local sustainability work and best practice on campus with national and international leadership on environmental sustainability and climate justice issues.

For example MGC promotes activities such as 'Maynooth Unplugged' to reduce unnecessary energy use; 'Marchathon', 'Walktober' and' Biodiversity Walks' to encourage walking for health. MGC also campaign to improve behaviour in relation to waste including litter pick up activities, labelling bins, and organising recycling workshops. MGC encourage a civic dimension and partnership across all University and campus user stakeholders which is a key part of the sustainability programme success on MU campuses.

In addition, the approach of MGC is also designed to make links between local good practice and a push for national and global policy change on environmental sustainability. From the outset action on climate change and its relationship to social justice globally has been intrinsic to MGC's work.

As well as working closely with Campus Services, Grounds and Capital sections of the MU Estates Department, MGC works actively with staff and students across the faculties of Arts and Humanities, Science and Engineering and Social Sciences (particularly MU Department of Primary and Early Childhood Education (Froebel), MU Education Department (Secondary Level Teacher Education), MU Department of Adult and Continuing Education, MU Department of Social Science (Community & Youth Work, Social Policy), MU Department of Business and MU Department of Law). Each of these areas has its own possibilities for incorporating sustainability into teaching and research and MGC has sought to work with all of them in one way or another.

The MGC initiative has reached out to all academic departments to promote research and teaching relevant to environmental questions, and MGC has also sought wider public engagement at local, county and regional levels and has emphasised the importance it attributes to this element of climate action and the importance of community involvement in campus improvements.

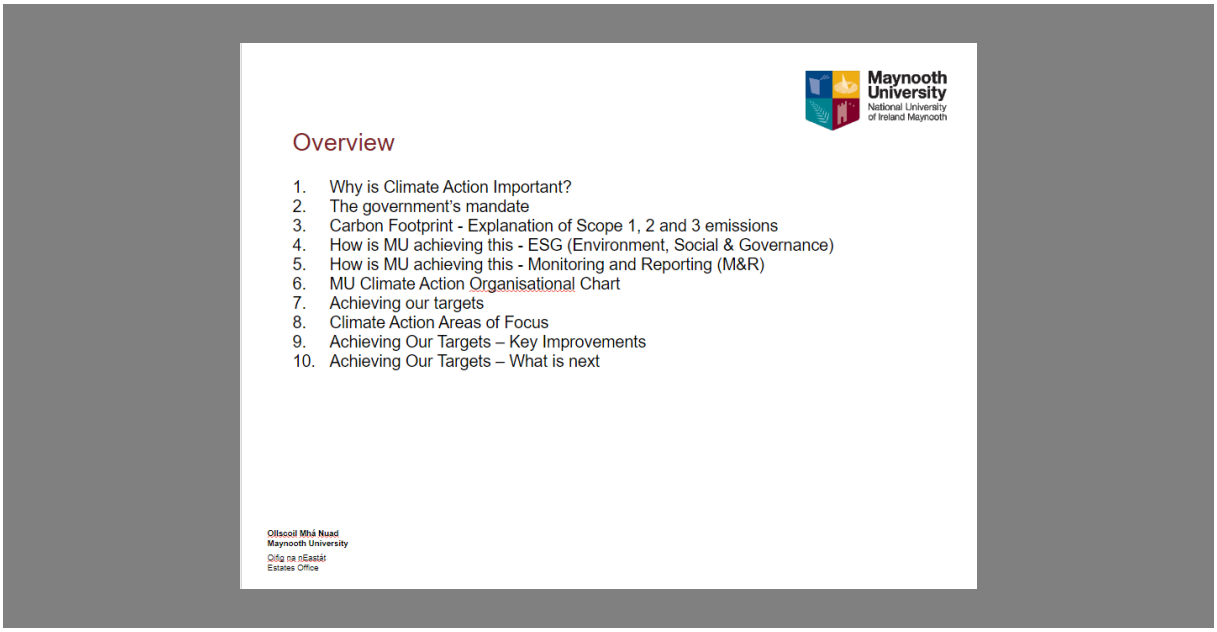
MGC are an important vehicle to engage with the wider campus community. The MU Green Team includes several MGC members.

MGC regularly sends out updates and reminders to people regarding green agenda items and holds several awareness events throughout the year as well as being active on social media. Green Campus | Maynooth University

The green team in conjunction with MGC are targeting areas/groups to raise awareness and are working with the relevant staff and students to effect change and reduce our use.

2.2.1 Climate and Leadership Training for Senior Management

MU has recently developed its own online training course for staff and the course overview slide is shown below.



This training is live on MU's IProtectU platform which allows for targeted distribution and record keeping.

This will be reviewed routinely and we would hope to avail of the DECC centralised OneLearning provision of climate related training and upskilling for all civil service grades once it is available.

