UL Climate Action Roadmap 2030

2025 Update



October 2025

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Abbreviations

Abbreviation	Meaning
CO_2	Carbon Dioxide
B&E	Buildings and Estates
BOD	Biological Oxygen Demand
COD	Chemical Oxygen Demand
DEC	Display Energy Certificate
EEDPP	Energy Efficiency Decarbonisation Pathfinder Programme
EnPI	Energy Performance Indicator
EPEAT	Electronic Product Environmental Assessment Tool
ESB	Electricity Supply Board
EU	European Union
GHG	Greenhouse Gas
GPP	Green Public Procurement
GtT	Gap to Target
HEA	Higher Education Authority
IBC	International Business Centre
ICT	Information Communication Technology
IT	Information Technology
ITD	Information Technology Department
ISO	International Organistion for Standardisation
KBS	Kemmy Business School
kg	Kilogram
LED	Light Emitting Diode
MSSI	Materials and Surface Science Institute
NTA	National Transport Authority
NZEB	Nearly Zero Energy Building
PV	Photovoltaic
SEAI	Sustainable Energy Authority of Ireland
SI	Statutory Instrument
TCO	TCO Organisation
TGD	Technical Guidance Document
UL	University of Limerick
UN	United Nations

Acronyms

Acronym	Meaning
CyCUL	Cycle UL
ISCycle	Inclusive e-bike uptake and Sustainable use
WEEE	Waste Electrical and Electronic Equipment

1.0 Introduction

1.1 Organisational context

Established in 1972, the University of Limerick (UL) is an independent, internationally focussed university with circa 18,700 students and 2,000 members of staff. It is a young, energetic and enterprising university with a proud record of innovation in education and excellence in research and scholarship. UL offers programmes across a wide range of disciplines, including arts, business, engineering and construction, health (including medicine), information and communication technology, law, mathematics and natural sciences. The UL's mission is to build on the expertise of our scholars in creating, harnessing and imparting knowledge for the benefit of our students and the enrichment of our community.

UL's main campus is set on a superb 367-acre riverside site approximately 5 kilometres east of Limerick City. Its built space extends to over 235,000m^2 spread across 45 buildings which range in construction date from 1840 to 2025. UL's main campus has unrivalled sports and cultural facilities, including Ireland's first Olympic-size swimming pool, an indoor sports arena, a boathouse with a state-of-the-art indoor rowing tank, the expanded Glucksman Library, the 1,100-seat University Concert Hall, the Irish Chamber Orchestra Building, the Irish World Academy and an impressive range of visual art, including outdoor sculptures, the National Self-Portrait Collection of Ireland and the Water Colour Society of Ireland Collection. Off-campus buildings bring UL's total building portfolio to c. 261,000 m^2 and comprises student accommodation, offices, research space, and community engagement spaces.

2.0 Our targets

In keeping with the Government of Ireland's Climate Action Plan 2025 UL's targets are to:

- Reduce its energy related GHG emissions by 51% by 2030.
- Improve its energy efficiency by 50% by 2030.
- Update its Climate Action Roadmap annually within 6 months of the publication of the Climate Action Plan.

2.1 Progress to date

In 2024 UL's total CO_2 emissions of 10,385,412 kg CO_2 were 30.1% below the baseline of 14,855,463 kg CO_2 (Figure 2.2). To achieve its 2030 target UL needs to reduce its overall CO2 emissions to 4,513,012 kg CO_2 by 2030.

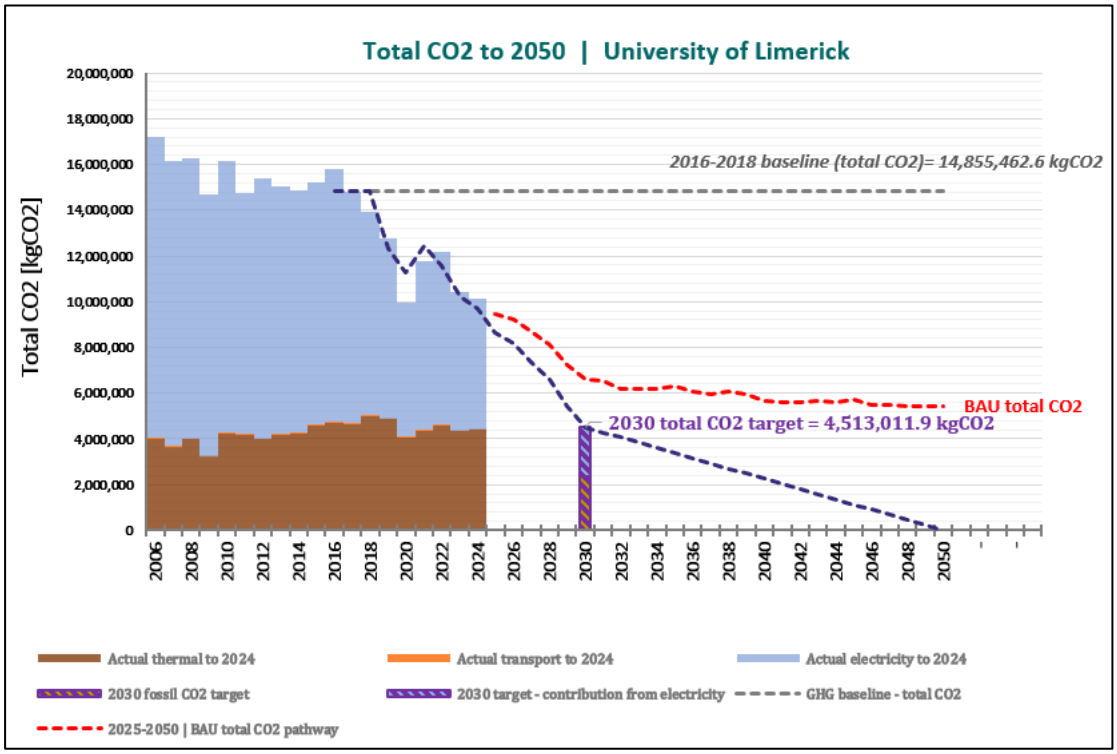


Figure 2.1 UL's CO_2 emissions reduction target and progress to date

By 2024 UL's energy efficiency has increased by 35.8% compared with the baseline year of 2006-2008. To achieve its 2030 target, UL must improve its energy efficiency by a further 14.2%.

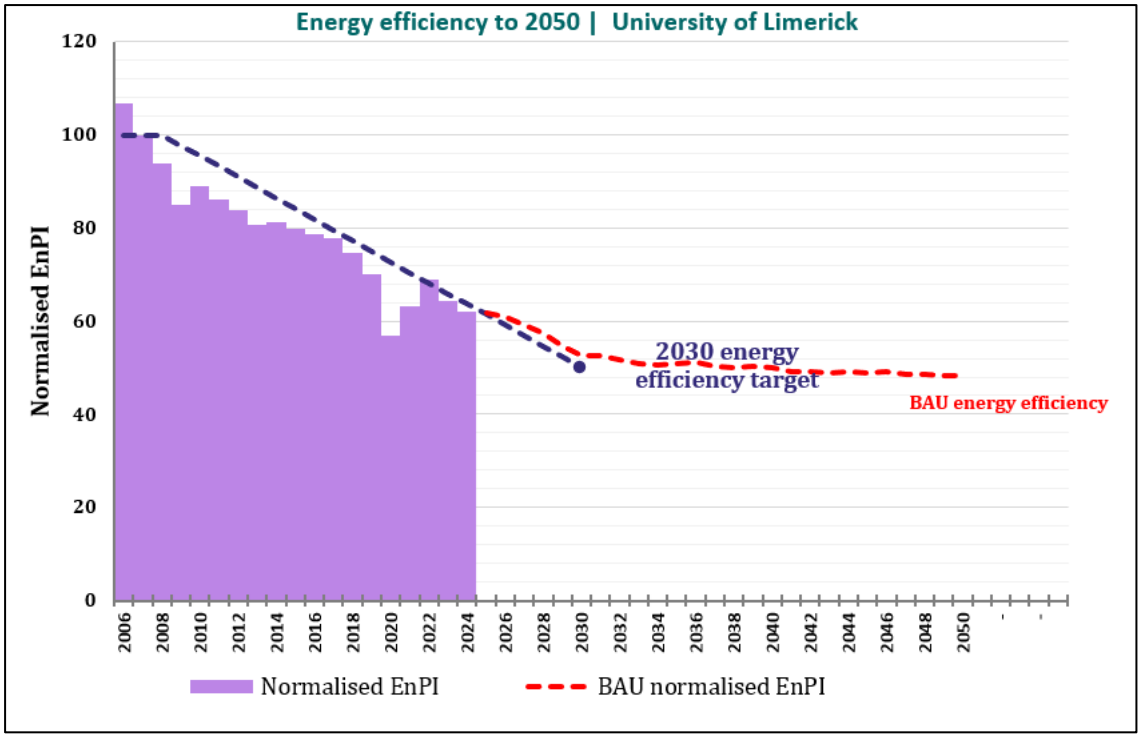


Figure 2.2 UL's energy efficiency target and progress to date

In 2024 UL delivered a significant number of projects aimed at both decarbonising improving energy efficiency. These included:

- Upgrade of natural gas-fired boilers in the KBS and Boathouse buildings to heat pumps.
- Deep retrofit of the IBC Block 2 building which included upgrading its oil-fired boiler to a heat pump
- Upgrade of 1,700 internal light fittings to LED across multiple buildings including the Main Building Phase 1A, Main Building Phase 1B, Foundation Building, Library Phase 1 and CS Building.
- Upgrade of external Sports Pitches lighting to LED (north campus).

