



**Trinity College Dublin**

Coláiste na Tríonóide, Baile Átha Cliath

The University of Dublin

# Trinity Sustainability

## Annual Report 2024

[tcd.ie/sustainability](https://tcd.ie/sustainability)



# Our Vision

We will be a university, a place, and a community where climate change and biodiversity loss are addressed in a holistic, integrated and health-focused way to protect and restore our planetary home for future generations

# Our Mission

To tackle climate and biodiversity challenges for a healthy planet and healthy people through our educational programmes, our research and innovation, and our day-to-day operations, both within Trinity and in partnership with external collaborators and communities.

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# Word from the Vice President for Biodiversity and Climate Action

Since starting in this role in May 2022, and one year on from the launch of Trinity's first Sustainability Strategy in January 2024, we have seen huge progress across Trinity. I want to thank my team in Trinity Sustainability for their good will and hard work. However, what is in this report is not just a result of their efforts. It is also the result of hundreds of students and colleagues across Trinity who are all involved in the delivery of Trinity's sustainability vision. I wish to thank all of them for their energy, collegiality and commitment.

Sustainability is a broad concept, encompassing a wide range of environmental, social and economic issues, that are complex and intertwined, and sometimes can even appear contradictory. In Trinity's Sustainability Strategy, we have key targets in three interconnected areas: climate, nature and health. These reflect the focus of four of the 17 Sustainable Development Goals (SDGs), namely, climate action, life below water and on land, and good health and wellbeing. As indicated in the report, we address many more SDGs through this work, including quality education, clean energy, sustainable cities, and responsible consumption. There are clear links with SDGs that relate to other strategic priorities in Trinity including gender equality, peaceful and inclusive societies and institutions, and partnership.

This work is more important than ever as we see the external and international context rapidly changing. Global temperatures continue to rise, with 2024 being the world's hottest year on record, and the first year to exceed 1.5 degrees warming. This warming is faster than climate scientists had predicted, and warming is accelerating. This means that associated risks have been underestimated. Planetary boundaries have reached tipping points and abrupt changes to climatic systems are causing disruption to natural systems, to human societies, our health and well-being and our economies. This puts additional pressure on our natural systems that have been under-valued, over-exploited, degraded and weakened in their ability to buffer such stresses. As the world's temperatures increase, we will meet tipping points (irreversible changes of state) for massive global biosphere systems.

As a global population, we are running out of time to address this. The window of opportunity is closing. We urgently need to reduce carbon emissions to the atmosphere. But phasing out fossil fuels on its own is not enough – we need to keep the planet within the safe operating space for human health and well-being, and address ecological integrity, land use change, pollution, freshwater change and ocean acidification. We will need to adapt, because the trajectory we are already on will mean we are facing conditions that no humans have ever faced before. As Johan Rockström says, "We need to be stewards of the entire planet".

Fortunately, there are solutions: a rapid transition from fossil fuels, transition to circular business models and healthy diets from sustainable food systems, and halting and reversing nature loss, and regenerating marine systems, wetlands, soils and forests. In Trinity, we have a role, responsibility and opportunity to play our part in this global transformation, and we are doing so. Some of what we are doing was already underway and now sits under the framework of the Sustainability Strategy, some of what we are reporting on is because of external drivers such as government legislation, and some activities are brand new, stimulated by the Sustainability Strategy and investment in Trinity Sustainability. Wherever it has come from, sustainability is gaining momentum in Trinity. It should not be viewed as an added extra, on top of business as usual, but sustainability is business as usual. And it is important as we move forward that we do this together, in collaboration with one another within and beyond Trinity. This is too big for one person, one department, one institution – we need each other, and working together is the only way to make the significant transitions that are our collective legacy to future generations.



Go raibh míle maith agat.

**Prof. Jane Stout**  
Vice-President for  
Biodiversity  
and Climate Action



## Our Values

To achieve our mission and vision, we will be;

- > Leaders and advocates
- > Adaptable
- > Optimistic and Radical
- > Collaborative
- > Responsible and inclusive
- > Enabling health promotion

## SUSTAINABLE DEVELOPMENT GOALS



# Strategic Updates

## Our Targets



Net Zero  
Emissions  
by **2040**



Nature Positive  
by **2030**



Healthy Trinity  
by **2030**

Trinity launched its first Sustainability Strategy in January 2024 after extensive consultation with the college community. The Strategy has set key targets for climate action, biodiversity and health by embedding sustainability across education, research, operations and within our community by 2030. The Strategy is supported by a comprehensive action plan with 264 actions which are divided into key action areas; education, research, nature positive campus, climate smart campus, active campus, circular campus, responsible campus and campus community.

**100**  
baby Birch seedlings  
given away



In January 2024, Trinity launched its first Sustainability Strategy which marked a new beginning for the University, one that focuses on biodiversity, climate and health as well as broader sustainability goals. The Strategy was launched by giving away 100 birch seedlings, which were a symbol of that new beginning. The seedlings were grown as part of a No Mow May initiative and offered to staff, students and friends of the university.

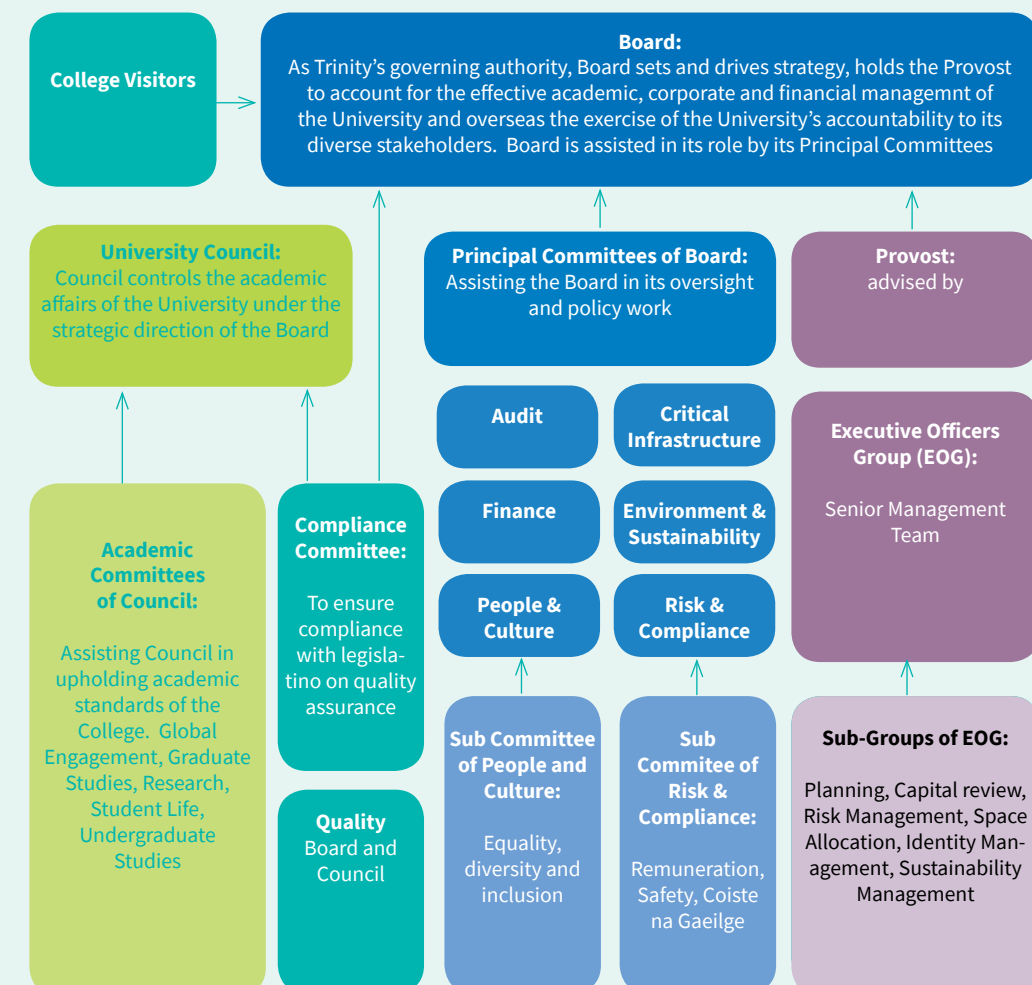
Trinity Alumnae  
collecting Birch seedlings