3. Our Way of Working

3.1 Annual Reporting

The University's annual report will includes reporting in the Statement of Governance section on the following:

- GHG emissions (performance versus target);
- Energy usage (performance versus target);
- Implementation of the mandate;
- Sustainability activities (across a number of headings including Green Procurement, Construction, Waste Management, paper usage, water usage and conservation measures, Circular Economy, campus biodiversity and sustainable travel modes).

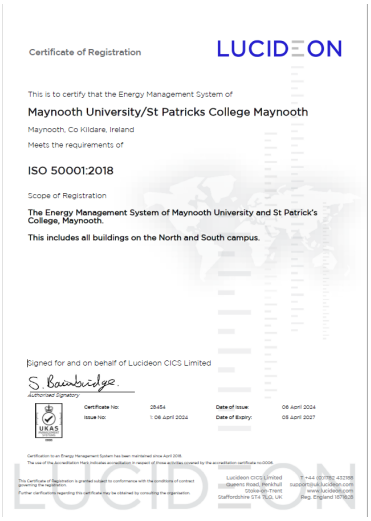
MU uses to SEAI M&R system to report on the individual mandate requirements as indicated by the reports and graphs included above that were generated by this system.

3.2 Individual Mandate Requirements

Maynooth University uses the SEAI Monitoring & Reporting (M&R) system as our central platform for energy data collection, performance tracking, and annual compliance reporting.
Maynooth University uses this system to record their annual energy consumption, calculate associated greenhouse gas emissions, and submit reports in line with public sector energy efficiency obligations. This enables accurate measurement of progress against our Climate Action targets and ensures continuous improvement in energy performance.

3.3 External Certification

MU has achieved ISO 50001 (Energy Management) certification and this was recently recertified until 2027



Certificate of Registration

LUCIDEON

This is to certify that the Energy Management System of

Maynooth University/St Patricks College Maynooth

Maynooth, Co Kildare, Ireland

Meets the requirements of

ISO 50001:2018

Scope of Registration

The Energy Management System of Maynooth University and St Patrick's College, Maynooth.

This includes all buildings on the North and South campus.

Signed for and on behalf of Lucideon CICS Limited

S. Bainbridge

Authorised Signatory

Certificate No:	28454	Date of Issue:	08 April 2024
Issue No:	1 08 April 2024	Date of Expiry:	08 April 2027

UKAS

MU is currently working towards ISO 14001

MU was awarded the Smarter Travel Mark in December 2023

MU has also received external certification in the form of three green flags through MGC. MU was awarded the Green Campus Flag in September 2018. The Flag is an international award under a scheme co-ordinated by the Foundation for Environmental Education (FEE), based in Copenhagen, Denmark. The Flag is awarded to third level institutions that satisfy an assessment of progress undertaken by An Taisce.

To achieve this goal and to further develop the reach of our activities, MGC created a roadmap with a set of realistic objectives that fall under a number of thematic areas: Biodiversity, Energy Management, Water Conservation, Waste Management, and Sustainable Travel and Transport. In addition, MGC adopted the theme of Climate Justice, which we see as absolutely urgent in the context of global warming and climate change. This theme has now been included as a sub-theme under the national Green Campus programme by An Taisce. The flag was awarded in recognition of our achievements under all of these thematic areas.

This Flag was renewed in 2023

The MU Campus has also received Green Flag Award in recognition of achieving international standard for parks and green spaces (renewed 23/24), and Green Heritage Site accreditation in recognition of achieving the required standard in the management and interpretation of a site with local or national historic importance (both renewed 23/24).

MU was also a finalist in the '2030 Climate Action' section of the Green Gown Awards in 2023.

Nine laboratories at Maynooth University have received sustainable laboratory certification for their commitment to implementing best-in-class, sustainable research practices.

Minister for Further and Higher Education, Research, Innovation and Science, James Lawless TD announced sustainable laboratory certifications to research spaces in higher education institutions across Ireland, under a Research Ireland-led programme.

3.4 Green Public Procurement

MU has adopted green procurement in the set-up of central contracts many of which are drawdowns from larger Office of Government Procurement frameworks or contracts. The purchase of equipment from the "Triple E register" is implemented. The University has a central procurement and contracts office, and all tenders are run through this office. The office is aware of an implementing the EPA Green Public Procurement Guidance. All tenders for the last number of years have included some green public procurement criteria and this is being strengthened with each iteration.

3.5 Construction

MU has its own 'Maynooth University Design Guidelines for Designers and Specifiers'. These guidelines are regularly updated to take account of changing regulations or lessons learned from both previous construction projects and campus maintenance experience. These guidelines are issued to design teams / project managers for both capital and minor works. The latest version specifies low carbon construction methods and low carbon cement material as far as practicable and references the best practice guidelines for the preparation of Resource and Waste Management Plans for construction and demolition projects.

