# Climate Action Roadmap 2030







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#### Introduction

This document serves as an update on the progress of the projects delineated in the Climate Action Roadmap 2030. It is solely dedicated to tracking and reporting on these projects. For comprehensive details or queries regarding the university's overarching sustainability strategy or the roadmap itself, we kindly direct the readers to the original Climate Action Roadmap document which is available on <u>ul.ie/sustainability</u>.

This document has been co-created by

UL Centre for Sustainable Futures & Innovation and

UL Buildings & Estates, in collaboration with strategic

design partner Saol. It was created through an open
and participatory process, ensuring the diverse range
of perspectives and disciplines within our university

were included at each stage of development.

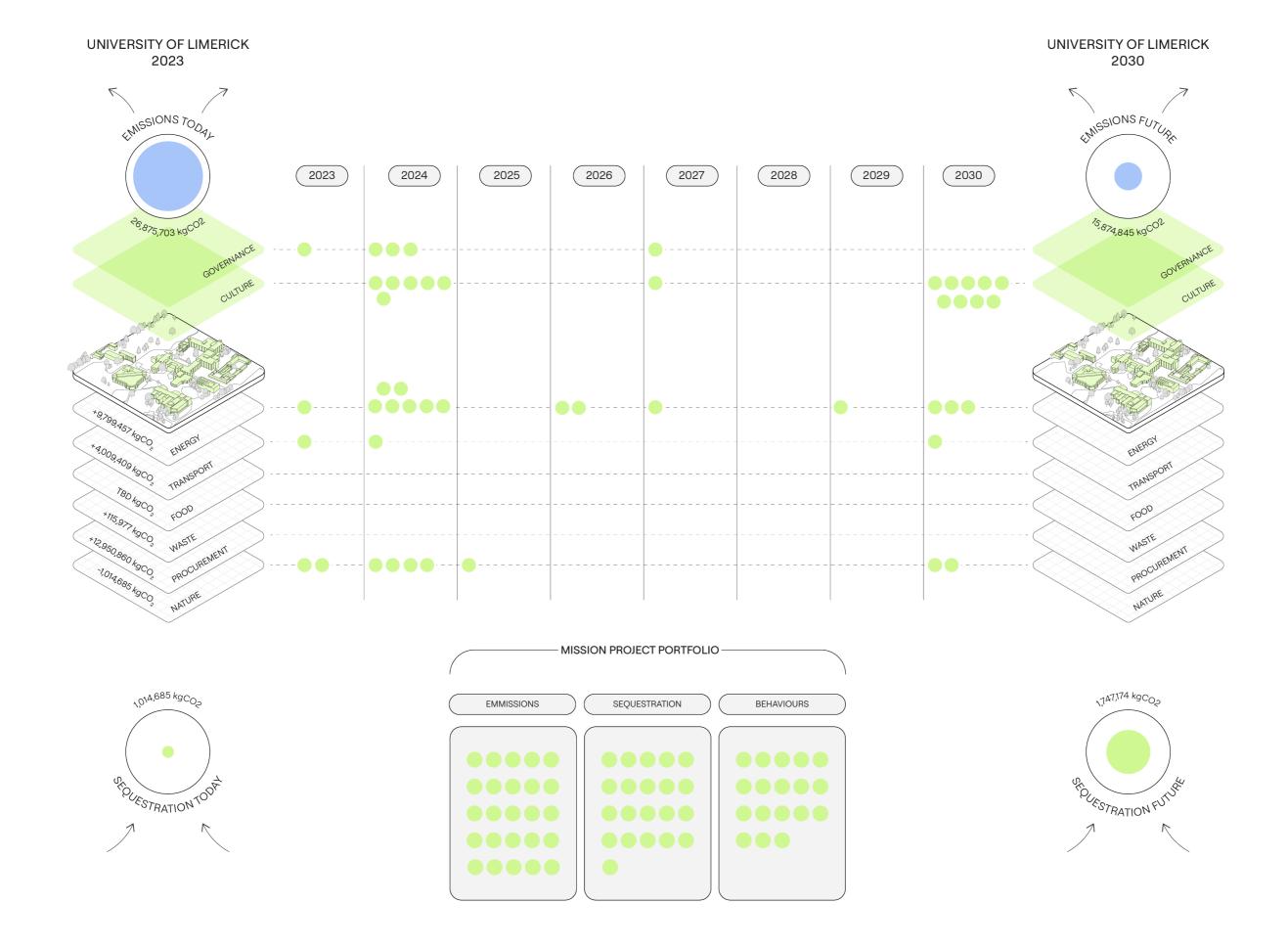






www.ul.ie/sustainability www.studiosaol.com www.un.org 3

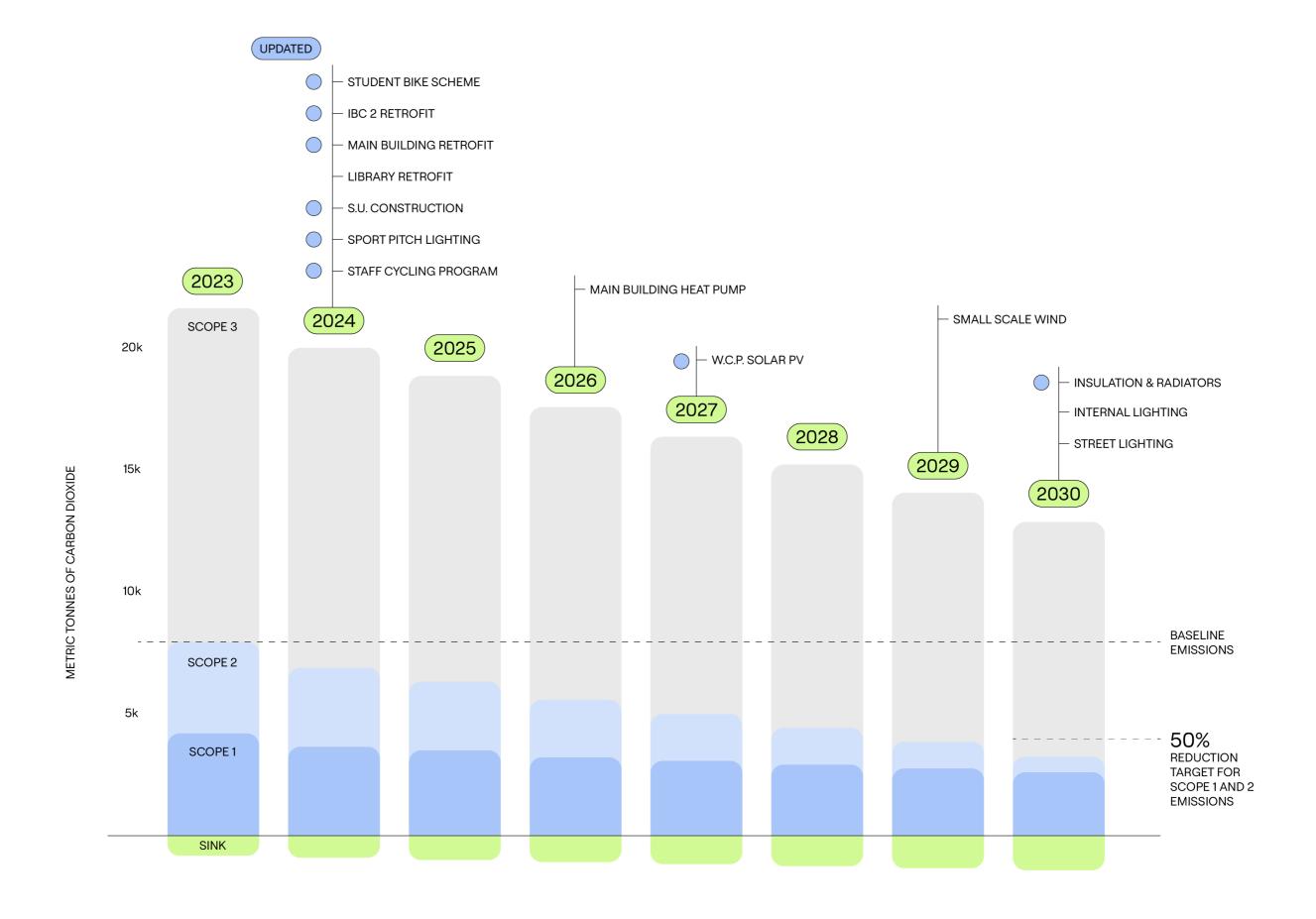
# **Transition Pathway**



## Climate Action Roadmap

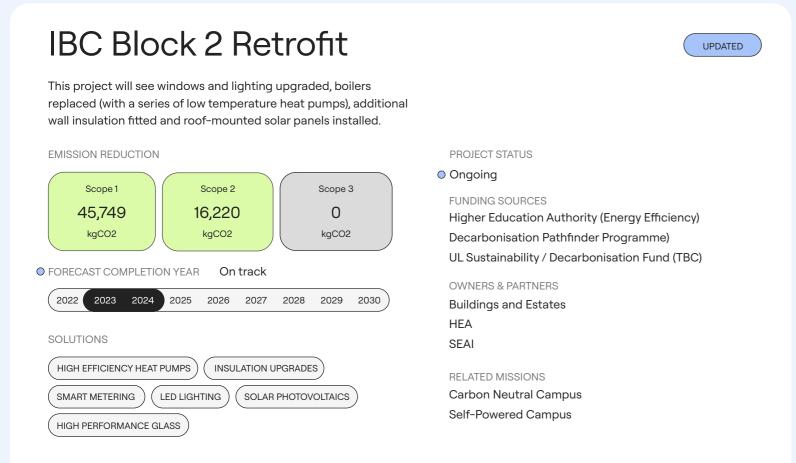
While University of Limerick has no changes in emissions data to report on, the status of many emissions reducing and sequestering projects around campus have progressed. Throughout this document status updates are signified with blue graphic assets such as these:

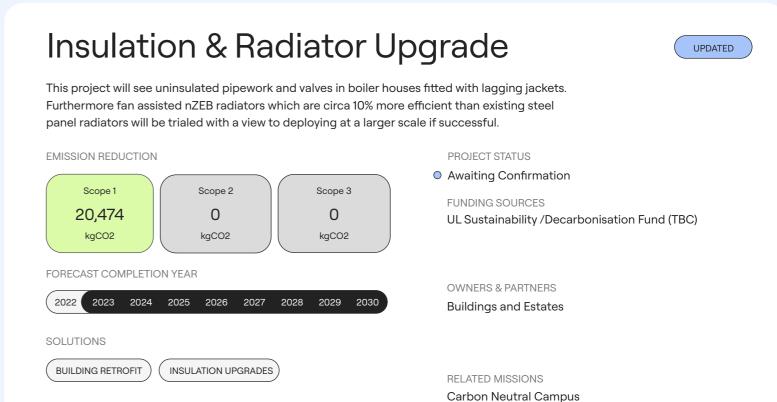






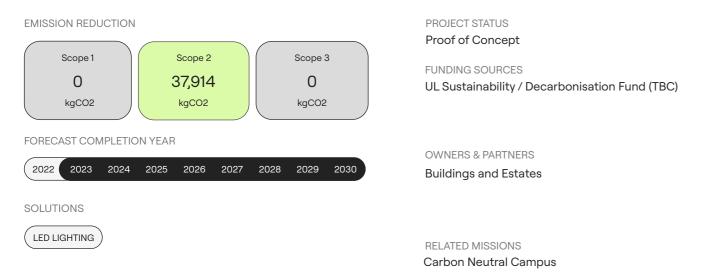
## Mission Projects Reduce Emission





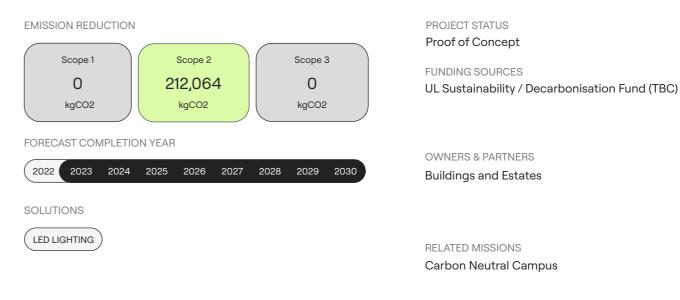
### Campus Street Lighting Upgrade

This project will see street lighting on campus replaced with high efficiency LED upgrades. Sample projects will be undertaken to determine the most cost efficacious methods of upgrading to LED.



#### Campus Internal Lighting Upgrade

This project will see street lighting on campus replaced with high efficiency LED upgrades. Sample projects will be undertaken to determine the most cost efficacious methods of upgrading to LED.

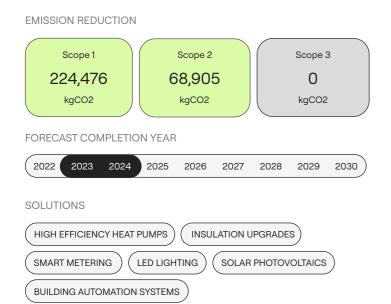


## Mission Projects Reduce Emissions

#### Main Building Retrofit (Blocks C, D, E)

UPDATED

This project will see the primary heat source for this building replaced with a high temperature heat pump, roof and wall insulation and lighting upgraded, and BMS, energy metering and solar panels installed.



#### PROJECT STATUS

Awaiting Funding

**FUNDING SOURCES** 

- O Higher Education Authority (Energy Efficiency)
- Decarbonisation Pathfinder Programme (TBC) UL Sustainability / Decarbonisation Fund (TBC)

OWNERS & PARTNERS

**Buildings and Estates** 

HEA

SEAI

RELATED MISSIONS

Carbon Neutral Campus

Self Powered Campus

#### Western Car Park Solar Photovoltaics

2028 2029 2030



This project will see the Western Car Park, containing circa 350 car parking spaces, covered in photovoltaic solar panels. The installation will feed directly into adjacent buildings.

#### **EMISSION REDUCTION**

2022 2023 2024

SOLAR PHOTOVOLTAICS

Market consultation underway.

SOLUTIONS

UPDATE



PROJECT STATUS Implementation

**FUNDING SOURCES** 

UL Sustainability / Decarbonisation Fund (TBC)

**OWNERS & PARTNERS** 

**Buildings and Estates** 

**RELATED MISSIONS** 

Carbon Neutral Campus

Self Powered Campus

#### Library Building Retrofit

UPDATED

This project will see streetlighting on campus replaced with high efficiency LED upgrades. Sample projects will be undertaken to determine the most cost efficacious methods of upgrading to LED.

#### **EMISSION REDUCTION**

Scope 1 242,299 kgCO2

Scope 2 22,359 Scope 3 0 kgCO2

FORECAST COMPLETION YEAR

**BUILDING AUTOMATION SYSTEMS** 

2023 2024 2022 2025 2026 2027 2028 2029 2030

SOLUTIONS

HIGH EFFICIENCY HEAT PUMPS INSULATION UPGRADES SOLAR PHOTOVOLTAICS SMART METERING LED LIGHTING

PROJECT STATUS

Awaiting Funding

**FUNDING SOURCES** 

- Higher Education Authority (Energy Efficiency
- Decarbonisation Pathfinder Programme) (TBC) UL Sustainability / Decarbonisation Fund (TBC)

OWNERS & PARTNERS

**Buildings and Estates** 

SEAI

RELATED MISSIONS

Carbon Neutral Campus

Self Powered Campus

#### Small Scale Wind

UPDATED

To complement the deployment of photovoltaic on campus, this project will see small scale wind turbines on site, if and where feasible

#### **EMISSION REDUCTION**

Scope 1 0 kgCO2

Scope 2 20,372 Scope 3 0 kgCO2

FORECAST COMPLETION YEAR

2022 2023 2024 2025 2026 2027 2028 2029

**SOLUTIONS** 

MICRO WIND TURBINES

UPDATE

O Small-scale wind to be considered as part of campuswide decarbonisation.