## Governance

Trinity has established an Environment and Sustainability Committee, one of six Principal Committees of Board, which were established to assist in the performance of its functions. The Committee will oversee the delivery of the Sustainability Strategy and Action Plan. You can find more information here: [Environment and Sustainability Committee](#)

In addition, a Sustainability Management Group was established in 2024 to ensure the implementation of, and track progress on the Action Plan. The members of this group are made up of key senior academic and professional staff from across the university.





## Progress

There has been a significant amount of work undertaken over the last year to start or progress the 264 actions from the Action Plan. The timeline for the Action Plan was short (2024-2026) yet almost two-thirds of the actions (167 actions) have been started or completed. The remaining actions, which have not yet started due to several issues relating to resourcing, capacity and recruitment, will be addressed during 2025.

The Sustainability Strategy set strong targets for climate, biodiversity and health. The Action Plan focused on implementing these by dividing up the actions according to education, research, operations and outreach. The operations actions were divided according to nature positive campus (nature & biodiversity), climate smart campus (energy, capital projects and IT), active campus (sustainable transport & infrastructure), circular campus (resource use & waste), responsible campus (finance, reporting & health) and community (communication, training & engagement). This report is a record of progress on all action areas, with highlights of key initiatives that have taken place over 2024.

## Our Growing Team

Trinity Sustainability is responsible for coordinating the delivery of Trinity's Sustainability Strategy, which has ambitious targets relating to climate, biodiversity and health. It was therefore necessary to build capacity within the team to deliver these targets. In 2024, four strategic roles were appointed: Sustainability Communications Officer, Green Labs Officer, Healthy Campus Manager and Student Experience Officer. The new team members bring a wealth of experience and expertise from previous roles both from within Trinity and beyond.



**Dumitru Anton**  
Green Labs Officer



**Katie Byrne**  
Communications Officer



**Sarah Murphy**  
Student Experience Officer



**Martina Mullin**  
Healthy Campus Manager

# 1. Action and Progress



## Education

**Strategic Objective:** All Trinity students and teaching staff will be empowered to develop the knowledge, skills and attitudes necessary to act as agents of change, individually and collectively, in working for sustainable development within planetary boundaries.

The fellows were:

- Dr Sarah-Jane Cullinane (Assistant Professor, Trinity Business School) - until July 2024
- Dr Cicely Roche (Associate Professor, School of Pharmacy and Pharmaceutical Sciences)
- Dr John Gallagher (Assistant Professor, School of Engineering)
- Dr Felix Mezzanotte (Assistant Professor, School of Law) - until December 2023
- Dr Carlos Rocha (Associate Professor, School of Natural Sciences)
- Dr Clare Kelly (Associate Professor, Trinity Inst. of Neurosciences (TCIN) and School of Psychology) – from April 2024.

## Education for Sustainable Development (ESD) Fellows

Trinity announced a new strategic initiative to embed Education for Sustainable Development (ESD) throughout the curriculum in 2023. Five members of academic staff from across all three faculties were seconded to work with Trinity's Centre for Academic Practice (Trinity Teaching & Learning) and Trinity Sustainability.

The fellows were tasked with developing a programme for Trinity to empower students and staff to develop the knowledge, skills and attitudes necessary to act as agents of change for a sustainable future. They achieved this by:

- Identifying relevant competencies for sustainability and the pedagogical approaches which support their development;
- Co-creating a shared vision for ESD as part of Trinity undergraduate and postgraduate education;
- Mapping existing ESD provision at Trinity including integration of ESD concepts and pedagogical approaches across undergraduate and postgraduate programmes.



Dr Pauline Rooney, Nicola Byrne, Dr Carlos Rocha, Dr Sarah-Jane Cullinane, Dr John Gallagher, Dr Felix Mezzanotte, Dr Cicely Roche and VP Jane Stout.



## Citizens Assembly



In December 2023, more than 60 academic, research and professional staff and more than 30 students gathered for a day-long Citizens Assembly on Education for Sustainable Development, to discuss implementation of ESD in Trinity. A collaborative, deliberative approach was taken to the day, with participants engaging in a wide range of discussions on what a university is for, why Trinity should engage with ESD, what the challenges might be, and how these challenges could be overcome for staff and students. Participants recognised that although transformative change was necessary and complex to delivery ESD across Trinity, there were things to gain in terms of breaking down barriers across Trinity, and building social cohesion. Watch here: [ESD Citizens Assembly](#)



Students attend the first "Enacting ESD" module



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## ESD Common Module

One key strategic action within Trinity's ESD journey was to develop a common interdisciplinary module which addresses ESD themes and develops key competencies for sustainable development. The module was designed to align with the United Nations Educational, Scientific and Cultural Organization (UNESCO) 2020 vision for ESD to "empower learners with knowledge, skills, values and attitudes to take informed decisions and ...responsible actions for environmental integrity, economic viability and a just society." Developed by an interdisciplinary team of ESD Fellows, in collaboration with undergraduate and postgraduate ESD Student Interns, this module entitled "Enacting ESD" can be adapted for integration within all undergraduate (UG) / postgraduate (PG) curricula, and within staff professional development programmes. The module covers broad sustainability topics including earth systems science, the materials economy, corporate political activity and colonialism as well as anxiety and action content developed by Healthy Trinity. In 2024, almost **six hundred first year business students** had the opportunity to experience this new five-credit module, led by Associate Professor Norah Campbell in Trinity Business School.

In addition, two iterations of a professional development module have been delivered to approximately 60 staff, representing most of the 24 Schools in Trinity, from across all three faculties, reflecting a recognition for the need for ESD capacity-building across disciplines.

## ESD Student Interns



The ESD team also consisted of four student interns who informed the module topics, co-developed the workshops and trialed them with staff and other students. The students came from a range of disciplines including medicine, law, natural science and geography & politics. Second-year PhD student Meryam Yabo said "Being part of the team has made me realise why it's so important to have different perspectives. With sustainability it's like a big puzzle and every piece matters"



Dr Cicely Roche, Freddie Fallon, Tom Hegarty, William Reynolds and Dr Sarah-Jane Cullinane

### ESD in the curriculum

ESD is not only provided via interdisciplinary modules, but also embedded in modules and programmes at undergraduate and postgraduate level across all disciplines in Trinity.