3.6 Organic food

Maynooth University caterers, MasterChef, recognise the importance of protecting the environment and the important role they play in the sustainable development of the multiple communities where they operate, improving the social, economic and environmental well-being of their employees and customers.

At MasterChef, sustainability is not an add-on, it's embedded into the way they think, operate and innovate. From reducing waste to regenerative farming, their approach combines bold ambition with meaningful action. Everything they do is designed to protect the planet, support people and future-proof their food system.

An example of this, is their own organic Ellan Farm. Ellan Farm is MasterChef's commitment to doing food better. It is their own purpose-built 20 acre organic farm designed to close the loop on how they grow, serve, and return food to the land. Born from a passion for sustainability and innovation, Ellan Farm helps MasterChef to reimagine what catering and events can look like when driven by care for the planet.

Masterchefs menus are organic seasonable and sustainable, in 2024 Ellen farm supplied 30% organic produce to the company.

At MasterChef and Ellan Farm, their philosophy is Farm to Fork to Farm. Everything they grow is used in their kitchens and events and any food waste is returned to the farm to be composted through their on-site bio-digester.

3.7 Food Waste

Food waste has a separate waste stream. The food waste from restaurants, catering concessions and departmental kitchens is collected in brown bins or kitchen caddies and then taken off-campus to a composting facility in Nobber, Co. Meath. Compost is returned to the campus for use by campus landscape and grounds staff or for taking home by staff and students for their own gardens, closing the waste management cycle and supporting the circular economy.

In 2024 there were 10.29 tonnes of food waste generated on the campus that was sent for composting.

The university has recently tendered its main food service contract and food waste is included as a targeted measure to be addressed with the successful bidder.

The central production kitchen on the campus at the main restaurant has a dedicated bin store where the different streams (Mixed Waste, Recyclables, Glass, Cardboard, Food Waste) are managed and includes a cardboard baler.

3.8 ICT Equipment

In line with our sustainable procurement commitments, Maynooth University confirms that 80% of ICT end-user products procured are certified to the EPEAT Gold Standard, meeting recognised environmental performance criteria and supporting our Climate Action targets.
This is something that both IT Services and the Procurement Office are aware of, we avail of the HEAnet tendered framework process.
Our main contract is for Dell devices (computers, servers, monitors and laptops) and almost all of these are EPEAT Gold rated with a small number of Silver and Bronze rated devices. Dell devices are similarly TCO certified and are Energy Star compliant.

Dell actively uses EPEAT standards as a key aspect of their sustainability initiatives across product lines including monitors, computers, and servers.

Dell registers products under EPEAT for those covered by IEEE 1680.1-2018: desktops, notebooks, monitors, servers, displays, and more. Some product categories (like storage solutions) may not yet be in scope, but Dell maintains registration where applicable.

Dell highlights its position as an "EPEAT Climate+ Champion" with over 220 products designated as Climate+, providing extra assurance of limited climate impact for qualifying devices.

3.9 Paper

MU has several initiatives targeted to reduce the use of paper and cardboard on campus.

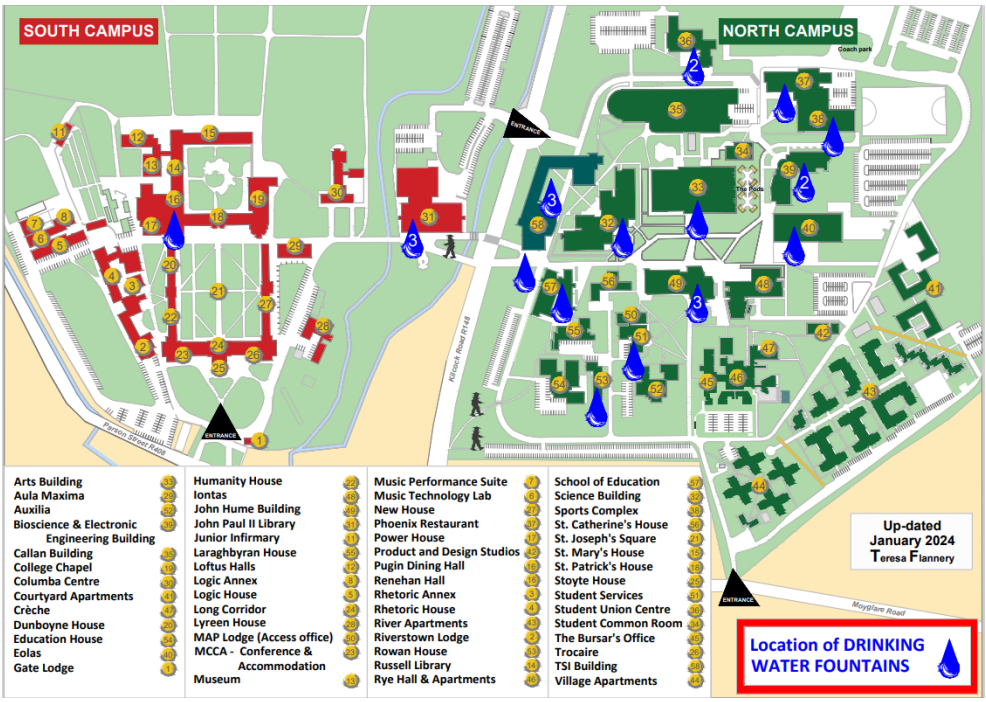
- The use of "Moodle" a virtual learning environment for Students.
- The use of Microsoft Teams for meeting minutes and management of various committees.
- A managed print service has been rolled out across the campus in recent years. This initiative includes setting all machines to default as black and white double sided printing. (this has saved ~400,000 sheets per annum)
- Managed print has reduced the number of machines and standardized the toners and consumables across the estate.
- Managed print allows jobs sent to print and not collected to be automatically deleted (this saves ~122,000 sheets per annum)
- Since introducing managed print the volume has reduced from ~4,000,000 sheets per annum to 2,518,000 sheets per annum.