**PROJECT STATUS** 

Concept

**FUNDING SOURCES** 

UL Sustainability / Decarbonisation Fund (TBC)

**OWNERS & PARTNERS** 

**Buildings and Estates** 

**RELATED MISSIONS** 

Carbon Neutral Campus

Self Powered Campus

## Mission Projects Reduce Emissions

#### North Bank Sports Pitches Lighting

UPDATED

This project will see pitch lighting on UL's north campus replaced with high efficiency LED upgrades. Careful consideration will be given to the most cost efficacious method of upgrading to LED.

#### **EMISSION REDUCTION**

Scope 1 Scope 2 0 20.725 kgCO2 kgCO2

Scope 3 0 kgCO2

FORECAST COMPLETION YEAR

2023 2024 2027 2028 2029 2030 2025 2026

SOLUTIONS

BUILDING AUTOMATION SYSTEM LED LIGHTING PROJECT STATUS

Funding Approved

**FUNDING SOURCES** PCC

**OWNERS & PARTNERS** 

**Buildings and Estates** 

PCC

RELATED MISSIONS

Carbon Neutral Campus

### Inclusive Sustainable Cycling

The e-bike research project to encourage modal shift in behaviours towards more sustainable transport forms. Scheme provides e-bikes free of charge to staff at the university of Limerick, to trial them over a period of 6-12 weeks.

#### **EMISSION REDUCTION**

2022

UPDATE

SOLUTIONS

Scope 1 0 kaCO2

FORECAST COMPLETION YEAR

2023 2024

BICYCLE INFRASTRUCTURE

O Preliminary findings due 2024.

Scope 2 0 kgCO2

2026

2025

Scope 3 35.050 kgCO2

2027 2028 2029 2030

FUNDING SOURCES

Department of Transport SEAI

#### **OWNERS & PARTNERS**

PROJECT STATUS

Implementation

School of Allied Health Department of Electronics and Computer Engineering

Healthy UL

RELATED MISSIONS

**Active Mobility Campus** 

Carbon Neutral Campus

## Main Building Retrofit (Blocks A, B)



This project will see the primary heat source for this building replaced with a high temperature heat pump.

#### **EMISSION REDUCTION**

2022 2023 2024

Scope 1 167,330 kgCO2

Scope 2 0 kgCO2

Scope 3 0 kgCO2

FORECAST COMPLETION YEAR 2025 2026 2027 2028 2029 2030

SOLUTIONS

HIGH EFFICIENCY HEAT PUMPS SMART METERING

UPDATE

O Part of Blocks A & B to be upgraded as part of the Higher Education Strategic Infrastructure Fund. Procurement of Design Team stage.

#### PROJECT STATUS

Design/Decision

**FUNDING SOURCES** 

UL Sustainability / Decarbonisation Fund (TBC)

**OWNERS & PARTNERS** 

**Buildings and Estates** 

RELATED MISSIONS

Carbon Neutral Campus

#### **New Student Centre Construction**

This project will an NZEB building constructed to provide a space where students can relax, chill, party, play, be informed, be advised, supported, network and live life.

#### **EMISSION REDUCTION**

Scope 1 0 kgCO2

Scope 2 -18,363 Scope 3 0 kgCO2

FORECAST COMPLETION YEAR

2022 2023 2024 2025 2026 2027 2028 2029 2030

#### SOLUTIONS

HIGH EFFICIENCY HEAT PUMPS SMART METERING

HIGH PERFORMANCE GLASS

LED LIGHTING SOLAR PHOTOVOLTAICS **PROJECT STATUS** 

Implementation

**FUNDING SOURCES** 

Student Levy

University of Limerick PCC

OWNERS & PARTNERS

**Buildings and Estates** Student Life

**RELATED MISSIONS** 

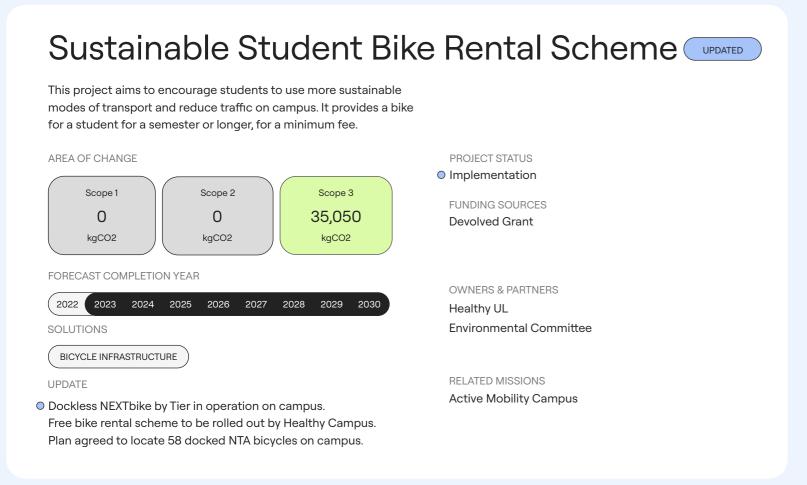
Carbon Neutral Campus

Campus Tribe

Egalitarian University

UPDATED

# Mission Projects Reduce Emissions



# Mission Projects Increase Sequestration

#### Small Scale Green Houses

UL has currently got a number of green houses on campus, this project will see them rejuvenated and used as a growing space on campus to encourage participation and enable hands-on-learning.