## Examples of new courses delivered in 2024 are:

- **The Business of Nature Positive**  
4th Year module in Trinity Business School
- **Commercial Determinants of Health**  
4th Year module in Trinity Business School
- **Responsible Business and Sustainability**  
MSc programme in Trinity Business School
- **Statistics and Sustainability**  
MSc programme in School of Computer Science and Statistics
- **Climate Leadership Development**  
Micro Credential in School of Natural Sciences
- **HEA Healthy Campus Open Course**  
developed by School of Medicine and partners across Ireland
- **Natural Products for circular economy**  
online course created by School of Pharmacy.

In addition, ESD has been embedded into existing modules. For example, 49 social marketing students created anti-vaping campaigns, and 110 mechanical engineers completed Trinity Sustainability Smarter Travel projects. Four of these student projects were shortlisted for NTA **Smarter Travel Awards**.

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## Healthy Trinity Online Tool

Healthy Trinity co-created a health and wellbeing module that is available to all undergraduate and postgraduate students through Blackboard. Two new modules were added this year: “Bias, Consent and Porn”, and “Gender Identity”.

## Responsible Futures – Student Led Audit

Trinity was one of 7 universities to take part in an international pilot of the UK Responsible Futures student-led audit. Students were set the task of auditing Trinity’s formal and informal ESD curriculum under the Students Organising for Sustainability Responsible Futures framework. This was led by Trinity Sustainability, with 10 students from across college, and comprised an audit under 51 criteria.



Student interns with Sarah Murphy, ESD Student Experience Officer

## Education in numbers:

**1** ESD common module developed

**7+** new courses delivered

**10** students carried out a student led audit

**6** ESD Fellows appointed

**600** students completed the new ESD Common Module

**60** Staff completed Professional Development Module

**90** staff & students attended a Citizens Assembly



## 2. Research

### Strategic Objective:

To enable and support research of the quality, diversity, depth and novelty necessary to generate new understanding, insight and approaches for transformational change at local, national and global level to address historical, current and future biodiversity, climate and health challenges.

### Green Labs

Trinity has over 450 labs involved in delivering Trinity’s academic mission of teaching and research. However, labs can have a **huge environmental footprint** in terms of their energy and water use, as well as the amount of waste that is generated from the purchase of laboratory materials. Therefore, a key priority for 2024 was to reduce this impact through a recognised Green Lab accreditation programme as well as offering training to lab users. Thirty-seven labs were funded by Trinity to take part in the **My Green Lab** accreditation programme, which was already operating in over 18 labs across the College. In addition, 27 Trinity labs were selected to take part in Research Ireland’s pilot study on sustainable labs.

In addition to this, funding was made available for 37 staff members to undertake the **My Green Lab Professional Accreditation Course** which offers modules in waste, green chemistry, energy, procurement, water and engagement.

Progress in other areas includes:

- Green Labs Committee – the committee was reestablished in Autumn 2024 after a hiatus of two years.
- Green Lab Network Events – two network events were organised for staff and Jack O’Grady from My Green Labs delivered a presentation at one event.
- Green Lab website – a new Green Lab website was launched to support staff.

### Interdisciplinary research training

A structured (5 ECTS) module entitled ‘Integrating inter- and transdisciplinary practices in research’ is being developed for PhD students and supervisors. Seed funding was provided by Trinity Sustainability and the Dean of Graduate Studies Office and is enabling Dr Jake Byrne, School of Education, to develop the module. It will be piloted in the first semester of the 2025-26 academic year for students and supervisors aligned with the Trinity Research Doctorate Awards (TRDA) group-based projects.



### Green Labs Progress

2023 **18** labs  2024 **82** labs (77% increase)

18% of all labs in Trinity are now taking part in the My Green Lab programme.

Pictured above: Dumitru Anton and Jane Hackett with Jack O’Grady (My Green Labs)





Co-Directors Profs  
Ed Hawkins, Mark Emmerson  
and Yvonne Buckley

## Co Centre for Climate + Biodiversity + Water

In 2024, a new research centre was established to focus on the interlinked challenges of climate change, biodiversity loss and water degradation on the islands of Ireland and Britain. Headquartered in Trinity, the co-centre brings together 100 leading researchers from 14 academic partner institutions in Ireland, Northern Ireland and Great Britain, who will focus on four key areas:

1. **Sustainable AgriFood Transitions**
2. **Sustainable Communities & Livelihoods**
3. **Assessing Risks & Opportunities**
4. **Investing in Carbon & Nature, focusing on forestry, peatlands, grasslands, and coastal habitats.**

## AIB Climate Hub

Trinity received €10million in funding from Allied Irish Banks (AIB) which will bring researchers together to address challenges around maintaining a stable and liveable climate, securing biodiversity and the ecosystem services provided by nature, as well as adapting to climate change, and reversing water degradation. The funding recognises the importance of quality education and innovation in solving global challenges and building a sustainable future for all. The Climate Hub will be led by Professor Yvonne Buckley with collaboration across the university.



Provost Linda Doyle, Mary Robinson, AIB Chief  
Executive Colin Hunt and Prof Yvonne Buckley



Chair of Climate Science  
Prof Karen Wiltshire

## Chair of Climate Science

Trinity created a new role in 2024 – Chair of Climate Science – which is a joint appointment by Trinity’s School of Engineering and the School of Natural Sciences. Professor Karen Wiltshire is a distinguished climate ecologist, an expert in coastal research and a Trinity alumna and she assumed her role in July 2024. She returns to the university from the Alfred Wegener Institute (AWI) for Polar and Marine Research in Bremerhaven, Germany, where she served as Vice-Director in combination with a professorship in Shelf Sea Ecology at the University of Kiel.



VP Jane Stout and  
Prof Yvonne Buckley

## Engagement - EU Researchers Night

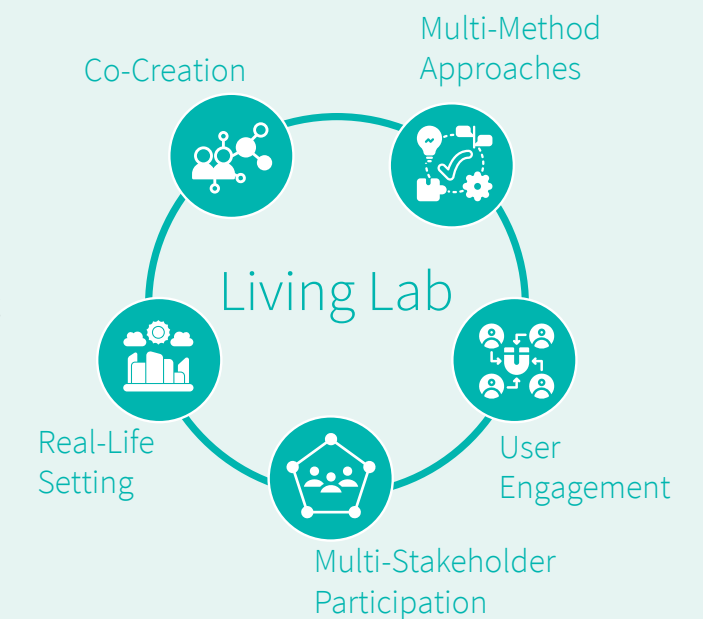
During EU Researcher’s Night, the Climate Co Centre hosted a ‘Talk Tent’ where Professors Jane Stout and Yvonne Buckley gave a talk moderated by Jane Hackett on research and policy impacts. They discussed the successes of the All-Ireland Pollinator Plan and the exciting role of nature-based solutions to climate change. Trinity students Zara Hussey and Johnny Dabrowski spoke on their involvement in climate activism and encouraged students in attendance to get involved. The event was also attended by Marina Fetodovaite, Policy Officer in the EU Commission.