As paper usage cannot be eliminated, just reduced, we are currently engaged in the process of changing to recycled carbon neutral paper as the default paper type.

The volume of paper continues to be monitored through managed print.

3.10 Water

MU has (in addition to staff tea rooms) put in place several drinking water fountains where people can refill their bottles.



Individual Water Bottles

MU has sought to promote changes in behaviour in water use, particularly in substituting the use of drinkable tap water for the use of disposable bottled water.

To promote the reusable water bottle initiative, additional drinking water fountains were installed on campus to encourage multiple-use bottles and to reduce the dependency on buying plastic bottles of water. A further six water fountains were added in 2022 as part of the new TSI Building and the incoming students in September 2023 were all given a branded reusable water bottle. The first external water filling station was also placed on the campus in late 2023.

Water Conservation

Water conservation is a priority for MU.

Recent buildings constructed on campus incorporate various water saving measures such as rainwater harvesting, reduced volume cistern design and urinal flush activation based on occupancy sensors.

The campus design guidelines for any new building and campus public realm design demand the use of low volume taps, rain water harvesting, grey water for toilet flushing, grey water for irrigation, green roofs and rain gardens.

Water attenuation features are adopted to mitigate flooding, to strengthen the sustainable drainage systems on campus and to reduce the load on the municipal drainage system.

Water butts are strategically located across campus to collect rain water which is used for watering plants and flower beds, rather than the inefficient transport of water in tanks.

The ageing watermain on campus has resulted in significant water leaks in past years. Ongoing investment is being made as part of a multi-annual replacement programme to reduce water loss, to meter water use to highlight abnormal water use, and to reduce inefficient water use.

Water usage on campus has dropped from ~170,000m^3 in 2016 to ~90,000m^3 in 2024

3.11 Single Use

MU is actively promoting the reduction / elimination of single use items on campus.

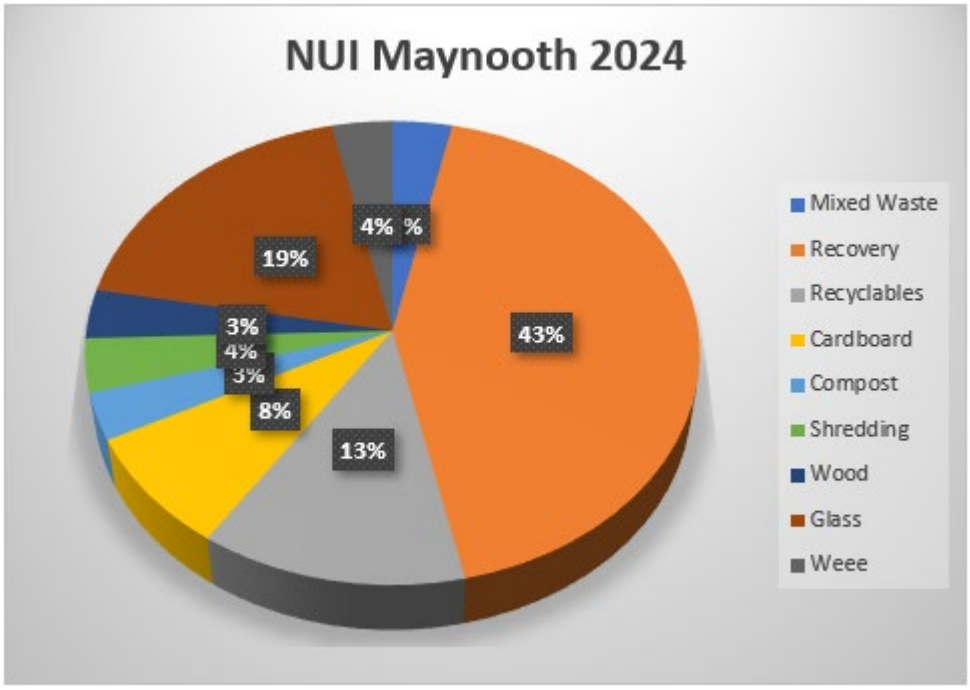
- The campus restaurants use delph for dining in.
- Campus restaurants offer a discount for 'Keep Cups'. Staff, students and visitors are encouraged to keep a cup, and to reduce the dependency on single-use cups. The Keep Cup raises awareness of the importance of recycling.
- As previously mentioned, MU has an extensive network of drinking water fountains where people can refill their water bottles and eliminate single use plastic bottles.
- Where caterers use disposables they are mandated to use compostable disposables and to eliminate the need for single use plastics.
- 

