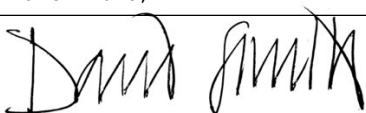


IADT Climate Action Roadmap

Document reference and version Number	IADT Climate Action Roadmap v3.1 (Draft)
Purpose	The Climate Action Roadmap is a document to be produced by public sector bodies which communicates how each public body aims to meet the requirements of the Climate Action Mandate 2022 (the Mandate) and reach its 2030 carbon and energy efficiency targets.
Commencement Date	December 2022
Date of Next Review	June 2025
Who needs to know about this document	All IADT Staff and Students and key external stakeholders supporting and implementing policy and actions herewith.
Revision History	November 2024 - Third revised version
Policy Author(s)	IADT Sustainability Champion, President, Estates & Campus Services Team
Policy Owner	Sustainability & Climate Action Committee
Approval by Executive	March 2023, V1
Signed by President	 30.03.2023 21.11.2023 8.11.24

Institute of
Art, Design +
Technology
Dún Laoghaire



Sustainability &
Climate Action Committee

Institute of
Art, Design +
Technology
Dún Laoghaire

Table of Contents

Introduction: Updating the Roadmap.....	3
Leadership and Governance for Climate Action.....	4
IADT Strategic Plan.....	7
Engaging Our People and Staff Training	8
Developing the Curriculum.....	9
Achieving Our Carbon Targets – Update 2024	16
Gap to Target Update 2024	17
Achieving Our Energy Targets – Update 2024.....	18
Energy & Environmental Management – 2024 update	21
Green Public Procurement	22
Baselining and Reducing Resource Use	23
Improving Our Buildings, Campus Amenity and Mobility plans.....	24
Buildings Update 2024	26
Appendix 1.....	31
Appendix 2.....	32
Appendix 3.....	33
Glossary	35

Introduction: Updating the Roadmap

Under the Public Sector Climate Action Mandate, IADT commits to undertake measures to reach the 2030 carbon and energy efficiency targets and to provide leadership towards climate action initiatives.

The roadmap provides an overview of the activities that are currently being implemented and the future strategic direction and key tasks that will be put in place to achieve the 2030 targets.

This document is supported by the climate action register.

Updating the Roadmap/Progress to Date (November 2024 Update)

Mr Rónán O Muirthile (Head of Faculty, Film, Art & Creative Technologies) remains the Climate Champion and chair of the climate committee. The members of the climate committee are:

Clare Crowley	Assistant Staff Officer, Faculty of Film, Art + Creative Technologies
Louise Glynn	Assistant Lecturer, Department of Technology + Psychology
Ciana Connolly	Assistant Estates and Campus Service Manager, Estates + Facilities Office
Kellie Hoyne	Assistant Estates and Campus Service Manager, Estates + Facilities Office
Patrick Glennon	Assistant Staff Officer, Human Resource Office
Sean Henriques	Psychology Technician, Faculty of Film, Art + Creative Technologies
Cormac Deane	Lecturer, Department of Humanities + Arts Management
Clyde Doyle	Lecturer, Department of Design + Visual Arts
Rachel Gallagher	Enterprise + Development Manager, Directorate of Research, Development + Innovation
Jessica Foley	Lecturer, Department of Design + Visual Arts
	X2 Student Representatives have yet to be appointed.

Following consultation with the HEA and SEAI this roadmap provides additional details and data to support the climate action register which includes a dashboard of targets that tracks specific mandated targets against relevant criteria.

The Estates & Campus Services team have completed several projects and initiatives over the past 5 years to improve the energy efficiency and reduce the energy usage of the campus (*please refer to Appendix 2 for a list of these projects*).

Savings in the Atrium after EEDPP project was complete:

Electricity 15,6076 kWh

Gas 20,4081 kWh

In November 2024 IADT joined the **Sustainable Development Solutions Network**, which is an inter-HEI group that shares information on several aspects of sustainable development, particularly with respect to the formulation of undergraduate sustainability-themed courses across all HEIs.

IADT achieves Smarter Travel Mark

IADT has been awarded the Smarter Travel Mark at Bronze level.

The Smarter Travel Mark is recognition of Dún Laoghaire Institute of Art, Design and Technology's commitment to changing attitudes and behaviours regarding walking, cycling and public transport usage by implementing measures that facilitate, support and encourage sustainable travel options for our staff, students and visitors.

Achieving the Smarter Travel Mark demonstrates that Dún Laoghaire Institute of Art, Design + Technology prioritises the importance and value of sustainable travel initiatives and the associated environmental benefits. We look forward to implementing further Smarter Travel initiatives to support staff, students and visitors in choosing environmentally friendly transport options.