## Living Labs

A Living Lab (LL) provides a collaborative framework for researchers, students, operations staff and external partners to leverage the campus to explore, develop and test new ideas, and to share the knowledge gained from these experiences. The European Network of Living Labs (ENoLL) defines Living Labs as ‘*open innovation ecosystems in real-life environments based on a systematic user co-creation approach*’ which integrate research and innovation processes in real life communities and settings. A Living Lab framework can be applied to any discipline across campus and for this purpose, seeks to address a current challenge related to the area of sustainability.

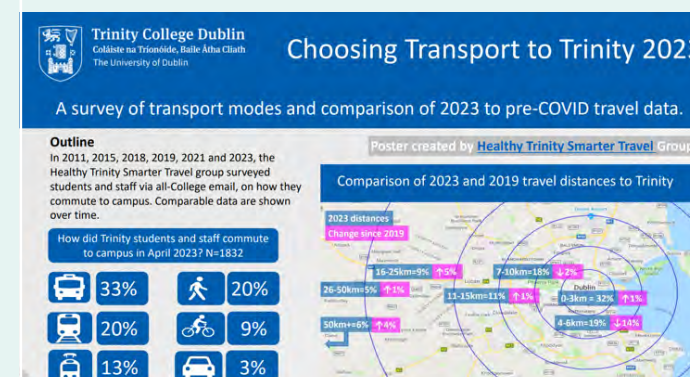
These LL projects and activities can be organised into three main categories across the university -

1. **Formal (for-credit research projects) - usually academic-led**
2. **Informal (extra-curricular projects) - usually student or operational staff-led**
3. **Paid opportunities**



## Living Lab Project – Smarter Travel

Smarter Travel Living Lab data collected in 2023 was used to inform a 2024 [response to consultation](#) on the Dublin City Transport Plan. Trinity Sustainability drew together academic and operational partners from across Trinity including Equality, Diversity and Inclusion to use Trinity data to support Dublin City’s Plan. In 2024, this data also informed an advocacy campaign in which the Healthy Trinity: Smarter Travel Committee lobbied the government for a [Bike to College Scheme](#) for Students which was included in the January 2025 programme for government.







Healthy Campus Tool launch with Provost Linda Doyle, HEA partners and Healthy Campus Network members.

## Living Lab Project – Tobacco Use

Tobacco Living Lab data collected during 2024 incorporated 343 checks on campus and found 1,052 observed nicotine users with 44% vaping. Of those using vapes, 61% (n=285) used disposable vapes. A vaping prevalence survey of Trinity students (n=2,683) is in publication and on publication, will be used to inform Trinity's policy on e-cigarettes. The same data were used to inform a Healthy Planet, Healthy People submissions to a [government consultation](#) on e-cigarettes which called for a phasing out of vaping to protect planetary and public health.

## Living Lab Project – Healthy Campus Tool

The [HEA Healthy Campus Tool](#) was developed in response to Trinity Sustainability target - Healthy Trinity 2030. Led by Professor Catherine Darker in Trinity, it required an extensive review of literature, network consultation and a workshop, leading to delivery of a process and impact measurement tool. An academic paper has been submitted and Living Lab testing is to commence in 2025. Launch [video here](#).

## Living Lab Project - HR Hybrid Policy Review

Professor Adele Grazie, Psychology and Michel Ryan, HR disseminated four online surveys, examining the effect of HR's new hybrid work policy. 2,200 responses were received, and a paper is in publication.

### Research in numbers:

**82** labs taking part in My Green Lab



**10** million euros secured for the AIB Climate Hub



**37** staff completing green lab accreditation



**1** new Chair of Climate Science



**100** leading researchers involved in the new Co Centre for Climate + Biodiversity + Water



**2,200** responses to the HR hybrid policy review



**1** new Green Lab website



# 3. Operations

### Strategic Objective:

To collaborate in multi-, inter- and trans-disciplinary teams to enable our campus and day-to-day operations to be environmentally sustainable, with reduced carbon emissions from our infrastructure and activities, increased space for nature on site, reduced impact on nature off site, and long-term operational plans for a healthier, more resilient future.



Tree planting at Santry during Climate and Biodiversity Action Week

Operations encompasses a large number of areas and therefore a thematic approach has been taken as follows; nature positive campus (nature & biodiversity), climate smart campus (energy, capital projects and IT), active campus (sustainable transport & infrastructure), circular campus (resource use & waste), responsible campus (finance, reporting & health).



## 3.1 Nature Positive Campus No Mow May

The No Mow May initiative was launched in Trinity in 2023 and was extended from May until October in 2024. The initiative started in the UK with a simple idea: you leave your lawn to go 'wild' during the month of May, to provide an opportunity for native plants to recover and flower, which then provides ecosystem support for pollinators, other invertebrates, birds and soil organisms. In Trinity, the lawns in Parliament Square (just inside the Front Gate) were allowed to go 'wild' for almost five months during 2024. In addition, 25,535sq.m. of Santry Sports Grounds and Iveagh Grounds were also left unmown during the month of May to support local biodiversity. This represents 12% of the total acreage (47 acres) of the University. No Mow May will continue in 2025, and more data will be available to determine the impact of the initiative on local plant and insect species.

## Tree Planting

Students and staff planted over 200 trees in Santry Sports Grounds during Climate & Biodiversity Week, in addition to the 250 planted in 2023. The trees chosen were a mix of native and non-native species and the chosen varieties of trees will extend the existing woodland which is under a Tree Preservation Order by Fingal County Council.



Dr Siobhan McQuaid at COP16



Students planting the Urban Forest

## UN Convention on Biological Diversity (COP16)

Trinity gained Observer Status for the UN Conference on Biological Diversity Conference of Parties (COP16) which took place in October. Dr Siobhan McQuaid, Trinity Business School was selected to take part in the event. Siobhan wrote an opinion piece for the Journal newspaper which outlines the progress made as well as the huge amount of work ahead: [Biodiversity COP: Global climate efforts and some gains made, but no clear agreement](#)

## Nature positive in numbers:

**25,535**  
sq. m.+ left to go 'wild'  
during No Mow May



**450+**  
trees planted  
since 2023

**2**  
in-person  
delegates  
attended COP16



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## Parsons Hall – Student Led Urban Forest

Students from the [Postgraduate Certificate in Climate Entrepreneurship](#) decided to take some climate action by planting a small urban forest at Parsons Hall, adding to the existing pocket forest planted in 2023. The forest was part funded by Trinity Sustainability and supported by Estates & Facilities. The students crowd funded for the remainder of the funds for the trees and demonstrated great leadership and dedication during the planning and planting stage. To find out more read their story [here: Trinity's Urban Forest.](#)