2.2 Achieving our 2030 targets

As part of a detailed SI 426 audit of 85% of its delivered energy UL documented observations on nearly 63,000 items of equipment across c. 10,000 unique room/equipment-type combinations. Two categories of plant and equipment emerged as the most significant energy users and carbon emitters namely natural gas burning equipment (accounting for 50% of energy consumption and 41% of carbon emissions) and lighting (accounting for 10% of energy consumption and 12% of carbon emissions).

Based on the outcome of the SI 426 audit, UL has updated its Gap to Target (GtT) model with the projects required to achieve its decarbonisation target. The most significant project to be undertaken will require the decarbonisation of space heating throughout

the campus. To this end, UL has tendered for consultancy services to undertake a detailed review and make recommendations on whether it should install individual heat pumps, a district heating network, a combination of both or just switch to biogas (if feasible). It is expected that this tender process will be completed in late 2025 and that the successful tenderer will have concluded their study within an eight-month period. UL will then be in a position to finalise its decarbonisation approach and commence detailed design.

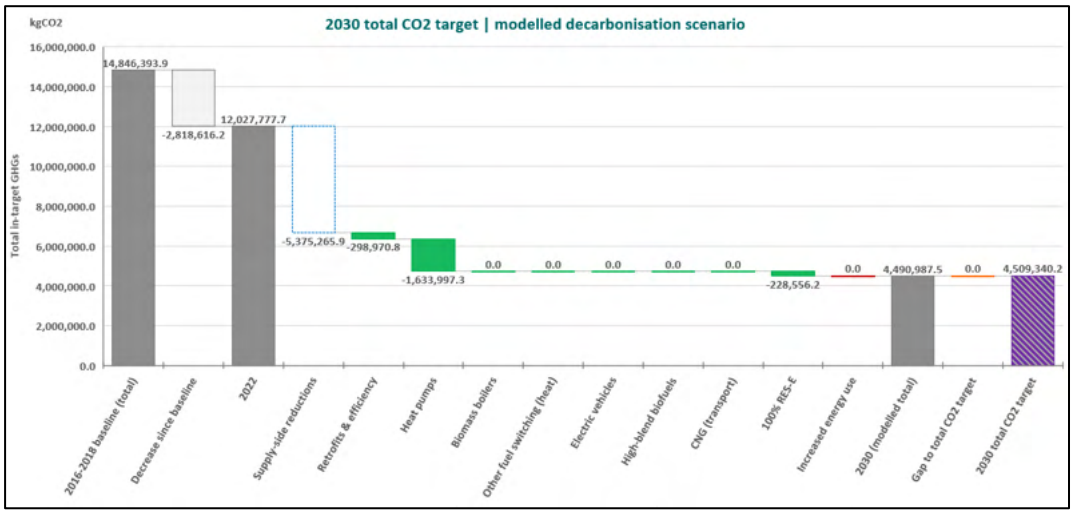


Figure 2.3 UL's Gap to Target model showing how it can achieve its 2030 CO_2 reduction target

Using the SEAI's GtT tool UL has modelled its project pipeline and confirmed it is possible for UL to achieve its 2030 energy efficiency target (see Figure 2.4).

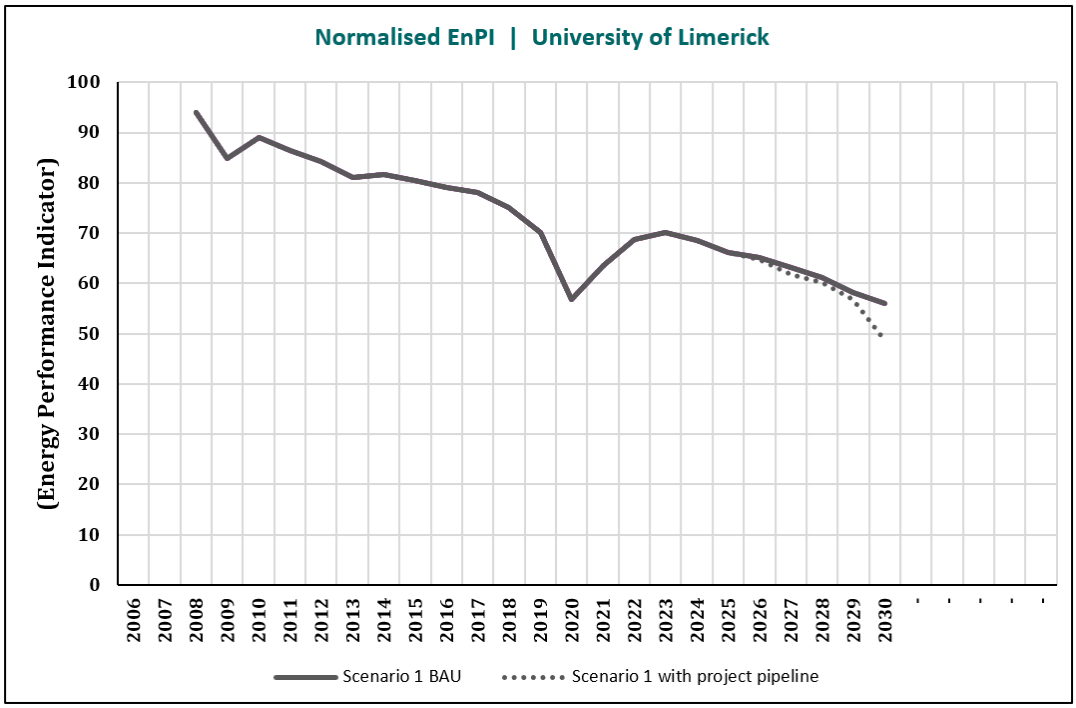


Figure 2.4 UL's Energy Performance Indicator with project pipeline modelled

The categories of projects required for UL to reach both its decarbonisation and energy efficiency goals are as follows:

- Decarbonisation of heating (heat pumps modelled)
- Significant solar PV installation (of the order of 2.55 MWp)
- LED Lighting upgrades
- Retrofit and energy efficiency measures

The greatest risk to UL achieving its 2030 decarbonisation targets remains funding which UL estimates it will need €26.9m to achieve its mandated 2030 goals.

2.2.1 Recent projects undertaken

Whilst it is intended to take a whole campus approach to the decarbonisation of heating, some projects cannot wait due the failure or imminent failure of heating plant. Recently completed decarbonisation and energy efficiency projects include:

- Deep retrofit of IBC Block 2
- Boathouse heat pump installation
- Kemmy Business School heat pump installation
- North Bank sports pitches lighting upgrade to LED
- Foundation Building (Arts, Humanities and Social Sciences postgraduate area)
- Main Building Canteen (Phase 1A)
- General lighting and stairwell lighting upgrades in Main Building (Blocks A & B and Blocks C, D & E), Foundation Building, Library Phase 1 and Computer Sciences buildings.

2.2.2 Upcoming projects

Projects planned for 2025/2026 include:

- Delivery of decarbonisation of heating study
- Upgrade of Living Bridge lighting to LED
- Lighting upgrades in the Schuman, Kemmy Business School, Computer Sciences and Lonsdale buildings.
- Foundation Building atrium lighting upgrade
- Block A Engineering Workshop
- Analog Devices Building main lecture theatre
- Lonsdale Gas Fired AHU replacement with Heat Pump technology
- Plassey House heat pump installation
- Engineering Research Building/Languages/Millstream Courtyard Development heat pump installation
- Health Sciences heat pump installation
- Stables heat pump installation

2.3 Guiding principles

In keeping with the Public Sector Climate Action Mandate and to ensure it complies with Section 15(1) of the Climate Action and Low Carbon Act 2021 UL is committed to:

- Build on existing taxonomies/approaches where possible, to incorporate lessons learnt elsewhere and ensure consistency.
- When screening each key activity (e.g. the provision of funding, infrastructure provision, a planning or regulatory activity, or through any another function of the University), make an assessment as to whether it has a material role in implementing: (i) the Climate Action Plan; and/or (ii) the Public Sector Climate Action Strategy; and/or (iii) the furtherance of the national Climate Objective.
- The University will reflect the full climate impact of decisions made – direct and indirect, including scope 1, 2 and 3 emissions.

3.0 Our People – Leadership and governance

3.1 Statement demonstrating Senior management commitment

UL is committed to reaching its 2030 targets as set out in the Climate Action Plan. To that end it continues to invest significant resources into energy efficiency and decarbonisation projects and its Capital Development Plan (currently under preparation) will apportion funds accordingly. UL uses a variety of funding sources to deliver energy efficiency and decarbonisation projects (e.g. HEA EEDPP, Devolved Grant, recurrent funds, internal Strategic Development Fund etc.) and is considering how best to leverage its existing funds to reach its 2030 targets. This includes the provision of both light and heat as a service.

UL is also bolstering its human resources and is currently seeking a Decarbonisation and Energy Engineer to join its team.

3.2 Nominated climate and sustainability champion and Energy Performance Officer

Mr Robert Reidy Director, Buildings and Estates and Acting Chief Commercial Officer has been nominated as UL's Climate and Sustainability Champion and Energy Performance Officer.