3.12 Waste Management / Recycling

Waste management and recycling has seen significant improvement over the years as outlined below with several initiatives aimed at reducing waste.

MU has a community-based approach to managing environmental concerns. Waste management features strongly in the work of the MGC, the MU Green Team and the MU Estates Campus Services Team and at an individual level across the campus community.

To achieve best practice in waste management, efforts by the campus community and by the waste management service provider have been co-ordinated. They have been designed to increase awareness, promote waste recycling and actively reduce the amount going to landfill. The University has an extensive recycling programme which is a combination of onsite source segregation and off-site processing to achieve high recycling / recovery rates. In 2024 the recycling recovery rate was 97%.



This is illustrated by the chart above, the source segregation into recoverable streams accounted for 51%, a further 45% is recovered in post collection processing giving an overall recycling rate of 96%.

In 2014 the campus generated ~440 tonnes of waste with a recycling recovery rate of 91%, now almost 10 years later the campus is much bigger both in terms of population and built environment but is generating 360 tonnes of waste with a recycling / recovery rate of 96%

This improvement was achieved through the implementation of strategic procurement, campus community engagement and a wide range of waste recycling and recovery measures including the bin-less office, cardboard recycling, self-compacting bins, food waste recycling, landscape and grounds recycling initiatives. Waste Electrical and Electronic Equipment (WEEE) recycling is active across the MU campus together with deposit and collection points for glass, batteries, CDs and clothes.

The broad range of measures undertaken on campus to reduce waste, and to increase recycling and recovery are outlined in more detail below:

The Bin-less Office

MU operates a bin-less office system. This system encourages each staff member to actively consider waste segregation and recycling waste elements such as paper, batteries, ink cartridges, electrical waste and food waste. Each office user is issued with a recyclable's cardboard desk tray and has easy access to a mixed dry recyclables bin (green) and a general waste bin (red) for the correct disposal of waste. Each kitchen is supplied with a food waste bin (brown).

This 'user segregates' waste management approach supports streamlined and more efficient office cleaning service operations.

Cardboard Baling and Recycling
Cardboard is a separate waste stream, it is segregated into dedicated 1,100 litre yellow bins which are provided at key locations. A Goupil electric van is deployed to gather and deliver the cardboard to a central campus location where it is baled on campus and issued to the waste management contractor for recycling. The main campus restaurant has a dedicated baling machine.

Public Realm Self-compacting Bins
The University has rolled out solar powered self-compacting bins as part of the campus public realm. Each self-compacting bin has telemetry which alerts the operations team when it is full, typically every three days. The bin emptying frequency requirement is reduced from daily to 'only when full'. The roll- out of the self-compacting bins visually promotes sustainable waste management strategies, while ensuring more efficient use of limited human and financial resources.

Catering Outlet Initiatives
As already mentioned, a surcharge now applies to tea and coffee purchased on campus where a single-use compostable disposable cup is required.

Catering service providers on campus have discontinued the use of single-use plastic cups, cutlery and straws, in tandem with the introduction of Fair-Trade tea and coffee and the wider promotion of re-usable Keep-Cups. The installation of additional Drinking Water Fountains on campus actively reduces the dependency on bottled water purchase and therefore reduces plastic waste.

Where takeaway food is offered, compostable cups, containers, cutlery and straws are provided to eliminate the need to have single use plastics.

Circular Economy

Furniture
MU reuses furniture wherever possible. Furniture no longer required is taken into stock and any furniture to support moves and changes is taken from recycled stock where possible.