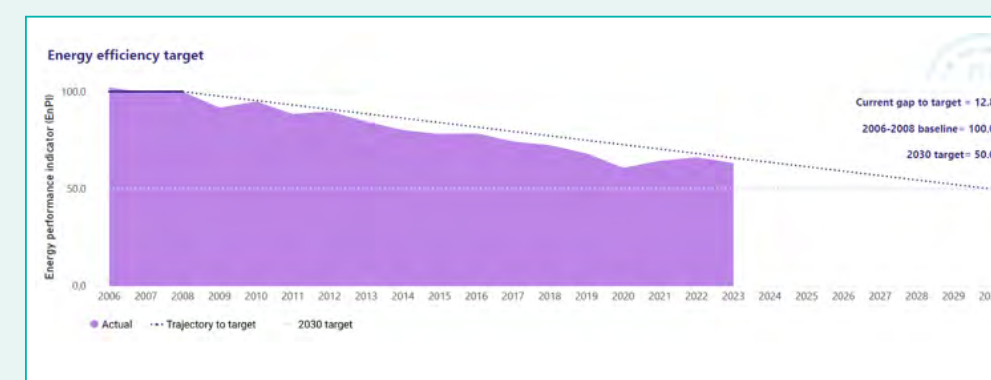
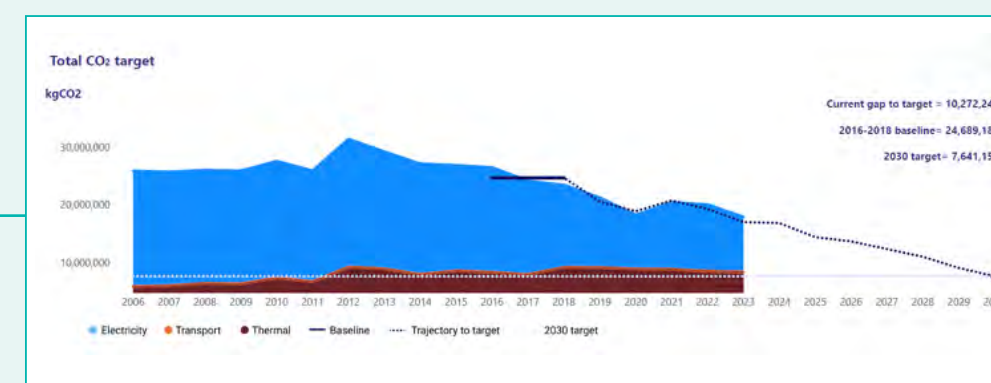
Spotlight on

## 13 CLIMATE ACTION 3.2 Climate Smart Campus

The university is focused on two key targets which relate to climate action:

1. **51% reduction in GHG emissions by 2030**
2. **50% improvement in energy efficiency by 2030**

These targets are mandated by the [Government's Climate Action Plan](#) and all public sector organisations must plan for the decarbonisation of their estates by 2030. Trinity has a unique mix of buildings,



ranging from protected structures to modern Near Zero Energy buildings and, as such, a full scoping exercise is required to determine the decarbonisation solutions available for each building, with associated costs. Teams across the university are working on building energy audits, energy efficiency upgrades, improved control systems and LED lighting retrofit projects. A full Decarbonisation Plan is in development to be completed by Q4 2025.

The latest data available from the Sustainable Energy Authority of Ireland (SEAI) is from 2023. This data shows that we are heavily reliant on the electrification of the national grid if we are to meet our CO2 emissions targets, however even if this occurs, we still have a gap to target of 10,272,245kg CO2 to eliminate by 2030. This will require huge investment so that the campus can electrify its heating systems, consolidate energy provision through energy centres as well as focused behaviour change to reduce use and improve efficiency.

There have been some improvements relating to our energy efficiency target, with savings generated through focused energy efficiency projects to upgrade lighting systems including retrofitting 2,300 light fittings in Sports, Goldsmith Hall and St James Trinity Centre Phase 1, saving circa 100 tonnes of CO2 per annum. In addition, an upgraded heating system was installed in Dartry student residences (accommodation block 1) with a new Building Management System (BMS), and the estimated carbon saving from that is 48 tonnes.

Progress has been made on auditing several buildings on the College Green campus to assess the potential costs involved in refurbishment and retrofitting. The audits will inform the development of a campus wide decarbonisation plan which will identify potential deep retrofit projects, energy saving projects and prioritisation of projects based on potential GHG emissions reductions.

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Several audits took place in 2024, including:

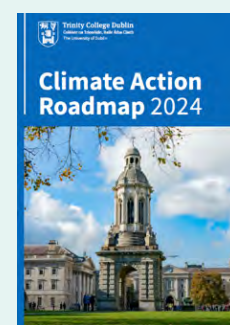
- Arts Building (built in 1978) – the Arts Building received a Higher Education Strategic Infrastructure Fund (HESIF) Grant from the Government in 2023 to complete an audit to identify a decarbonisation pathway for the building. This was followed up with an air tightness test to determine how inefficient/efficient the building is in terms of heat loss. An assessment of decarbonisation pathway from a cost and deliverability perspective is now under way by the Trinity South project team.
- House 33-37 (built between 1815 and 1820) - These historic buildings are used for student accommodation and represent a typical building from the estate that combine both historical significance as well as modern functions. The audits will allow us to determine where investment is needed for retrofitting the building, what type of technology is suitable instead of fossil fuel boilers and how much GHG will be saved as a result. A review of the decarbonisation pathway from a cost and deliverability perspective is now under way by Estates and Facilities.
- Trinity Biomedical Sciences Institute (TBSI) uses a significant amount of steam in sterilisation process and in humidification, and that steam is generated from natural gas. This audit and a follow-up steam trap review is being undertaken to assess the energy saving opportunities on the steam system.

An energy workshop was held with the main stakeholders in the building and a list of low-cost actions are being developed.

## Energy Management System

The college has invested in a new Energy Management System (EMS) which allows for the collection of live data at building level for the top 23 electricity and top 15 gas meters which accounts for about 90% of total operational carbon. The data obtained from the meters allows for greater understanding of which buildings are more energy intensive and where operational quick wins could be made. The data will be communicated to the college community through the Energy Reduction Campaign which commenced in December 2024.

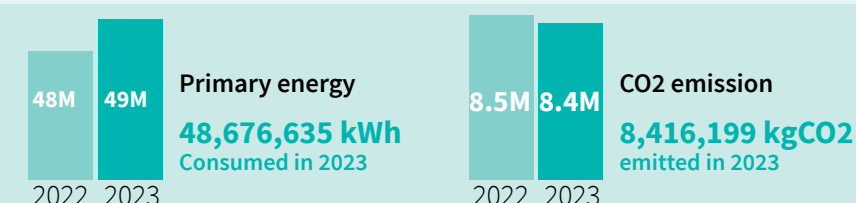
## Climate Action Roadmap



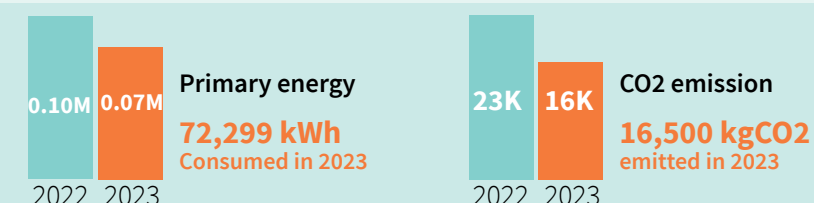
Trinity continues to comply with the Governments Climate Action Plan and completed a Climate Action Roadmap in 2024. The roadmap is available on the Trinity Sustainability website ([see Climate Action Roadmaps](#)).

The Climate Action Roadmap focuses primarily on our Scope 1 & 2 emissions with Scope 1 referring to greenhouse gases that are emitted from sources we own or control i.e. buildings, vehicles. Scope 2 emissions are indirect emissions, deriving from the purchase of electricity, steam, heat, or cooling.