3.3 Governance structure

Figure 3.1 shows how sustainability is governed at UL. The Environmental Committee is a sub-committee of the Executive Committee of the University. It has ultimate responsibility for the governance of sustainability and environmental matters of the University. There are other committees with related responsibilities and which feed in to the deliberations of the Environmental Committee.

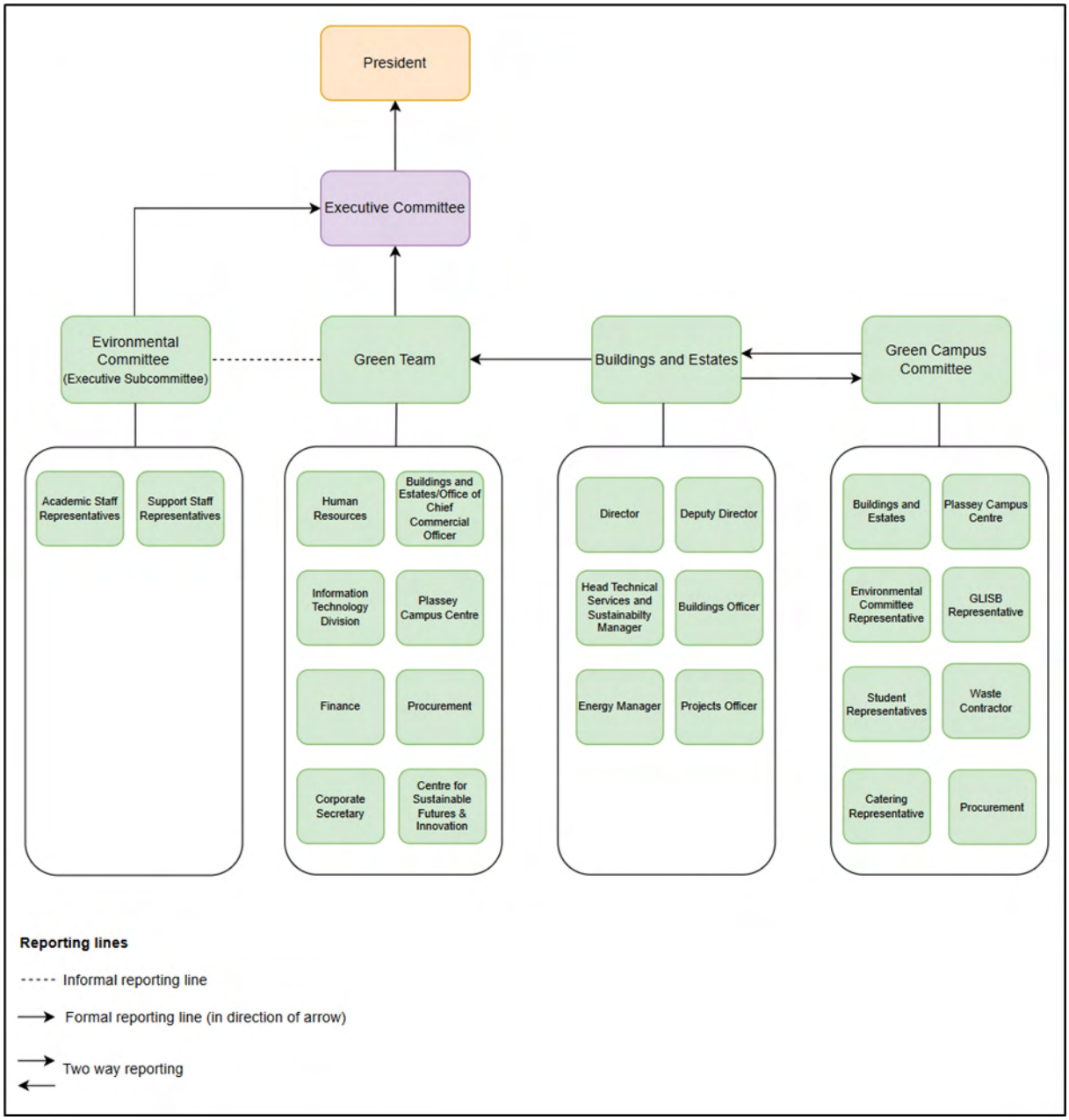


Figure 3.1 Sustainability governance at UL

3.4 Green Team

The Green Team is made up of senior management within UL including UL's Climate and Sustainability Champion, Energy Performance Officer and Director, Buildings and Estates. It is chaired by the Chair of the Environmental Committee who reports directly to the President. UL's Buildings and Estates Department reports on its activities to the Green Team.

As shown above in Figure 3.1 the Green Team at UL is made up of a senior management representing a cross-section of the campus community.

4.0 Our People - Engaging our staff

4.1 Staff training plans

Via UL's website and intranet staff are advised that the following training is available:

- Climate Literacy training via the UN's Climate Change Learning Partnership
- Energy and carbon basics training from SEAI
- Climate Fresk training available from the UL's Kemmy Business School
- Various sustainability courses available from LinkedIn Learning

Via its Energy Academy SEAI provides free online training on energy related issues. UL's Green Team and senior staff members will be encouraged to access and utilise this resource.

4.2 Plans for climate action and sustainability workshops

One all-day climate action workshop has been held to date. This permitted 80 senior staff members an opportunity to identify key climate challenges facing the university and collaboratively develop practical solutions and actionable next steps.

Aside from large workshops UL participation in the Reduce Your Use and Optimising Power at Work initiatives is ongoing. This involves a combination of engineering interventions and close collaboration with building-specific energy champions. Such has been UL's success to date that it features on SEAI's website as a case study.



Figure 4.1 Reduce Your Use case study featuring UL

4.3 Planned Senior leadership training

To date 179 out of 330 senior staff completed a 6-module online UN Climate Literacy programme between November 2023 and April 2024. This programme continues to be available to staff via https://unccelearn.org/

5.0 Our Way of Working

5.1 Annual report

UL's future Annual Reports 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.

5.2 SEAI Public Sector Monitoring and Reporting

Each year UL formally reports to the Sustainable Energy Authority of Ireland (SEAI) using the SEAI's Public Sector Monitoring and Reporting portal within the allotted timeframes.

5.3 Energy and environmental management systems

To ensure it meets its energy efficiency targets UL is committed to achieving ISO 50001 on a whole campus basis. UL has engaged the assistance of consultants to help it achieve its ISO 50001 certification and is working through putting in place the necessary processes, procedures, documentation and hardware to facilitate this. ISO 50001 accreditation will be achieved as soon as is feasible.

5.4 Green public procurement

UL has been incorporating sustainability in its tendering processes for several years. Examples include cleaning, waste, catering, print and water (reduction of use of single plastics) contracts where scores have been awarded for sustainability elements. At present UL Procurement is in the process of developing a comprehensive Green Procurement Policy. Complementing this, the Corporate Procurement Plan is being updated to integrate sustainability considerations into all procurement processes, making it a core element of decision-making.

Procurement staff have received initial training on green procurement practices and further training will be provided as needed to ensure staff remain up to date on GPP requirements and best practices. Actively promoting the GPP Criteria Search within the organisation will ensure that sustainability criteria are consistently considered in purchasing decisions, supporting UL's broader climate goals.

5.5 Construction

In terms of capital projects, UL continues to incorporate sustainability into the planning and execution of its infrastructure developments. Future capital developments on site will adhere to the latest Energy Performance of Buildings Directive.

As per the Public Sector Climate Action Mandate UL is committed to continuing practice and the introduction of measures to:

- Currently specifies low carbon construction methods and low carbon cement material as far as practicable as per guidance issued by Department of Enterprise, Trade and Employment for all construction projects
- Currently adheres to the best practice guidelines for the preparation of Resource and Waste Management Plans for construction and demolition projects
- Ensure a minimum proportion of construction materials it procures under new contract arrangements will comprise recycled materials in accordance with targets to be specified in the 2nd Whole of Government Circular Economy Strategy.

5.6 Organic Food

UL recently devised its *Food Philosophy: Guiding Principles* document. Amongst other things it emphasises responsible sourcing practices that prioritise environmental and animal welfare. This document was used as part of the tender package for the main catering contract which concluded in late 2024.

5.7 Waste management (including food waste)

As illustrated in Figure 5.1, there are seventeen waste collection depots on site dedicated to specific geographical areas and waste streams. Each bin is chipped and assigned to a specific waste stream and waste depot. UL utilises a single contractor to collect all waste from these depots thereby simplifying the monitoring of waste falling into each category including food waste.