CARBON ABSORBED

Absorbed 104 kgCO2

FORECAST COMPLETION YEAR



SOLUTIONS

SMALL SCALE GREEN HOUSES CAMPUS FARMS

PROJECT STATUS

Concept

**FUNDING SOURCES** 

UL Sustainability Fund (TBC)

**OWNERS & PARTNERS** 

**Buildings and Estates** 

**RELATED MISSIONS** 

Agrihood Campus

Carbon Neutral Campus

Biodiverse Campus

#### **Biophilic Library Pilot**

Biophilic design is a concept used within the building industry to increase occupant connectivity to the natural environment through the use of direct nature, indirect nature, and space and place conditions.

CARBON ABSORBED

Absorbed
200
kgCO2

FORECAST COMPLETION YEAR



SOLUTIONS

UPDATED

GREEN FACADES (VERTICAL GREENING
GREEN INTERVENTIONS)

PROJECT STATUS

Design/Decision

**FUNDING SOURCES** 

UL Sustainability Fund (TBC)

**OWNERS & PARTNERS** 

University Library

Centre for Sustainable Futures and Innovation

Green Campus Office

RELATED MISSIONS

Biophilic Campus

Carbon Neutral Campus

Biodiverse Campus

#### **Green Roofs**

Green roofs have a direct positive influence on local biodiversity. UL is planning to leverage its roof top spaces on campus by building and expanding on its current roof top garden.

CARBON ABSORBED

Absorbed
18,900
kgCO2

FORECAST COMPLETION YEAR

2022 2023 2024 2025 2026 2027 2028 2029 2030 SOLUTIONS

GREEN ROOFS ROOFTOP FARMS

UPDATE

Green roof spaces identified around campus by Buildings & Estates.
 Kemmy Business School at preliminary design stage.
 Funding secured by president for Main Building roof garden.

PROJECT STATUS

O Design/Decision

**FUNDING SOURCES** 

UL Sustainability Fund (TBC)

OWNERS & PARTNERS

**Environmental Committee** 

Centre for Sustainable Futures and Innovation

**RELATED MISSIONS** 

Agrihood Campus

Carbon Neutral Campus

Biophilic Campus

## Meadowland Rewilding

Rewilding is a progressive approach to conservation. It's about letting nature take care of itself, enabling natural processes to shape land and sea, repair damaged ecosystems and restore degraded landscapes.

CARBON ABSORBED

Absorbed
13,260
kgCO2

FORECAST COMPLETION YEAR

 2022
 2023
 2024
 2025
 2026
 2027
 2028
 2029
 2030

 SOLUTIONS

 NATIVE SPECIES CONSERVATION
 GREEN INTERVENTIONS

UPDATE

 High-visibility land managed as meadows in accordance with All Ireland Pollinator Plan 2021 - 2025. PROJECT STATUS

Implementation

**FUNDING SOURCES** 

UL Sustainability Fund (TBC)