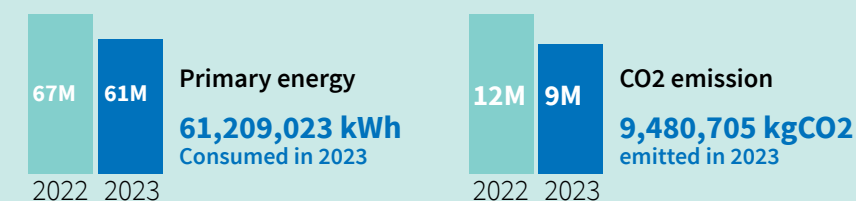
### Thermal energy



### Transport Fuels



### Electricity



### Total energy

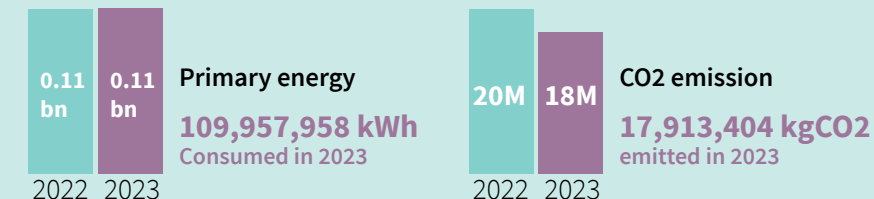


Figure 4: Scope 1 & 2 Emissions 2023

## Energy Reduction Campaign

An Energy Reduction Campaign was rolled out in December 2024 entitled 'Our 51% Challenge' (see [Emissions Reduction Campaign](#)). The campaign will be delivered over 12 months to provide information about energy use, promote behaviour change and identify projects for prioritisation. As part of this campaign, we published the [energy-related emissions](#) for 27 areas around campus.





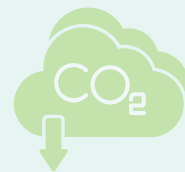


## Energy Sparks Online Game

Trinity collaborated with a young startup -Bolddonut Games – to develop an online game focused on raising awareness of peak and off-peak energy use. The game was developed, and play tested in conjunction with students and staff members. The game was launched during Climate & Biodiversity Action Week and a new level is currently in development which will include Green Labs. To play the game click here: <https://bolddonut.itch.io/sparked-tcd>

us an opportunity to share what we are doing in Trinity, learn from others and build collaboration and partnership between universities to demonstrate leadership and focus attention on meaningful climate action. Read more about those who attended here: [Trinity students and staff observe COP29](#)

## Climate smart in numbers:



**10,272,245**  
kgCO2 to eliminate by 2030

**38**  
new Energy Management Systems



**1**  
new Energy Reduction Campaign



**1**  
Climate Action Roadmap



**2,300**  
light fittings retrofitted



**1**  
new online game



**10**  
virtual delegates to COP29



## UN Framework Convention on Climate Change (UNFCCC)

The UNFCCC's 29th Conference of Parties (COP29) took place over two weeks in Baku, Azerbaijan in October 2024. Trinity Sustainability obtained Observer Status for the University, and as a result, received ten virtual tickets which were allocated to interested staff and students through an application process. Observer status gives



## 3.3 Active Campus

### Transport Study

Trinity commenced a Transport Study with funding made available from the National Transport Authority (NTA). The study is progressing well with the completion of a full consultation with key stakeholders from the University, as well as with Dublin City Council and the NTA. A campus cordon study which focused on counting pedestrians, cyclists and vehicles entering the College Green campus was also completed. A microsimulation study of Lincoln Place was also completed to investigate the possible impact of the proposed pedestrianisation of Lincoln Place under the Dublin Transport Plan. In addition, 5 cycling audits of key routes to the College Green Campus were completed and these studies will feed into the development of a Campus Travel Plan in 2025.

### Cycling Infrastructure

Trinity's first secure **Bike Hangar** was installed as part of the Smarter Travel initiative's ongoing upgrade of bike parking on St. James's campus. Almost 50 additional cycle parking spaces were installed across campus in addition to the hundreds already provided. Funding for this infrastructure was made available through the NTA's Smarter Travel Campus Programme.

### Bike Repair Event

Trinity ran a bike repair event in Oct 2024 during Climate & Biodiversity Week. The event proved popular with students and staff members who received free services to their bikes, all sponsored by Arup. The event was delivered by a company called Cycle Clinic.

### Active Campus in Numbers:

**25+**  
consultations undertaken



**148,438**  
pedestrians counted during the cordon study



**1,607**  
cyclists counted during the cordon study



**5**  
cycling audits completed

**1**  
microsimulation model built







## 3.4 Circular Campus

### Deposit Return Scheme

Ireland introduced the Deposit Return Scheme in February 2024 which required large retailers to provide reverse vending machines (RVMs) for the collection of aluminium cans and plastic bottles. Two RVM's were procured and installed in two locations on campus as part of the scheme and they were launched in partnership with the Green Campus committee.

### Circular Economy Initiative - Trash to Treasure

Trinity's Green Campus committee have been running a circular economy event entitled Trash to Treasure since 2018. The event focuses on reducing waste resources going to landfill by encouraging students to donate items at the end of the academic year, these items are then sold at a discounted rate to incoming students in September. The event in 2024 was entitled Uptown Funk and was co-ordinated by the Circular Economy sub-committee of the Green Campus committee, the students worked tirelessly over the summer period to ensure items were clean, in good working order and ready for reuse.

## Cup Collective - Student Led Initiative

Spotlight on

As part of their Capstone project two fourth year business students worked with Trinity Sustainability and Estates & Facilities to bring a new initiative to the campus which focused on the segregation of coffee cups. The initiative is called the Cup Collective and aims to improve recycling rates and regenerate paper cups on an industrial scale. The students recognised that Trinity wants to illuminate disposable coffee cups from all catering outlets but proposed this as an interim solution. Their project featured in a national newspaper and they also wrote an article for the college newspaper, [Evergreen: Dublin's New Cup Recycling System](#)



Pictured above: David Hackett with students leading the Cup Collective initiative

## Vape Recycling

Vape recycling was launched in March 2024 as part of a Healthy Trinity Engagement Forum on Vaping. The winning campaign design from MSc Social Marketing student Hanna Savchuk entitled "Don't Feed the Monster" was presented on vape recycling bins in the Arts and Hamilton buildings as part of Tobacco Free Trinity. In 2024, approximately 60kg of vape waste with some contaminants from other types of litter were removed from campus by Estates and Facilities.



## 3.5 Responsible Campus

### Health Accreditation

Global accreditation body [FISU Healthy Campus](#) confirmed Healthy Trinity's platinum award, the highest award given, and commended Trinity for three global best practices: 1. Societies and Clubs; 2. Mental Health; and 3. Living Labs.

### Sustainable Investment Policy

Trinity, via the Endowment Fund, has substantial opportunities to invest for a sustainable future that will reduce our negative climate and biodiversity impacts,

improve ecosystem and human health and wellbeing, and take us further towards the goal of sustainable development.

A Sustainable Investment Policy has been developed to ensure that investments match the priorities and values of the University and is intended to support our aims to invest in a better global future by delivering strong returns through involvement with organisations which demonstrate policies and practices in line with the University's mission and values. The Policy applies to the work of the Investment Committee in making and managing investments (of the Trinity Endowment Fund) on the University's behalf across the following headings:

- Investments
- Sustainable Investment
- Appointment of Fund Managers
- Representation Process

### ESG Reporting

Trinity's Financial Services Division (FSD) carried out an ESG Gap Analysis to determine the gaps in data relating to environmental, social and governance reporting. Trinity is committed to comprehensively reporting through a common standard and is part of the Irish Universities Association (IUA) Sustainability Finance Working Group (SFWG). The SFWG is working with the wider university sector to define and implement a common standard which complies with Irish and EU reporting requirements.