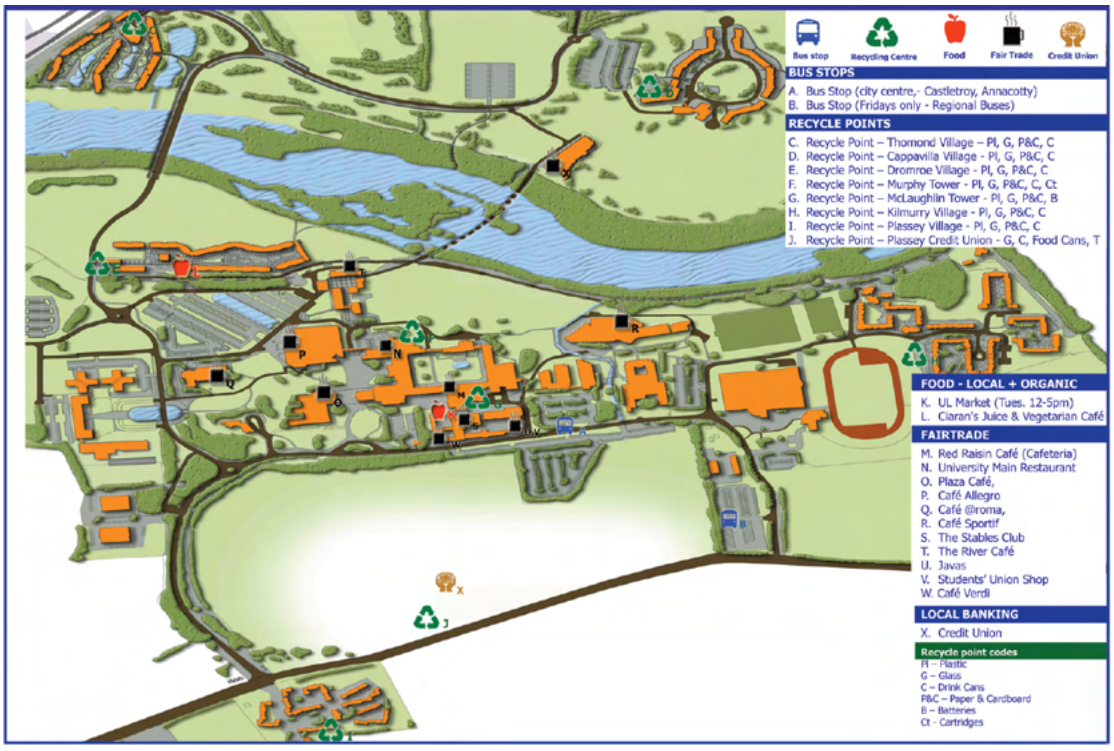


Figure 5.1 UL waste collection and recycling facilities

UL operates a colour coded 3-bin waste collection system on campus as illustrated in Figure 5.2.

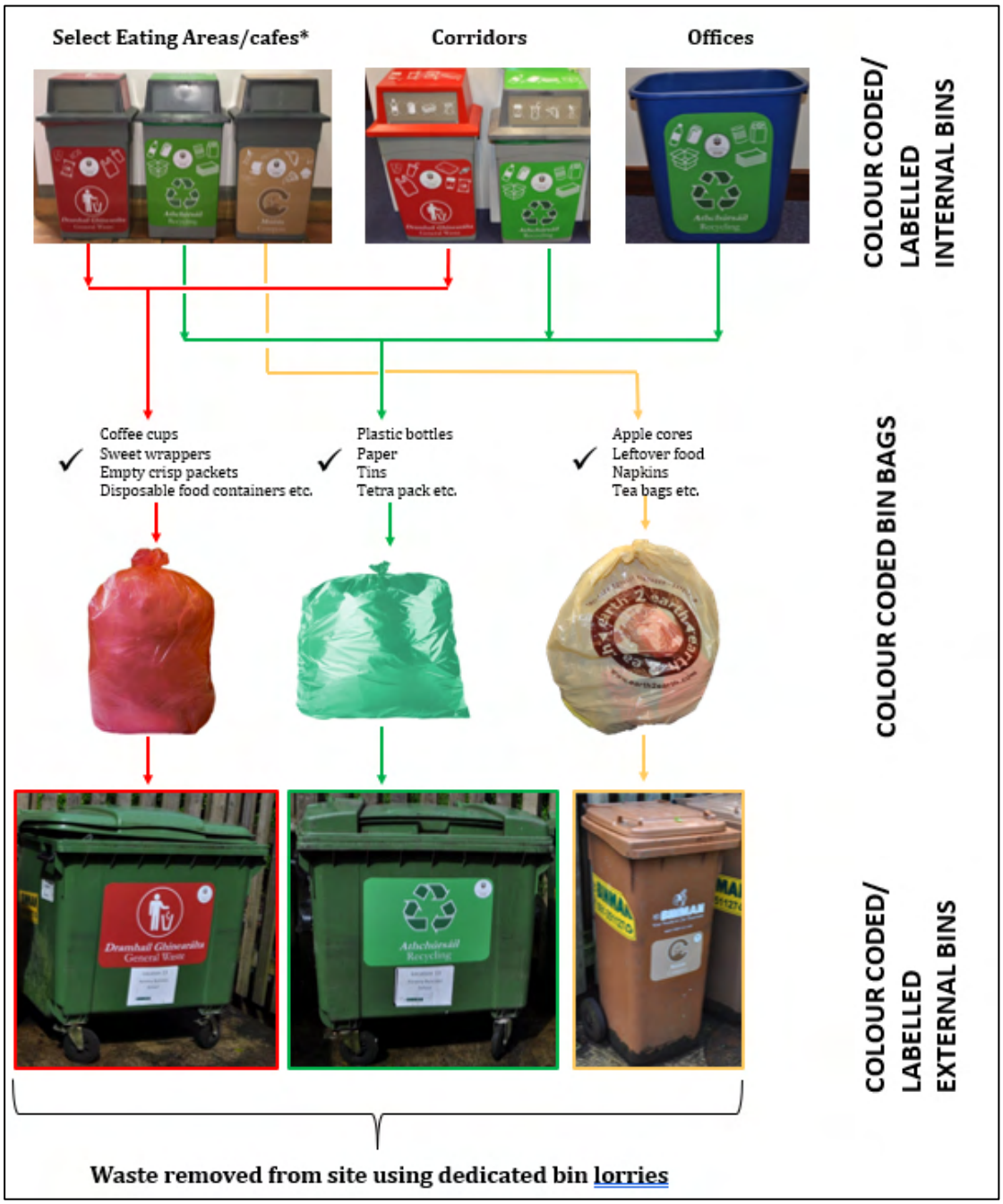


Figure 5.2 UL's waste collection system

UL also uses a food waste digester in its largest canteen on site to reduce waste volume by c. 85%. Figure 5.3. depicts the food waste digester with the components of interest annotated. used. Food waste deposited in the kitchen intake station is macerated into very small particles before being pumped into a holding tank where it is treated with a blend of microbes. Degrading the food waste releases water and reduces the volume and weight of solid material requiring disposal. Before removal from site the degraded waste passed is through a dehydrator where the solid and liquid wastes are separated. The

resulting liquid waste has a biological oxygen demand (BOD) and a chemical oxygen demand (COD) well within the acceptable limits for disposal to a sewer.

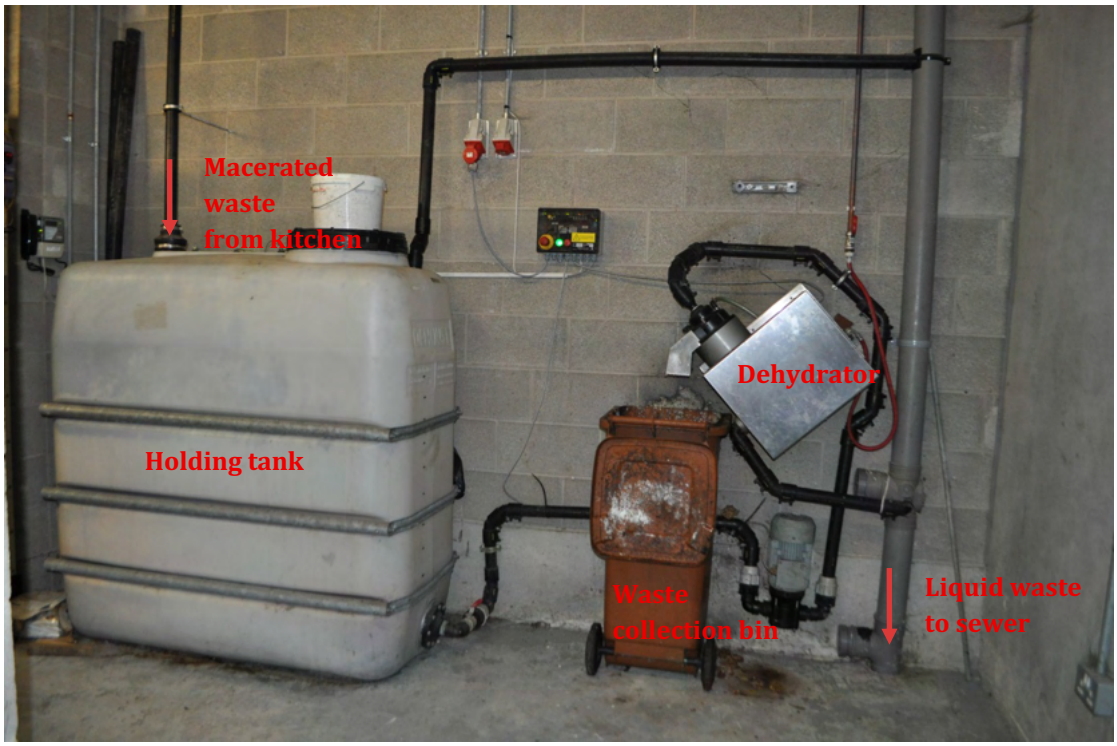


Figure 5.3 UL's Food waste digester system (annotated)

UL recently tendered for its main catering services on campus. Prior to going to tender UL devised a *Food Philosophy: Guiding Principles* document which centred around eight core principles as follows:

- Enhance the physical and mental health of the university community through nutritious offerings.
- Emphasise responsible sourcing practices that prioritise environmental and animal welfare.
- Foster collaborative relationships with local food suppliers and the community.
- Prevent, reuse, recycle, and recover food waste on campus.
- Ensure food services cater to all through inclusive and affordable options.
- Maintain clear communication and responsible practices in food services.
- Promote biodiversity and hands-on education by cultivating food on campus.
- Lead in sustainable food system practices through research and academic integration.