Anyone trying to order a piece of furniture through the purchasing system is first directed to the stock furniture to see if their need can be met from existing stock.

This is a joint initiative of MU Estates, MGC and MU Procurement.

Reuse Pop-up Centre in Residences
At the end of the year the students in residence are invited to a reuse pop up centre where they can leave their unwanted items for the incoming students next year.

Campus Landscape and Grounds Waste Recycling
The MU Campus Grounds team work to ensure that footpaths, carparks and roadways are kept clear of leaves to both reduce the risk of slips, trips and falls, and to mitigate blockage of road gullies and drains in adverse weather. Leaves are collected, stored on site in large concrete bays and developed into leaf mould over a three-year period. The leaf mould is a clean, weed free growing media that is used for seed propagation and flower beds.

MU has gone glyphosate free, woodchip/bark mulch is applied around the base of trees and in flower beds every season. Providing a thick layer of mulch around the base of a tree allows for effective weed suppression without the negative effects of using weed killer.
Tree cutting works that are carried out on campus incorporate wood chipping and storing the chip until the chip is mature enough to use as a decorative mulch.
All larger green waste that cannot be composted on site is collected from the campus and transported 5kms to a local green waste processing facility. As part of reducing unnecessary transport, mulch is brought back to campus on return journeys from the green waste facility, to be used by our grounds team.

Deposit Return Scheme

Maynooth Students' Union (MSU), with support from Maynooth Green Campus and the Estates Team, has launched a new Return Scheme on campus, designed to increase fundraising for the Charity Partner of the Year while addressing waste reduction. By dropping off empty bottles and cans at designated collection points across campus, students and staff can help reduce waste and raise funds for two meaningful causes: As I Am and Community Cancer Caregivers, Maynooth.

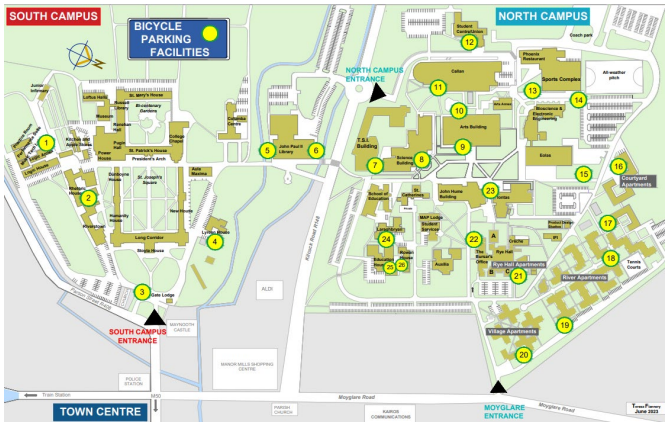
4. Our Buildings and Vehicles

4.1 Promoting sustainable travel

The MU campus is cycle and pedestrian friendly with the campus core pedestrianized. There is a campus speed limit of 25kmph on all internal roads.

MU has a policy of prioritising sustainable transport modes on campus, and in particular encouraging pedestrian and cyclist movement over vehicular movement. All sites have cycle racks in a variety of designs which are currently being standardized as sheltered Sheffield stands. The University offers access to shower and changing facilities for cyclists, supports a 'Cycle to Work' scheme for staff. MU encourages cycling through several services, events and groups, and provides bicycle repair stands on campus.

MU awarded NTA's Smarter Travel mark



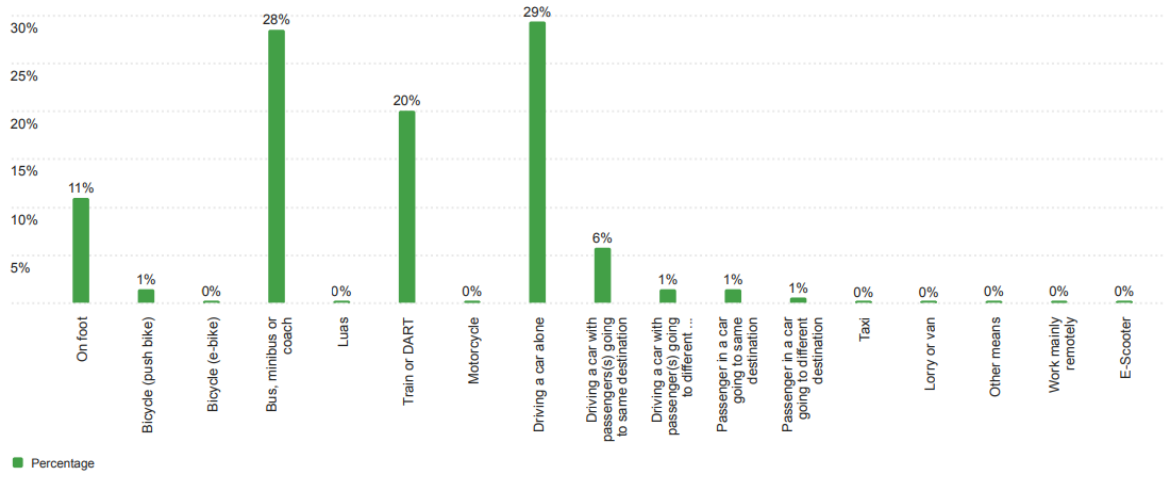
Bicycle parking locations across the campus