## 4. Community

### Strategic Objective:

To collaborate and engage with internal and external stakeholders across a broad range of disciplines and sectors to achieve institutional, local, national and international sustainability goals by 2030 and prepare for a more sustainable and healthy future in the long-term.

Type of Training	Number of Staff Trained
Climate Leadership Training	444
Circular Economy Training	41
Embodied Carbon training	17
Life Cycle Costs training	13

### Action & Engagement

Trinity supports students and staff members to take action and get involved through a number of events that take place annually. As well as annual events there are once off lectures, workshops, tours and talks that take place and information can be found on the events page here: [Events - Trinity Sustainability](#)

### Sustainability Leadership Awards

Trinity's second annual Sustainability Leadership Awards took place during Green Week. The awards celebrated the work undertaken by staff and students who showed initiative to become sustainability leaders within their studies, as part of their work or voluntarily within their community. Twenty-four students and staff members received an award for their work relating to green labs, green theatre production,

community engagement, videography & storytelling, education for sustainable development, research in engineering and education as well as and volunteering within their local community.

The week was delivered in collaboration with student societies and the Green Campus committee.

### Green Week

Trinity celebrated its 22nd annual Green Week in 2024, under the theme "Healthy Planet, Healthy People." The week offered a range of events focusing on diverse topics including a climate & sport panel discussion, clothes swop, film screening, webinars and student led workshops. The week also included the first sustainable sculpture competition which was open to artists within the island of Ireland. The winning sculptures were displayed across the College Green campus during the week. The week was delivered in collaboration with student societies and the Green Campus committee.



Trinity Urban Garden's Festival of Plants

### Climate & Biodiversity Action Week

Trinity ran its 2nd Climate & Biodiversity Action Week in October 24. This week runs during national Climate Action Week, however Trinity expanded the week to include the theme of biodiversity. The week included a range of activities including a festival of plants, a sustainable careers panel, biodiversity tours of the campus, tree planting and a Smart Cities project entitled 'Cities of the Future'.



Sustainability Leadership Award Winners

### Staff Training

The Governments Climate Action Mandate requires Trinity to provide annual training for all staff in Climate Leadership and over 440 staff members have been trained since 2023. Training has been delivered primarily by external providers; however, a new Climate Leadership Development Micro-credential has been developed in the university and sponsorship has been provided for 25 staff to complete this course. Additional training covering other sustainability issues was also delivered to a staff in 2024.



Climate Leadership Training



Show Your Stripes -  
Climate Stripes


## Show Your Climate Stripes

On Friday 18 October, as part of Climate and Biodiversity Action Week, we lit up Trinity's front façade with the Irish climate stripes. The climate stripes are a visual representation of our changing air temperatures. Created by [Ed Hawkins – Climate Scientist](#), these stripes serve as a stark reminder of the urgent climate challenges we face in Ireland. The idea behind lighting up the front façade was to start a conversation with our wider community, the citizens of Dublin and to demonstrate our commitments to reduce our green-house gas emissions. This initiative was undertaken in conjunction with the Co-Centre for Climate+ Biodiversity+ Water, where [#showyourstripes](#) creator Professor Ed Hawkins serves as Deputy Director.

## Healthy Trinity: Creating a culture of health on campus

Trinity on the Move launched [Health and Sports week](#) with 26 events incorporating a public lecture on corporate disinformation, free HSE Sexual Health Education, NTA free bike light giveaways, reduced price exercise classes in Trinity Sport, a capstone student led sustainable PPE event, society and club led come and try sessions, a Healthy Lunch in Trinity Global, theatre and film events and more.

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## Healthy Trinity supports in 2024 include but are not at all limited to:

S2S delivered 38 in-house Mentor training sessions (4hrs, in person). 2024 was the first year these were delivered by trained students with experience as S2S volunteers.

596 Mentors provided peer-led transition to 3,816 first year undergraduates.

Peer Support training was delivered to 19 new Peer Supporters and 3 SU Sabbatical officers. 48 students requested Peer Support, and 65 Peer Support meetings were arranged.

4928 students attended Student Learning Development sessions including one to one appointments, drop-ins, writing centre appointments, writing groups and workshops.

The Addictive Behaviours Group met 24 times with 28 students totalling 103 attendances. The Stop Smoking/Vaping course met 12 times with 51 students registering for a total of 108 attendances.

Staff Mindfulness eight-week programmes were run in both semesters with 20 registered in each, and a total of 301 attendances. Mind Body Boost ran two six-week courses, with 30 students participating for 130 attendances.

29 students attended Cookery 101 in Trinity Hall each Monday for six weeks, totaling 144 attendances.


Collie Ennis leads the Pond  
Workshop with Trinity  
Access Programme

**159** participated in Marchathon, **191** participated in the Campus 5K, **333** participated in Walktober and **215** participated in Reindeer Run.

Breastfeeding support groups with La Leche League Trinity met five times on campus with 28 attendances.

## Health Supports

Free period products [launched](#) at six location on campus in partnership with Estates and Facilities and Corporate Services Division (CSD) as part of Sexual Health group's work which also includes condoms, contraception, menopause, a submission to the national [sexual health](#) strategy consultation. Sustainable period products are proving difficult and costly to procure.

## Outreach – Engagement with Staff & Students

Trinity Sustainability provided input to academic staff induction, Head of School induction, PG orientation, UG Orientation, service expos, Open Day and had stands in the Arts Block and Hamilton Buildings during Freshers Week.


Transition-year students  
participating in the Design  
your Future City project

## Outreach – Trinity Access Programme

Trinity Sustainability has been supporting several initiatives delivered by the Trinity Access Programme (TAP). The initiatives focus on increasing awareness and knowledge of broad sustainability themes in primary & secondary schools through classroom projects, hands on workshops and campus tours.

## Outreach – Academy of the Near Future

Academy of the Near Future is a smart communities education programme in partner-ship with Trinity's CONNECT and Dublin City Council. The Design your Future City project was delivered to 20 secondary students as part of Climate & Biodiversity Action Week. The project allows students to take a deep-dive into all things STEM, urban design, and climate innovation, investigating how technology can support us to create a sustainable Dublin. During the week, students gained real-world experience of climate challenges facing Dublin and were equipped with the knowledge and practical tools needed to understand and address them. A biodiversity tour, communications workshop and project support were given by staff from Trinity Sustainability.

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Irish Green Business Council Biodiversity Tour



Academic Induction Sustainability Tour



## Outreach – Sustainability & Biodiversity Tours

Sustainability & biodiversity tours have been given to several school groups and interested organisations including Green Pearse Street and the Irish Green Business Council. The tours are a great way to inform students, staff and the wider public about the challenges facing the university and work undertaken to date.

## Outreach: Networks and Affiliations

Trinity Sustainability staff represent Trinity on multiple networks including HEA Healthy Campus, ASH Council, a council of the Irish Heart Foundation, EU Smoke Free Partnership, Irish Doctors for the Environment, Climate and Health Alliance, Irish Green Building Council, Green Pearse Street, LERU, Sustainable Development Solutions Network, Green Campus Network and the Irish Universities Alliance.