This Food Philosophy sets clear expectations for future suppliers, emphasising sustainable sourcing, nutrition, and inclusivity. These principles are designed to create a food system that not only supports environmental sustainability but also enhances the well-being of the entire university community.

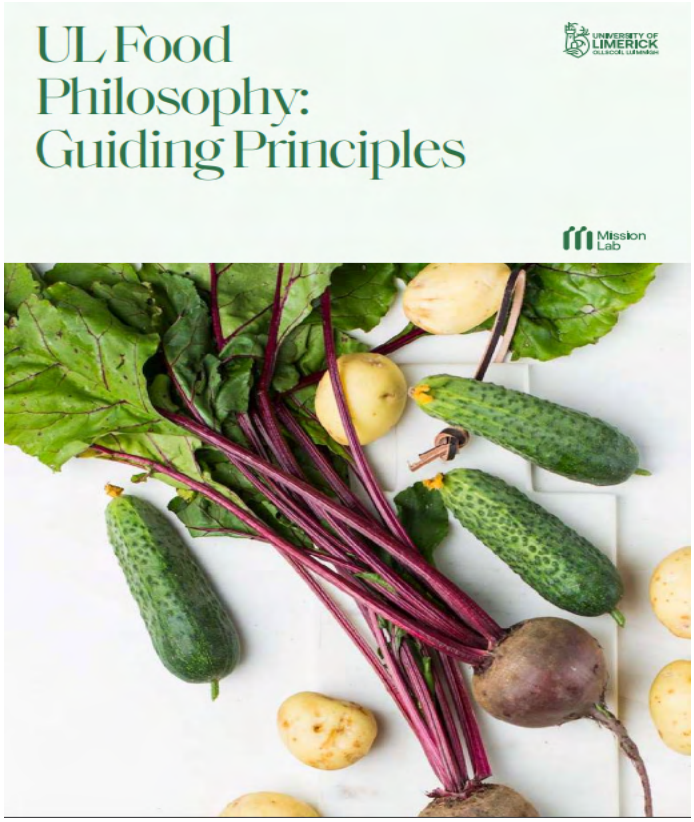


Figure 5.4 Front cover of UL's Food Philosophy document

5.8 Procurement of ICT equipment

The UL Enable – Stage 2 IT Strategy seeks to leverage sustainable technology to create greater operational resiliency and reduce our impact on the environment. UL's guiding ICT principles include:

- Digital sustainability i.e. working across the University to streamline and digitally transform processes to deliver a positive impact on the University's environmental footprint.
- Cloud First – As a service solution to support sustainability, scalability and security.
- Best in class commercial off the shelf products first

In keeping with the Public Sector Climate Action mandate, UL will ensure that a minimum of 80% of ICT end user products (desktop computers, portable computers and mobile phones) procured by public sector bodies under new contract arrangements are certified to EPEAT Gold Standard (or equivalent), TCO Certified (or equivalent) or will have been remanufactured.

Furthermore UL intends to put in a system to track the procurement of ICT end user products to monitor attainment of the GPP ICT equipment procurement target.

5.9 Paper and paper-based processes

5.9.1 Digitisation of paper-based processes

The UL Enable – Stage 2 IT Strategy places a focus on digital enhancements and digitalisation of processes and work practices to increase efficiencies and help the university achieve its environmental targets. The most recent digitisation processes saw mechanical, electrical and architectural maintenance staff issued with digital devices so that maintenance jobs can be accessed and signed off digitally without the need for voluminous hard copy paperwork. Digitisation of the parking permit process is due to go live in late 2025.

5.9.2 Paper usage

UL's newer Multi-Function Printers record the number of pages as standard. Individual printers are no longer supported by the IT Department. UL's Multi-Function Printer supplier i.e. Cantec supplies approximately 95% of printers of this type on campus. UL's ITD Division which manages this contract which encompasses paper used by UL's 18,500 students and c. 2,000 staff. Over the 2024 calendar year, UL used 7,867 reams of paper. UL's Print Room, which prints course notes, exam papers and offers printing services to both staff and students accounted for 40% of total consumption (3,180 reams). Students themselves accounted for an additional 19% of printing (1,463 reams) with the balance of the paper usage (3,224 reams) printed by staff in both support and academic departments. UL's Buildings and Estates Department which is the University's biggest department by spend consumed 94 reams or 1.2% of all paper consumed on campus.

5.10 Water

UL maintains an extensive network of water fountains and water bottle refill stations on campus which are accessible to both staff and students.

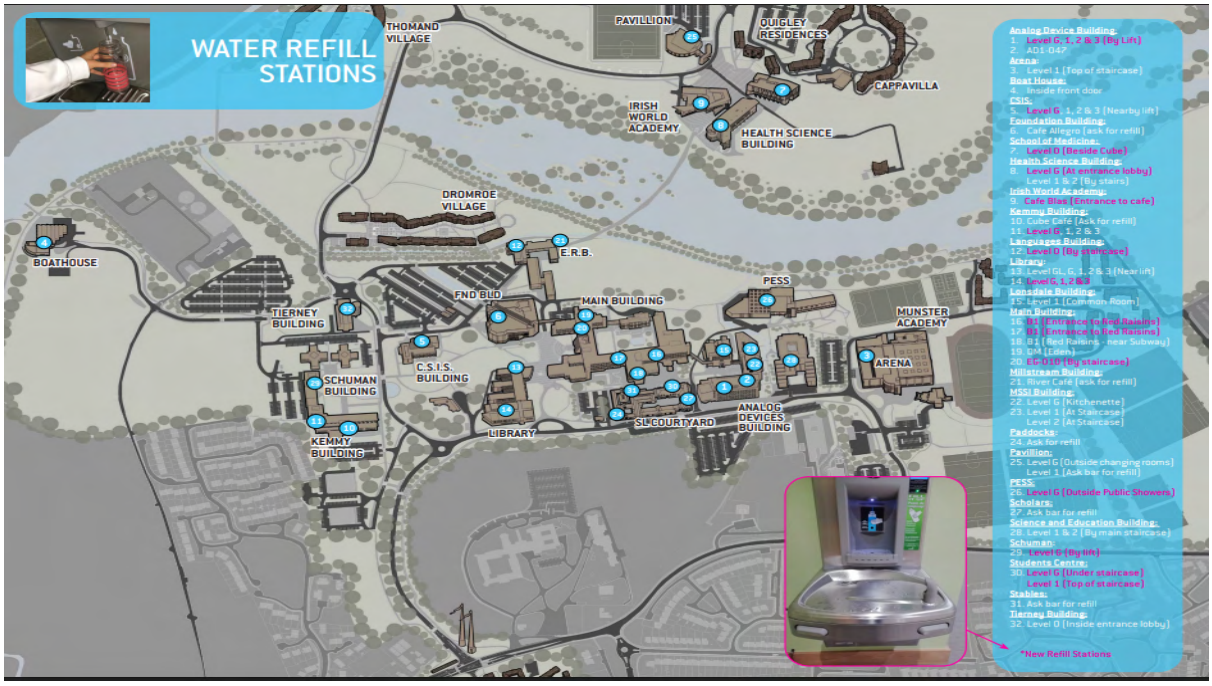


Figure 5.5 Water refill stations on campus

UL's Water Stewardship certified personnel continually measures and monitors water consumption on campus (see Figure 5.6). UL has implemented robust systems to monitor, measure, and reduce water consumption across campus. Water usage is tracked through a combination of Irish Water meters and advanced dataloggers, which ensure that any irregularities or spikes in consumption—typically caused by leaks—are quickly identified and addressed. This proactive approach minimises water wastage and ensures that leaks are repaired promptly, helping the university conserve this valuable resource.

In terms of water efficiency, UL has adopted low water consumption fittings as a standard in all buildings. This approach is part of a long-term strategy to ensure that water efficiency is integrated into the university's infrastructure, reducing overall consumption and contributing to UL's sustainability targets. By continuously improving its water management practices and promoting water conservation across campus, UL is making significant strides in reducing its environmental impact and advancing its sustainability agenda.