OWNERS & PARTNERS

**Buildings and Estates** 

Centre for Sustainable Futures and Innovation

**UL** Apiary

RELATED MISSIONS

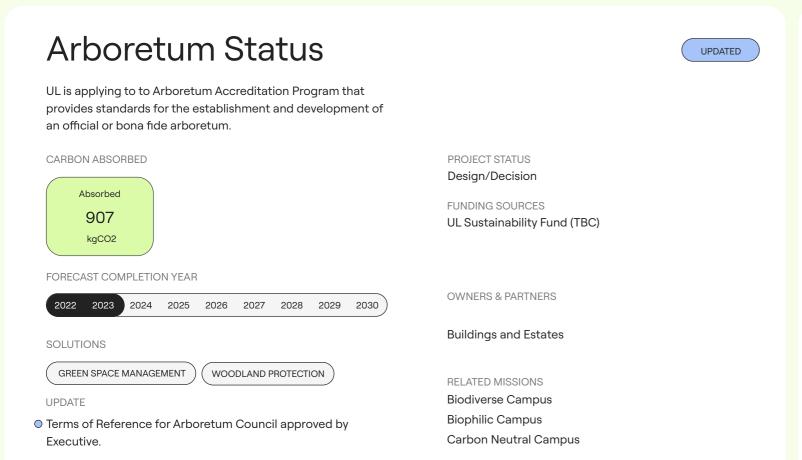
Biodiverse Campus

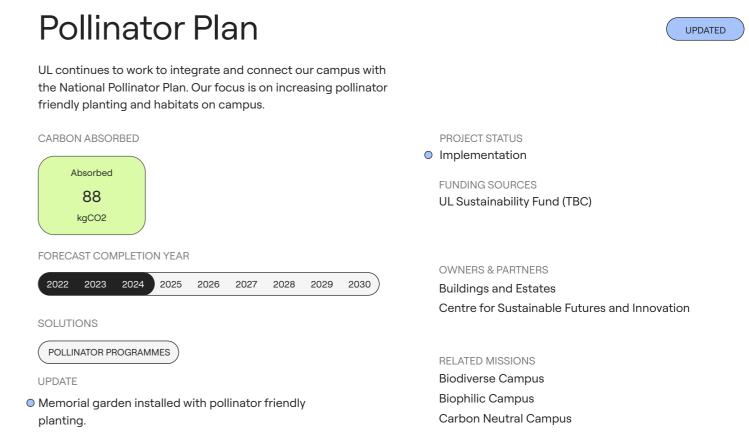
Biophilic Campus

Carbon Neutral Campus

19

# Mission Projects Increase Sequestration





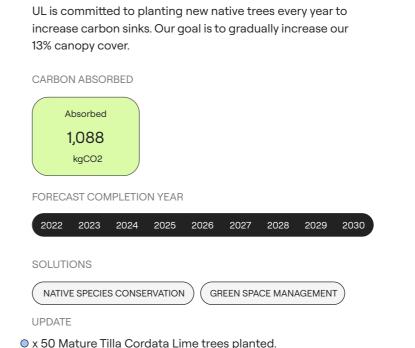
#### Campus Orchard

An orchard of fruit trees have been planted in an area to the east of Plassey House in a manner reflective of traditional parkland. It is situated in an area to take full benefit of natural light.



PROJECT STATUS Implementation **FUNDING SOURCES** UL Sustainability Fund (TBC) **OWNERS & PARTNERS Buildings and Estates RELATED MISSIONS** Agrihood Campus

Carbon Neutral Campus



x 12 Mature Birch trees planted.

**Native Tree Planting** 

**PROJECT STATUS** Implementation **FUNDING SOURCES** UL Sustainability Fund (TBC) OWNERS & PARTNERS **Buildings and Estates** RELATED MISSIONS **Biodiverse Campus** 

Biophilic Campus Carbon Neutral Campus

#### Sustainability Dashboard

The dashboard project will work to build a data visualisation tool that will allow UL sustainability reporting to be open and transparent. Data will be published across multiple interconnected layers.

Top-down

AREA OF CHANGE

Bottom-up Culture Governance change change

FORECAST COMPLETION YEAR



SOLUTIONS

REPORT DIGITISATION

PROJECT STATUS

Implementation

**FUNDING SOURCES** 

Centre for Sustainable Futures and Innovation

UPDATED

UPDATED

**OWNERS & PARTNERS** 

Centre for Sustainable Futures and Innovation Research Office/Research Institutes Centre for Transformative Learning **UL Engage** 

RELATED MISSIONS

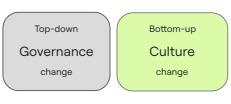
Digital Campus Commons

Mission Lab

#### **ESD Staff Program**

UL staff will get an introduction to the concept of sustainability, as well as explore its relevance to HE. Staff will also identify and implement sustainability projects on campus.

AREA OF CHANGE



FORECAST COMPLETION YEAR



SOLUTIONS



PROJECT STATUS

Approved

**FUNDING SOURCES** 

Erasmus +

**OWNERS & PARTNERS** 

Centre for Sustainable Futures and Innovation University of South-Eastern Norway **Antwerpen University** 

RELATED MISSIONS

Mission Lab

Open Loop University

Transition Governance Framework

### **University Digital Twin**

Digital model of the university campus infrastructure. It will be used to simulate, test and optimize various scenarios and outcomes.

AREA OF CHANGE



FORECAST COMPLETION YEAR



SOLUTIONS

DIGITISATION

UPDATE

Kemmy Business School digital twin pilot delivered.

PROJECT STATUS Implementation

**FUNDING SOURCES** 

University of Limerick

**External Funds** 

**OWNERS & PARTNERS** 

Centre for Sustainable Futures and Innovation

**RELATED MISSIONS** 

Digital Campus Commons

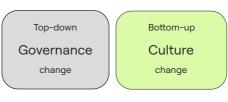
Mission Lab

Carbon Neutral Campus

#### **ESD Student Program**

These sessions are designed to engage students in the fundamentals of sustainability while demonstrating actionable ways of getting involved in sustainable development in their personal, professional, and academic lives.