Sustainable Sculpture Competition



Trinity Urban Garden volunteer Rachel Goodband

## Community in Numbers:

**38**  in-house Mentor training sessions

**29**  students attended Cookery 101

**900+**  took part in campus walks/runs

**51**  students registered for stop smoking/vaping course

**70+**  events run as part of annual weeks

**24**  students & staff received Sustainability Leadership Awards

**444**  staff received Climate Leadership training

# 5. Sustainability Communications

Engagement and awareness around Trinity's sustainability goals and initiatives increased throughout 2024. Key highlights include:

## Social Media

Trinity Sustainability's Instagram followers increased by 32% and video views increased by 83% during 2024. This was achieved in part by developing strategic links with students to create targeted content for their demographic. Increased use of video featuring students and using video as a medium to tell our sustainability 'story' led to increased engagement, views and followership. We also continued to use Trinity's central social media accounts to take full advantage of the larger audiences of their channels.

## Media Releases

In 2024, Trinity issued 40 media releases with a strong sustainability focus. These consisted largely of research developments, funding announcements, partnerships, opinion-editorials and awards. These stories are shared on Trinity's News and Events page, the Sustainability website, social media channels and internal communications channels. They'll often be accompanied by video content, interviews and other content we create to spread awareness and extend the life and reach of such valuable stories.

Stories that received strong media coverage included GoNaturePositive, a research project launched by Minister Malcolm

Noonan with Trinity researchers and local businesses in Connemara. Another strong media success was the 'Witness Trees' story featured by the Irish Times, Independent and Silicon Republic amongst others.

## Events

There were over 50 sustainability-themed events over the 2024 calendar year. The events ranged from public lectures to plant swaps to book clubs and gave staff, students and the public opportunities to learn, network and get involved in sustainability initiatives on campus. The events are supported by both internal and external communications to increase participation and awareness.

## Internal Communications

Our channels for internal communications are T-Net (Trinity's Intranet), the Weekly Wrap-Up (weekly e-zine to staff), all-staff emails and targeted use of social media such as LinkedIn. Each week we feature one sustainability story in the Weekly Wrap-up, which has an average readership of 630 views and a high average completion rate of 70%. Our series in 2024 that featured staff members excelling in their commitments to sustainability did well with above average engagement.



Trinity students promoting Climate and Biodiversity Action Week



## Featured Campaigns



Sustainability  
Strategy  
launch

### Sustainability Strategy Launch

The year kicked off with a successful communications campaign to launch the Sustainability Strategy. The campaign (as mentioned on page 3) involved giving away 100 Birch tree seedlings that grew because of our 'No Mow May' initiative. Across social media, this campaign garnered 165,000 impressions and 2,930 engagements from 23 individual posts. Media coverage was impressive – 36 media mentions with a reach of 37.9 million (source: Brandwatch). The story was covered by the Irish Times, RTE, Irish Independent, Virgin Media, Daily Star, Trinity News, Dublin Live and Lad Bible. Radio coverage included 98FM, SpinFM, RadioNova, East Coast FM, Q102, FM 104 and Sunshine FM.



### Green Week

During Green Week we saw above average engagement on social media posts. Engaging and accessible visual elements and activities led to quality content. For example, the sustainable sculptures, swap shops and plant swaps all saw strong engagement both in person and online.

We published a total of 46 social media posts over four channels.

The posts collectively had 106,000 impressions and 3,220 engagements. The highest performing posts were from Instagram, with an average engagement of 5.47%. (average for education sector is 3.26%: source Hootsuite 2024)

Our content included interviews with three Green Week event planners, graphics, slides for campus digital screens and a composite calendar for the week. We posted all events on the events calendar and included a promotion in the all-staff and student emails. We published a news item on the week on Trinity's News and Events page.

## Climate and Biodiversity Week

Our 2024 Climate and Biodiversity Week proved to be an excellent opportunity to showcase Trinity's commitment in this area. To launch the week, we published a [news piece](#) by recently appointed Chair of Climate Science Professor Karen Wiltshire, where she discussed climate change in Ireland, Trinity's opportunities for research impact and her vision for the University in this area.

This piece was featured amongst 34 other social media posts that garnered over 230,000 impressions and 2,925 engagements. As mentioned previously, we capped off the week by displaying the Climate Stripes on the front facade, which earned a spot in The Journal.ie photos of the day online. We received an average of 86 engagements per post, with the highest post receiving 817 engagements.



Tree planting  
in Santry



### Healthy Trinity Ambassadors

Healthy Trinity Ambassadors (above) complete weekly circuits of campus and remind people face-to-face of the tobacco free campus, deliver social media content, attend events, refill condoms and period products, audit bike parking, conduct pulse surveys and champion health on campus.

Trinity Sustainability Communications and Healthy Trinity Communications are working closely together and exploring a strategy for brining communications together.



## 6. Progress In 2024

### Commitment and Progress

Area	Strategic Objective	Number of Actions	Complete	Ongoing	Not Yet Started/ Under review
Education & Research	<p>All Trinity students and teaching staff will be empowered to develop the knowledge, skills and attitudes necessary to act as agents of change, individually and collectively, in working for sustainable development within planetary boundaries.</p> <p>To enable and support research of the quality, diversity, depth and novelty necessary to generate new understanding, insight and approaches for transformational change at local, national and global level to address historical, current and future biodiversity, climate and health challenges.</p>	72	15	19	38
Operations	To collaborate in multi-, inter- and trans-disciplinary teams to enable our campus and day-to-day operations to be environmentally sustainable, with reduced carbon emissions from our infrastructure and activities, increased space for nature on site, reduced impact on nature off site, and long-term operational plans for a healthier, more resilient future.	110	5	75	30
Community	To collaborate and engage with internal and external stakeholders across a broad range of disciplines and sectors to achieve institutional, local, national and international sustainability goals by 2030 and prepare for a more sustainable and healthy future in the long-term.	82	7	44	31

## 7. Next Steps

Looking forward we will focus on embedding sustainability throughout education and research by focusing on Education for Sustainable Development as well as the Sustainable Development Goals. We will continue to offer staff and students the opportunity to learn about sustainability through the delivery of training as well as supporting our community to act both on and off campus.

The development of a Decarbonisation Plan for the campus is a priority for the University as this will steer us towards our 51% emissions target by 2030, and towards Net Zero by 2040. Reporting on all of our in-scope emissions will also be a focus, especially Scope 3 emissions, which will allow us to demonstrate our full carbon footprint beyond heat, electricity and transport.

Becoming Nature Positive by 2030 will require us to develop a Biodiversity Plan to identify new areas for nature across our 47 acres of campus. This will be accompanied by a more robust approach to identifying our biodiversity footprint across all our operations and activities. It will be a challenging exercise but one that can be supported by partner institutions within the Nature Positive Universities Alliance.

Health underlies everything we do, and we will seek to ensure greater understanding of how our decisions not only impact upon our planetary health but also on individual and intergenerational health.

We will continue to collaborate and develop new partnerships with other institutions, organisations and businesses who are also focusing on climate, biodiversity and health as well as broader sustainability goals.

We would like to say a huge thanks to all our colleagues and students who have been involved in this work. It is only possible with the hard work, vision and ambition of those in Trinity that we can meet our challenging targets and move forward. It is with this in mind that we ask you to think about how you can play your part over the coming twelve months and stay in touch.

Best wishes,  
Jane Hackett,  
Sustainability Manager







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Coláiste na Tríonóide, Baile Átha Cliath  
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