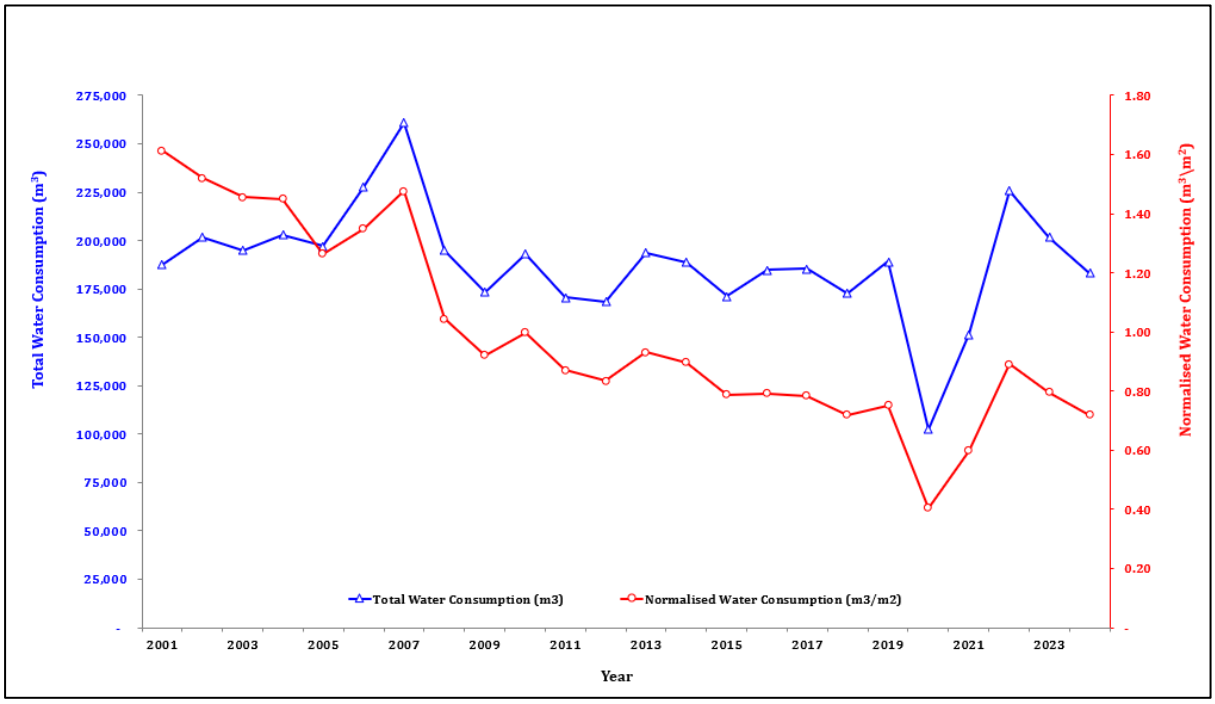


Figure 5.6 Trend of total and normalised water consumption at UL

5.11 Single use items

Key actions in delivering on UL's *Food Philosophy: Guiding Principles* include:

- Banning the use of single-use plastics in all catering and retail operations/facilities.
- Ceasing to use disposable cups, plates, and cutlery in food premises.
- Elimination of single use items from events on campus including those organised/ funded by UL or external entity.

5.12 Other materials

UL supports Ireland's producer responsibility initiatives such as the Deposit Return Scheme (Figure 5.7) and plastic, glass, batteries, printer cartridges, WEEE, metal, timber cardboard etc. return/recycling (see Figure 5.1 and the B&E waste page).

As evidenced in Figure 5.2 UL operates a 3-bin waste collection system. External bins are also colour-coded use the same scheme as the internal bins for consistency (see



Figure 5.7 Deposit Return Scheme at UL



Figure 5.8 External bins at UL showing consistency with colour coding on internal bins

6.0 Our buildings and vehicles

6.1 Vehicles

UL uses a small fleet of vehicles and non-road mobile machinery to service and maintain its 367-acre campus.

In keeping with EU Directives on the promotion of clean and energy-efficient road transport vehicles UL will only procure zero-emissions vehicles. Section 6.5 sets out UL's plan for the installation of electric vehicle charging infrastructure to support this and the wider adoption of electric vehicles in general.

6.2 Promoting cycling and shared mobility

6.2.1 Smarter Travel

In 2012 UL, Limerick City Council and Limerick County Council together secured Smarter Travel Demonstration City status for Limerick i.e. the first city in Ireland to achieve this. Since then, UL has been a particularly active Smarter Travel campus. In October 2023, UL became the first university in Ireland to achieve Smarter Travel Mark – Gold accreditation. In September 2025 UL appointed a dedicated Smarter Travel Coordinator.

Arising from its participation in Limerick Smarter Travel the University has and continues to proactively carry out a range of ongoing measures aimed at improving mobility around campus. The initiatives have fallen into three categories namely infrastructural, challenges/incentives/giveaways and, communication.

Some of the infrastructure initiatives used to encourage active travel to work include the installation of pedestrian / cycling shared paths (complemented by the UL to City Centre Riverbank walkway/cycleway), secured covered bicycle parking, covered bicycle parking, docked bicycle scheme (NTA), dockless bicycle scheme (privately operated) and free showers (see Figure 6.1).

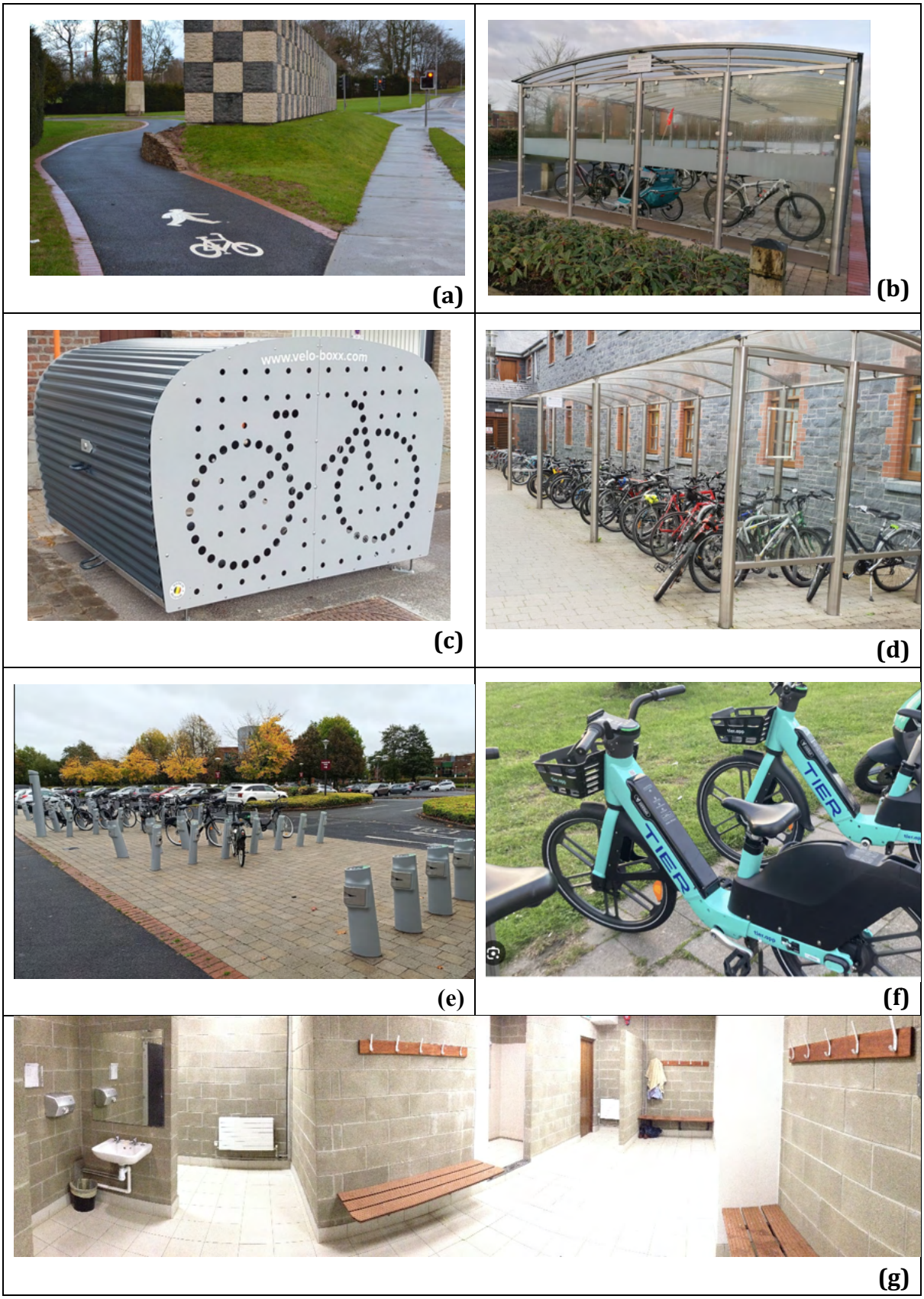
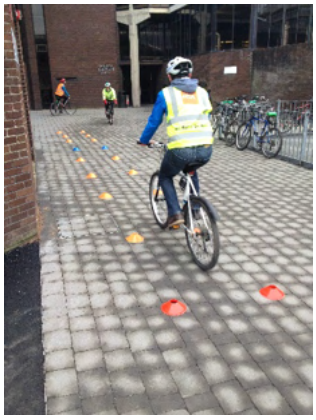


Figure 6.1 (a) Shared cycleway/walkway improvements, (b) and (c) secured covered bicycle parking, (d) covered bicycle parking and (e) docked bicycle scheme, (f) dockless bike scheme and (f) free showers.

Incentives and giveaways that UL has used to encourage cycling include giving away free lights and high visibility vests, providing cycle training and organising a weekly bike mechanic to fix bikes on site (see Figure 6.2).



(a)



(b)



(c)

Figure 6.2 (a) Issuing of free lights to cyclists, (b) cycle training, (c) weekly bike mechanic

Communication of the sustainable commuting options, the infrastructure that supports this and the various challenges incentives and giveaways on campus is achieved through a variety of means (see Figure 6.3). These include term start stalls, a First Seven Weeks presence, inclusion of content in Admissions Orientation Guidebook/ Student Academic Affairs Handbook/ Student Life Diary/noticeboards in on-campus accommodation etc., distribution of journey planners, maintenance of a high quality Travel and Transport Webpage and publication of articles in the student newspaper (An Focal).