AREA OF CHANGE



FORECAST COMPLETION YEAR



SOLUTIONS



**PROJECT STATUS** 

Concept

**FUNDING SOURCES** 

Centre for Sustainable Future and Innovation

OWNERS & PARTNERS

Centre for Sustainable Futures and Innovation Clubs and Societies

UL Faculty and Staff

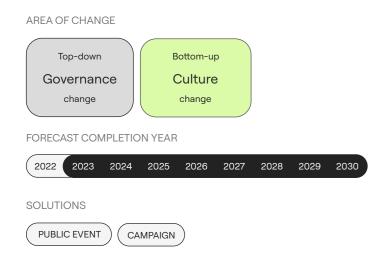
RELATED MISSIONS

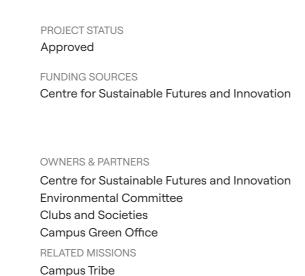
Mission Lab

Open Loop University

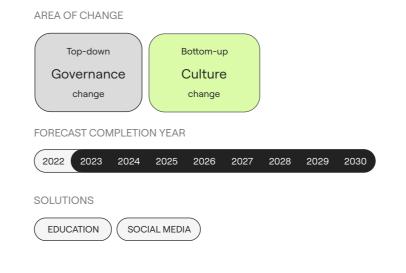
#### Green Campus Week

The annual week of activities and events in conjunction with An Taisce Green Campus' Green Campus Week.





# Online Sustainability Community Fostering an online community for students and staff to learn more about, and connect with, UL's sustainability portfolio and



progress toward a sustainable university.

PROJECT STATUS
Concept

FUNDING SOURCES
Centre for Sustainable Futures and Innovation

OWNERS & PARTNERS
Centre for Sustainable Futures and Innovation
UL Marketing and Communications
Virtual Learning Environment - Brightspace

RELATED MISSIONS
Mission Lab

Mission Lab
Open Loop University
Campus Tribe

**PROJECT STATUS** 

**FUNDING SOURCES** 

OWNERS & PARTNERS

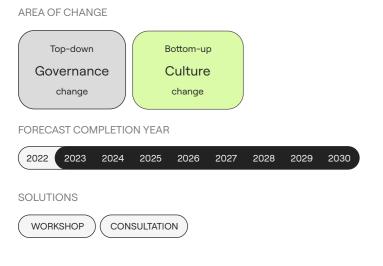
**Buildings and Estates** 

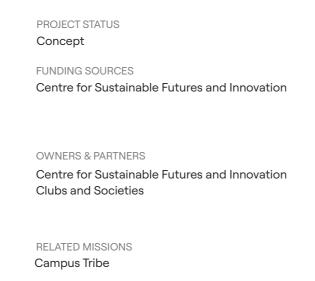
UL Sustainability Fund (TBC)

Implementation

## Student Sustainability Workshops

Workshops run with students to understand student sentiment toward sustainability, and what initiatives or projects they would like to see UL prioritise and collectively take action on.





## Sustainability Video Series

'Unsung Heroes' series of videos to bring to light the action oriented work that UL sustainability advocates are carrying out across campus.



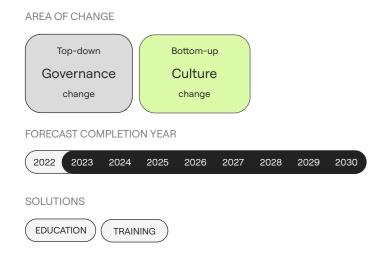
by the EPA.

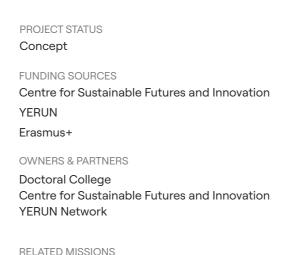
RELATED MISSIONS Mission Lab



#### **ESD Doctoral College**

This doctoral program will focus on increasing students' understanding of sustainability, enabling meaningful interdisciplinary collaborations and taking action to address sustainability challenges.





UPDATED

Mission Lab

Open Loop University

#### **Baseline Mapping Education**

This project will work to map all UL education to the UN SDGs. Enabling us to identify gaps, measure progress, connect key projects and plan new mission-based learning projects.



PROJECT STATUS

Concept

**FUNDING SOURCES** 

Centre for Sustainable Futures and Innovation

OWNERS & PARTNERS

Centre for Transformative Learning
Centre for Sustainable Futures and Innovation
Mission Lab

RELATED MISSIONS

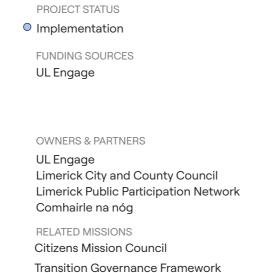
Digital Campus Commons
Mission Driven Learning
Sustainability Dashboard

### Citizens Assembly

tizens Assembly

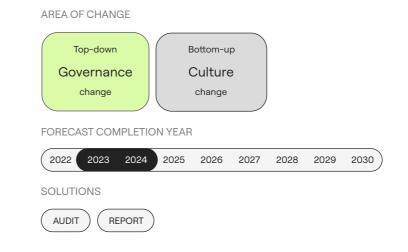
Safe and respective space for citizens to come together and discuss SDG focused Actions for Limerick. To provide a public focus on sustainability and SDG action in UL. Opportunity for UL staff and students to develop their public engagement skills and experience.





## Baseline Mapping Research

This project will work to map all UL research to the UN SDGs. Enabling us to identify gaps, measure progress, connect key projects and plan new mission-based research projects.