The university's modal splits have been steadily moving towards more sustainable modes since 2009 when car travel represented 60% and public transport was at 18% to the current picture today where Maynooth is a hub for public transport through a combination of national services and local private operators working with MU responding to student accession data.

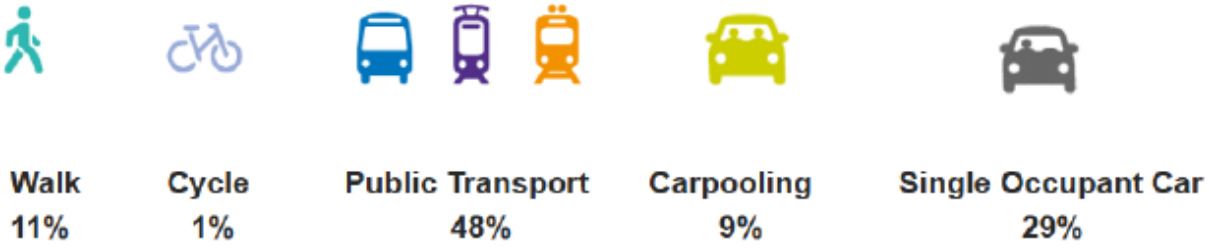
Our commuting pages promotes these [Commuting | Maynooth University]

The most recent survey undertaken by the NTA highlights the progress that has been made since 2009 with 60% now commuting sustainably and public transport up from 18% to 48% while car travel decreased from 60% to 38%.

Most recent Travel survey undertaken in April 2025

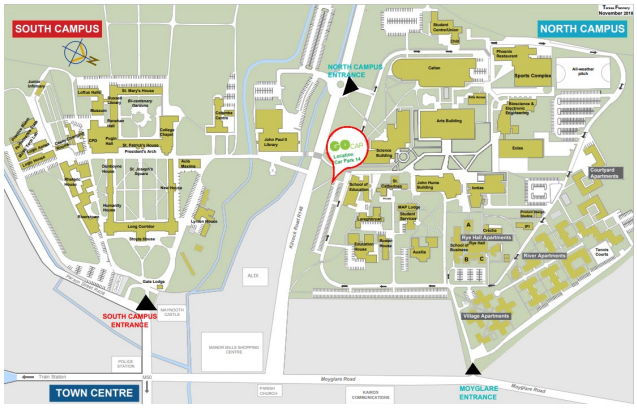


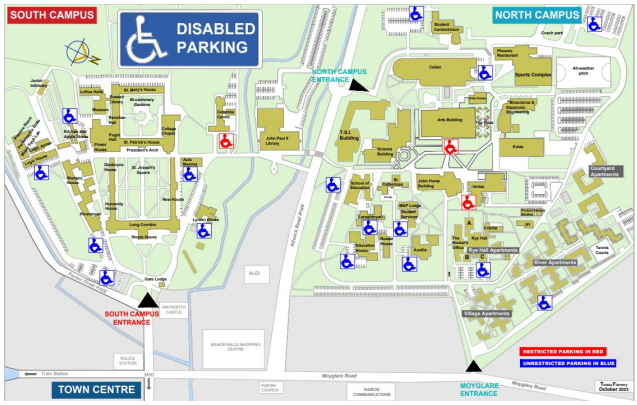
- 12% of students and staff actively commute
- 48% used a variety of public transport
- 9% used some form of car-pooling
- 60% commuted through sustainable and active modes



Where car travel is necessary the university promotes car sharing and provides dedicated car sharing spaces on campus [Car Sharing | Maynooth University]. To use car sharing spaces two valid parking permits must be displayed in the vehicle. Car sharing is supported by the initiatives such as the guaranteed lift home should your car share let you down for unforeseen circumstances.

The University also has a 'GoCar Go Base' on campus adjacent to the Kilcock road so people can avail of a short term car hire if required





The university is well catered for disabled parking with spaces located across the campus

EV Charging

The University has 16 Electric Vehicle ("EV") charging facilities on campus managed by Easygo.

The side of Bio-Science Building (Barrier access) on the North Campus has four AC charge points and two DC charge points giving a total of six EV spaces.