Figure 6.3 Some of the communication methods used to drive sustainable commuting behaviours including (a) term start stalls, (b) journey planner and (c) B&E Travel and Transport webpage

6.2.2 Other cycling initiatives

Outside of Smarter Travel multiple other projects and research initiatives contribute to the uptake of cycling on campus by both student and staff alike. These include:

- Under the CycUL initiative,UL loan free bikes to 78 of its students for €50 per semester or €90 per academic year.
- Each of the student villages on site (which comprise a total of c. 2,600 beds) operate a shared bicycle scheme where residents can loan out a bicycle for a short period.

- The ISCycle research project (i.e. Inclusive e-bike uptake and Sustainable use) is examining how e-bikes can change transport behaviours, improve health and protect the environment (see Figure 6.4). As part of the trial a range of bikes are being loaned to participants for a 4, 8 or 12 week period.
- The ISCycle 2 research project aims to develop a long-term e-bike loan programme aimed at, amongst others, parents of school-aged children and older adults including those who are currently excluded from the Bike-to-Work tax incentive scheme.



Figure 6.4 Bikes available in UL thought the ISCycle project

6.2.3 Car-pooling

To encourage car-pooling preferential car parking spaces are reserved in all staff car parks between the hours of 8am and 10am each weekday. To avail of these spaces two valid parking permits must be displayed. This rewards both drivers as spaces those car pooling are guaranteed a preferential car parking space up to 10am each morning.



Figure 6.5 Example of car-pooling spaces on campus

6.2.4 Shared mobility trials

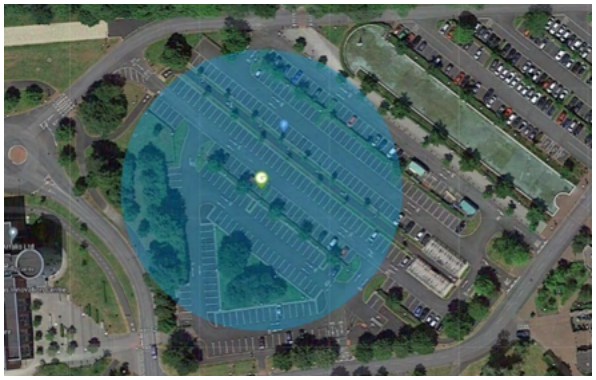
UL has run several shared mobility trials as part of research projects thereby helping establish the practicality of pursuing/extending these initiatives.

These have included a shared e-car service trial and an e-scooter trial.

Shared e-car service

UL together with Limerick City and County Council, Limerick Clare Energy Agency, GoCar and ESB (Emerging Technologies) collaborated on the Horizon 2020 funded +CityxChange project. UL provided a hub for fully electric e-Car on campus i.e. the first fully electric vehicle available to rent and drop off at a University campus in Ireland (see Figure 6.8). The shared mobility service was centrally located on campus adjacent to secured covered bicycle parking offering excellent onward connectivity to both residents and those arriving on campus by sustainable means. Over a six month operating period, the shared car service was used on average three times per week. A total of 83 trips

averaging 148km were covered using the eCar with the average trip time lasting 16 hours. The total distance travelled over the period was 12,307km. GoCar have advised that this is comparable to a fossil fuelled GoCar located at the nearby Limerick One Shopping Centre which averages 203km per journey with an average trip time of 19 hours.



(a)



(b)

Figure 6.6 (a) Aerial view of Foundation Car Park showing GoCar base and (b) the GoCar being delivered to UL

e-scooter trial

Prior to the legalisation of scooters on Irish roads, B&E teamed up with shared mobility provider Moby to trial a fleet of 30 e-scooters on campus over a six-month period (see Figure 6.7). To comply with the law in place at the time, the e-scooters were 'geofenced' to ensure they could not be used in public places outside of the University grounds. Over the 25 weeks that the e-scooters were in service, 931 users made 1,977 trips with each user taking an average of 2 trips.

To track the modal preferences of both staff and students and the effectiveness of the initiatives undertaken, UL regularly completes surveys and compares this to the baseline and subsequent years (see Figure 6.8).



Figure 6.7 Moby e-scooters deployed on campus

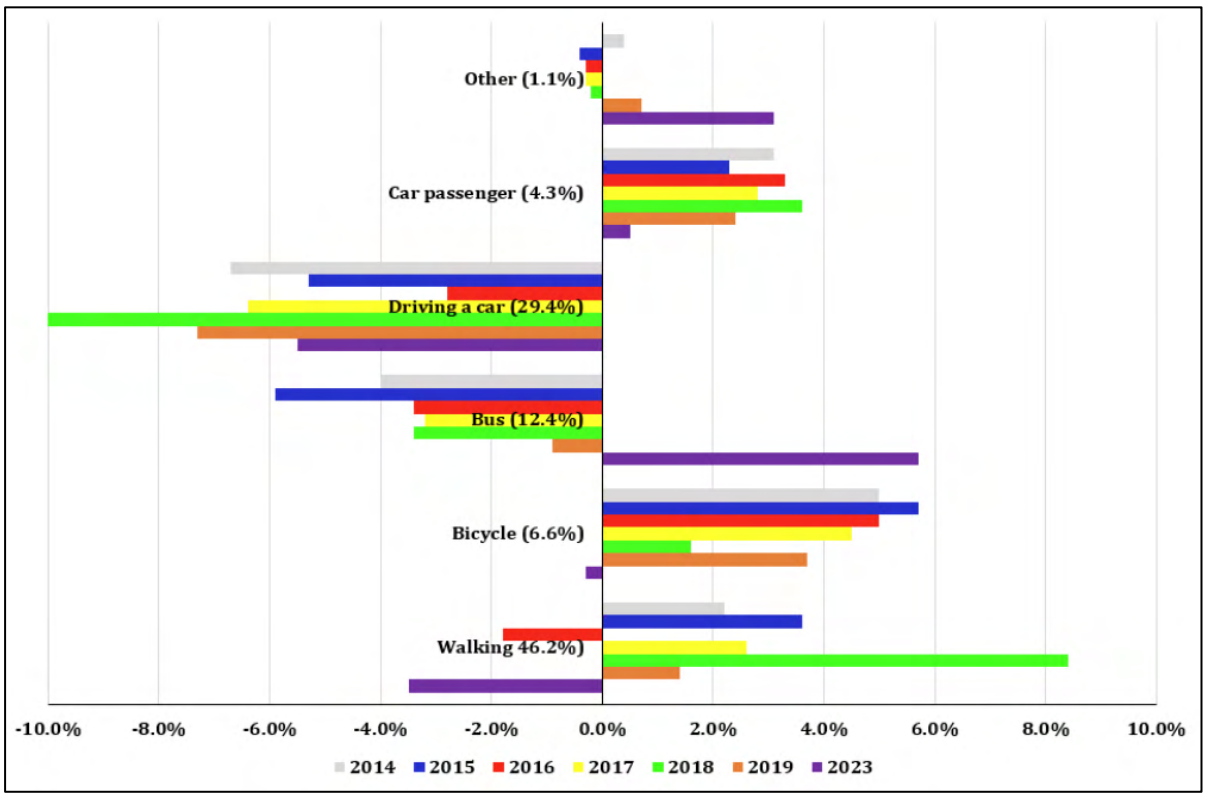


Figure 6.8 Modal shift of UL students compared to 2011 (baseline year)*

*Numbers shown in parenthesis are baseline figures

6.3 Phasing out parking

It is customary for UL to build on car parks without replacing the car parking spaces it displaces. This has happened in the New Student Centre (completed in 2025 – see Figure 6.9 the Library Extension (completed in 2018), Analog Devices (see Figure 6.10 and MSSI Buildings (both completed in 2015). Future construction as part of the Higher Education Strategic Infrastructure Fund (HESIF) will see a further car park displaced to make way for lecture theatre space.



UL Library Extension



Figure 6.9 New Student Life Building



Figure 6.10 Analog Devices Building

6.4 Procurement of zero emission vehicles

As noted previously UL uses a small fleet of vehicles and non-road mobile machinery to service and maintain its 367-acre campus. UL is phasing out the use of fossil-fuelled vehicles used in its maintenance services and to that end both architectural and electrical maintenance service providers use electric vehicles. UL's most recently tendered service – mechanical maintenance – has also specified the use of an electric vehicle.



Figure 6.11 UL's on-site architectural and electrical maintenance services vehicles

6.5 Plans to install charging infrastructure

To complement its existing electric car charging infrastructure UL has completed a technical review of car parks with the capacity to accommodate electric vehicle charge-points. As per Figure 6.12 below, nine additional locations have been identified.