PROJECT STATUS
Implementation
FUNDING SOURCES
Centre for Sustainable Futures and Innovation

OWNERS & PARTNERS
Centre for Sustainable Futures and Innovation

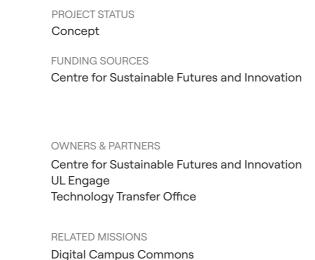
Digital Campus Commons

RELATED MISSIONS

#### **Baseline Mapping Community**

This project will work to map all community based initiatives connected with the UN SDGs. Enabling us to identify gaps, measure progress, connect key projects and plan new mission-based initiatives with the wider community.



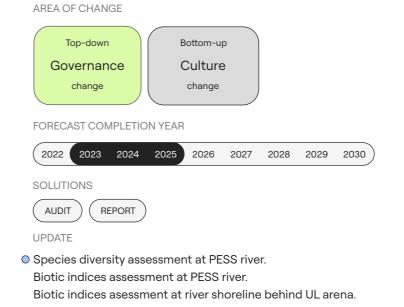


Citizens Mission Council

#### Baseline Mapping Biodiversity

UPDATED

A biodiversity baseline study is the collection and interpretation of information on the biodiversity values at a site; this includes the species, habitats and ecological systems present, their current condition and their trends before a project commences.



PROJECT STATUS

Implementation

FUNDING SOURCES

University of Limerick

OWNERS & PARTNERS

Department of Geography

Centre for Sustainable Futures and Innovation

RELATED MISSIONS

Digital Campus Commons

Biodiverse Campus

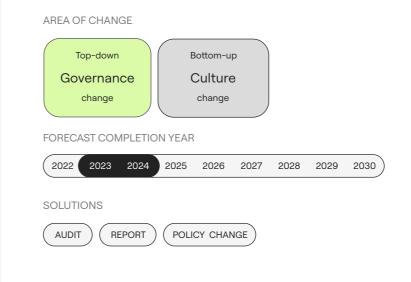
## Sustainability Scholars Scheme 2022

The Faculty of Science & Engineering is supporting collaborative, transformative and interdisciplinary initiatives in sustainability by funding five structured PhD scholarships.



## Baseline Mapping Policy

Baseline study of policies at UL to support the design and development of a portfolio of sustainability related policies.



PROJECT STATUS
Concept

FUNDING SOURCES
University of Limerick

OWNERS & PARTNERS
Centre for Sustainable Futures and Innovation
Sustainable University Working Group
Policy Hub

RELATED MISSIONS

Digital Campus Commons

Transition Governance Framework



PROJECT STATUS Implementation **FUNDING SOURCES Environmental Committee OWNERS & PARTNERS Environmental Committee** The Banner Beekeeping Association **UL** Apiary RELATED MISSIONS **Biodiverse Campus** 

UPDATED

UPDATED

#### Sustainability Literacy Libquide The library is leading on the creation of resources and academic content in the areas of climate literacy, biodiversity, energy, food production and agriculture. AREA OF CHANGE

Bottom-up

Culture

change

2023 2024 2025 2026 2027 2028 2029 2030

O Sustainability Literacy Libquide now available at Glucksman Library

Top-down

Governance

change

SOLUTIONS

TRAINING

UPDATE

2022

**SOLUTIONS** 

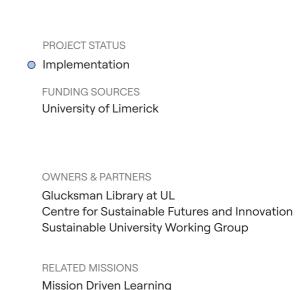
CAMPAIGN

September 2023 - 2025.

FORECAST COMPLETION YEAR

**EDUCATION** 

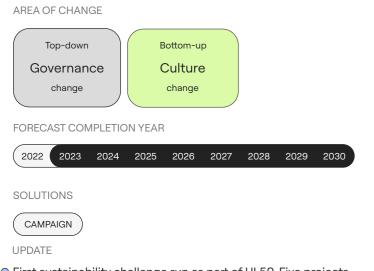
Sustainability Literacy Libquide





O Continues to run annually. 44 Registered students 2023.

An interfaculty competition which calls on students to submit ideas to make our environment more sustainable - to either the campus, the city or wider Mid-West region or further afield.



• First sustainability challenge run as part of UL50. Five projects selected for funding. UL Sustainability Challenge

PROJECT STATUS Implementation **FUNDING SOURCES** University of Limerick **OWNERS & PARTNERS** Bernal Institute Faculty of Science and Engineering Kemmy Business School **Buildings and Estates** Research Office RELATED MISSIONS Mission Lab

**Energy Behaviour Change Campaign** This project will see Buildings & Estates, the OPW and both existing and new Green Teams continue and expand the roll-out of the Optimising Power at Work initiative. AREA OF CHANGE Top-down Bottom-up Governance Culture change change FORECAST COMPLETION YEAR

2023 2024 2025 2026 2027 2028 2029 2030

New Service Level Agreement signed with the Office of Public

Works to deploy the Optimising Power at Work campaign.

PROJECT STATUS Implementation **FUNDING SOURCES** UL Sustainability Fund (TBC) OWNERS & PARTNERS **Buildings & Estates** Office of Public Works **Green Teams** RELATED MISSIONS Carbon Neutral Campus

UPDATED