New car park (North Campus) has two AC charge points and four DC charge points giving a total of six EV spaces.

Side of Lyreen House (South Campus) has two AC charge points and two DC charge point giving a total of four EV spaces.

4.2 Phase Out Parking

The number of parking spaces on campus has remained constant through 2024. However, due to growth in campus population (student and staff numbers), the ratio of parking spaces per campus user has decreased. This reflects a shift towards sustainable transport modes. No new parking facilities have been added, and priority has been given to promoting public transport, cycling, and walking.

4.3 Display Energy Certificate

Display Energy Certificates have been installed in the lobby of the campus buildings indicating the current energy rating. These energy ratings have been steadily getting better as we do works or improve controls of the building systems.

4.4 Removal of fossil Fuels for new and current buildings

Maynooth University is committed to the complete removal of fossil fuel use in both new developments and existing buildings through phased replacement of heating, hot water, and other fuel-based systems with renewable and low-carbon alternatives, in line with national decarbonisation targets. No new fossil fuel boilers were installed in 2024 and the capital projects to refurbish or develop new facilities have all utilised heat pump technology.

4.5 Procurement of Energy-Related Products

The university is keenly aware of the need to consider sustainability in its procurement decisions. The need to comply with environmental legislation and to seek environmentally friendly options and solutions is strongly advocated to all staff members.
The university's Strategic Plan emphasizes infrastructure sustainability, carbon reduction, energy efficiency, and intent to develop 'green procurement practices.'

4.6 Procurement of Cleaning Contracts

Bidvest Noonan's , Maynooth University Cleaning Contractors, have confirmed that their Environmental, Social and Governance Strategy, Sustainability - Environmental Performance - Bidvest Noonan. Their Project Sunrise, encapsulates their ambition to provide MU with a circular-economy cleaning solution using green/chemical-free approaches that achieve and will support our own route to net zero.

Environmental Champions at their Maynooth University operational teams are trained to promote positive behavioural change and think about how they support sustainability/reduce emissions. Sustainability training for all their operatives, which they now have as a standard part of their induction and rolling annual training programmes.

Noonans have employed a Goupil Electric vehicle to serve the campus in moving equipment and supplies.

4.7 Buildings

MU has a Building Stock Register which has been compiled and submitted to the SEAI.
The register is being maintained and updated annually and the information contained within used to determine the University's approach to 2050.

As already stated, MU has its own Maynooth University Design Guidelines for Designers and Specifiers. These guidelines are regularly updated to take account of changing regulations or lessons learned from both previous construction projects and campus maintenance experience. The guidelines are issued to design teams / project managers for both capital and minor works and have been updated to take account of the public sector mandate and the requirement for no fossil fuel heating after 2023.

MU has already embarked on the projects outlined above in this roadmap and some projects are already complete including the replacement of gas boilers with a heat pump in the library as a pathfinder project.

Last year a deep retrofit of the Arts Building (4,670m^2) was completed with the upgrade of the metal framed single glazed façade to a modern thermally efficient façade and associated mechanical and electrical works.
Phase 2 of the library refurbishment project was also undertaken which upgraded the heating and lighting in the original John Paul II library.

Rye Hall heating was also upgraded to electric.

The diesel fuelled heating systems in some of the older buildings are now being fuelled by HVO pending a further upgrade.

Our newest building opened 2022 is the first 'A rated' building on campus and has EXEED certification with no fossil fuels in its operation other than grid electricity. Hot water and space heating are provided by heat pumps. The building also incorporates rainwater harvesting to provide grey water for toilet flushing and a solar array on the roof.

New buildings are targeted to be A2 rated at design stage.

MU is a member of (Association of University Directors of Estates) AUDE, U9 (University Energy Managers Group) and Irish Universities Association (IUA) and benefits from sectoral information sharing through these groupings.

4.8 Vehicles and small engines

Since 2014 any new campus vehicles have been electric and most of the campus service vehicles both operated by MU and service providers are now EVs. (A sample below) These EVs allowed the pedestrianisation of the campus core as only these narrow track EVs can fit between the bollards to access the heart of the campus.

As of April 2025, Maynooth University Estates team is proud to announce the completion of its transition to an all-electric vehicle fleet marking a significant milestone in the university's ongoing commitment to sustainability and climate action.
Today, MU Estates operates a fleet of nine electric vehicles, including an electric ride-on mower and an electric forklift, and the transition is now complete. In addition, our campus service providers have embraced the move to electric vehicles: Bidvest Noonans (Cleaners) now use a Goupil, MasterChefs (Caterers) utilise two Goupils for deliveries, and MCR Security employs a Mullen Go car for patrols.

The small petrol powered hand tools were also replaced with battery operated equivalents.