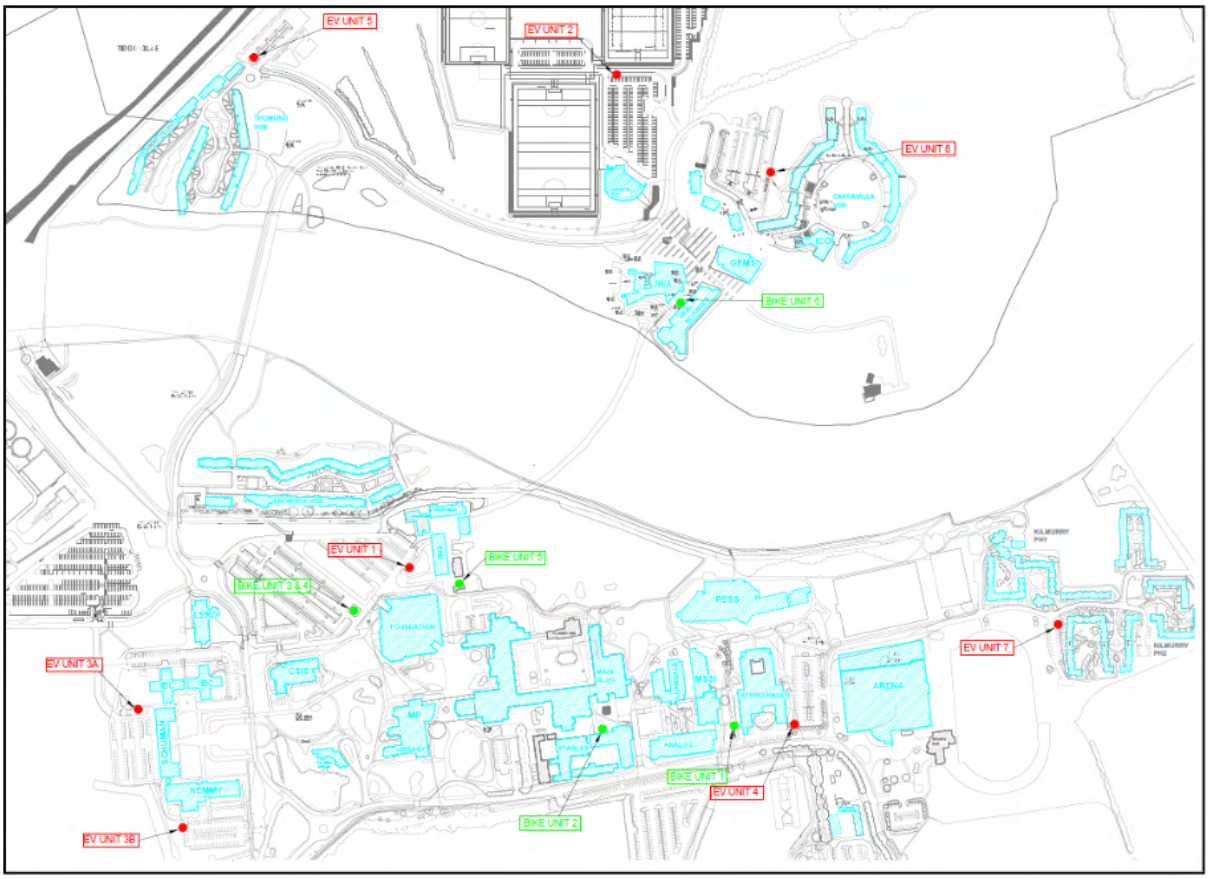


Figure 6.12 Locations identified for electric vehicle charge-points

Work on the installation of additional charging-points has already commenced with the first of the charge-points currently being installed at point 3A on the above map (Figure 6.12). Order of magnitude costs for the enabling works for the remaining charge-points have been established and will be completed as funding is secured.

6.6 Buildings

6.6.1 Fossil fuel heating systems

UL's main campus was established in 1972 with a single 19th century building i.e Plassey House and expanded over the last half-century to comprise 45 buildings with a combined built space exceeding 235,000m^2. As evidenced by Figure 6.13 all bar one of UL's buildings were built in accordance with Technical Guidance Document (TGD) Part L – 2008 or earlier. This is significant as the 2017 TGD L Part L which came into effect in 2019 set out how buildings should achieve Nearly Zero Energy Building (NZEB) status in accordance with the Energy Performance of Buildings Directive.

Accordingly due to the age profile of UL's buildings and the TGD that applied at the time, almost all of UL's buildings were built with natural gas fired boilers as their primary heat source.

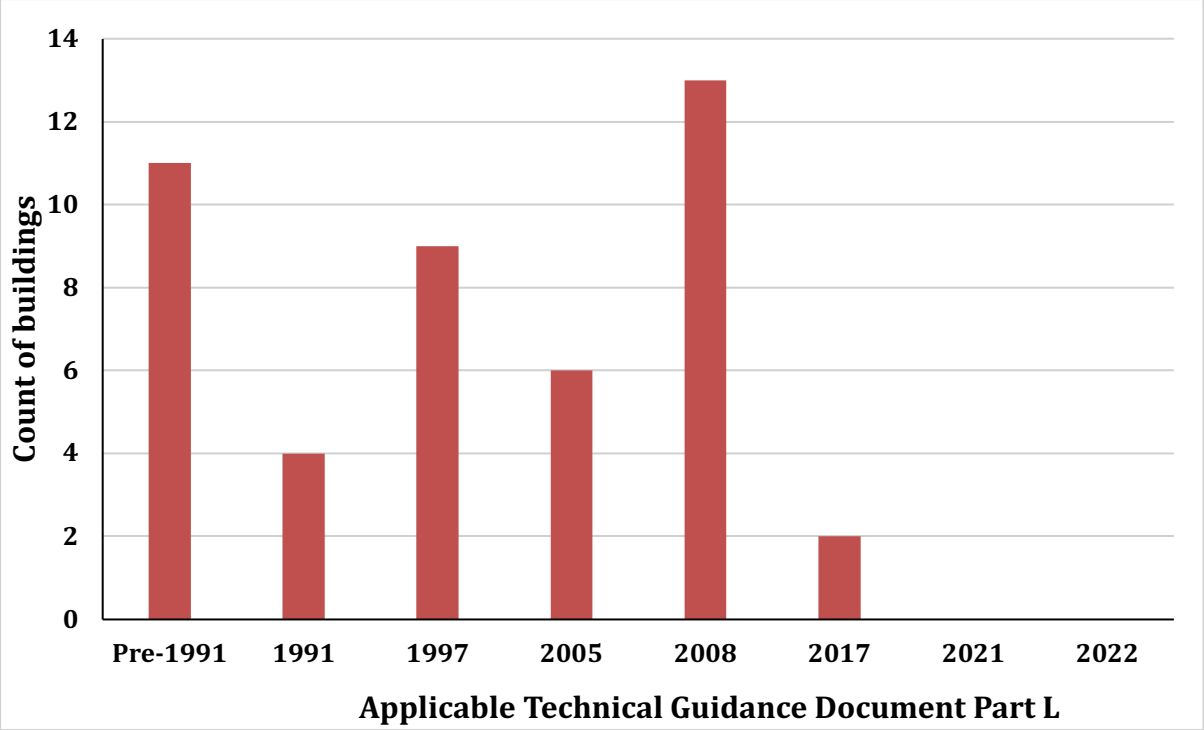


Figure 6.13 Spread of UL's buildings by applicable TGD L

6.6.2 Display of Display Energy Certificates

The profile of display energy certificates (DECs) of UL's buildings is illustrated in Figure 6.14. It demonstrates that whilst the majority of buildings have a DEC rating of B3 or better there are still 13 buildings with a C1 energy rating or worse.

Display Energy Certificates have now been displayed in public buildings throughout the campus.

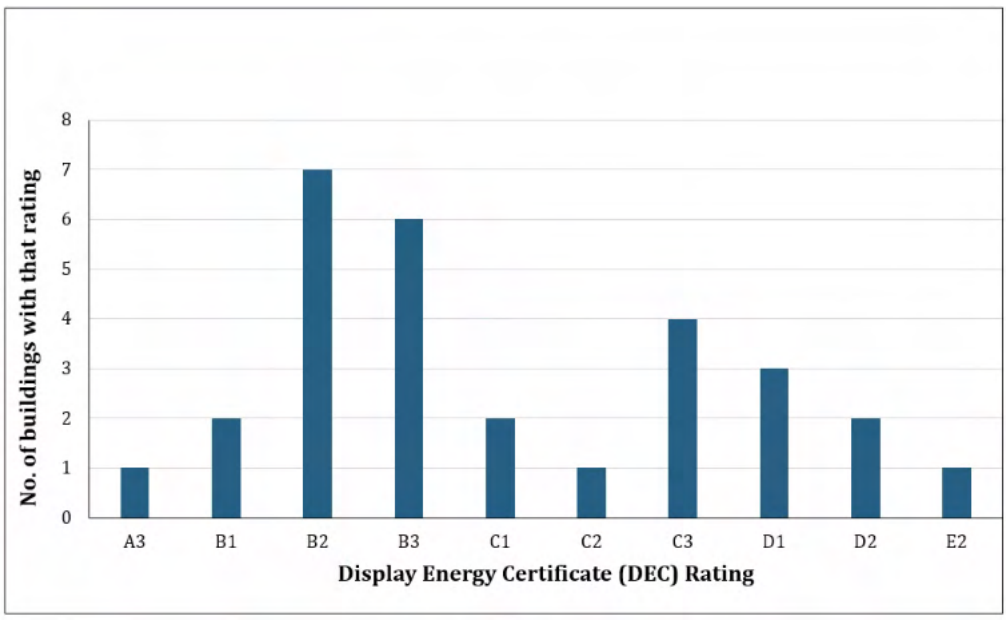


Figure 6.14 Profile of DECs of UL's buildings

6.6.3 Procurement of cleaning services

In procuring its main cleaning contract UL awards marks based on the environmentally friendly cleaning practices and products to be used as part of the contract and demonstrated staff knowledge of the area.

6.6.4 Stage 1 building stock plan

UL reports on its building stock annually as part of its SEAI return. Furthermore, UL has assessed the condition of all of its buildings and has determined budget costs for upgrading to Condition B as per HEA standards. As funding becomes available, buildings will be refurbished.