David Smith, President IADT said *"The Smarter Travel Mark is an important milestone for IADT as part of a series of practical measures we are taking to support our journey towards achieving a net zero campus. As a community, IADT's staff and students recognise our responsibilities and the actions necessary to address our environmental impact. We are fully committed to our future sustainability and will continue to incorporate sustainable practices into daily campus life."*

Leadership and Governance for Climate Action

IADT Governance and Management Structures

As a publicly funded Higher Education Institution, IADT operates under the primary legislation of the *Institutes of Technology Acts 1992 to 2006*, and the *Qualifications and Quality Assurance (Education and Training) Acts, 2012 and 2019*. The Institute additionally complies with all relevant legislation (e.g., Freedom of Information, Data Protection, Safety, Health and Welfare, Employment and Equality legislation).

The Governing Body, appointed by the Minister for Further and Higher Education, Research, Innovation and Science (DFHERIS) has ultimate responsibility for the overall strategic direction of the Institute. Its functions are listed in the *Institutes of Technology Acts 1992 to 2006*.

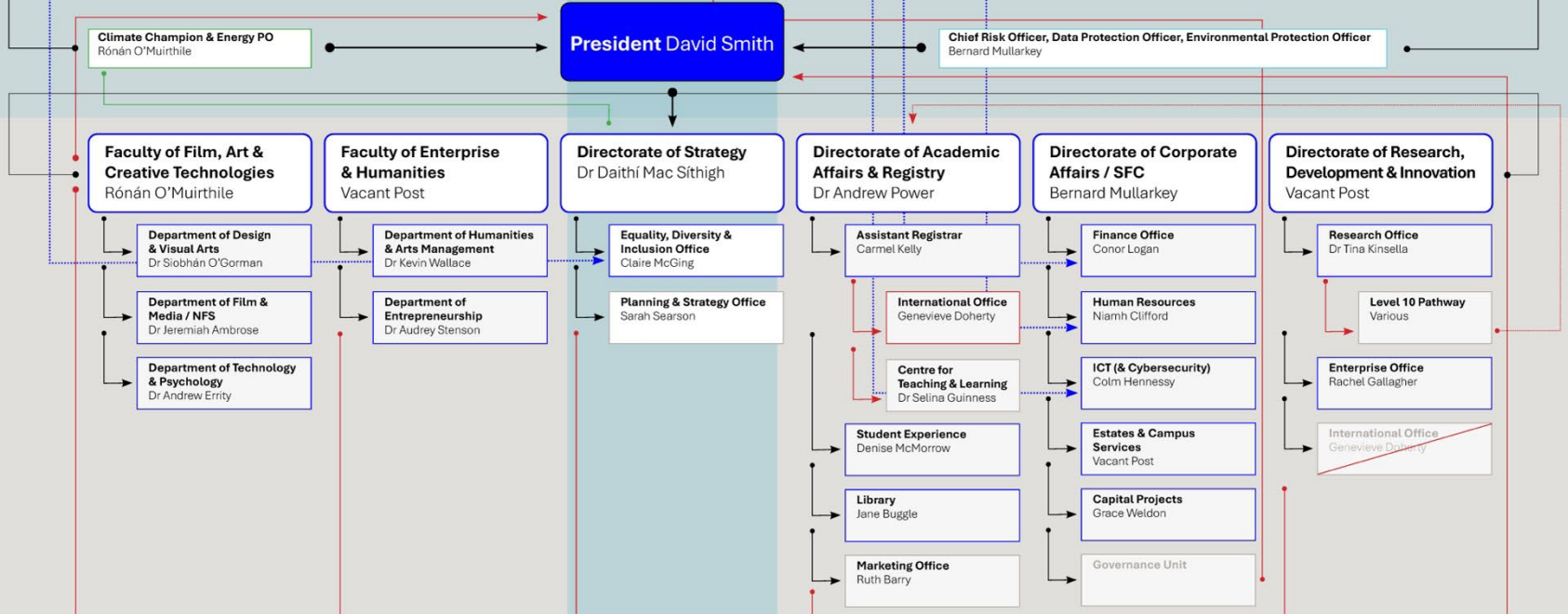
IADT management structures and reporting lines are set out in *Figure 1: Organisational Chart and Governance Structures*. In addition to the two academic faculties, there are three Directorates (each led by a Vice-President); Research, Development and Innovation, the Office of the Registrar and Academic Affairs and the Office of Corporate Affairs. The three Vice-Presidents, the two Heads of Faculty, and the President make up the IADT Executive who have responsibility for the effective operation and implementation of the institute's Strategy and adherence to all relevant regulatory and legislative frameworks.

A Management Team manages the day-to-day operations of the Institute. In addition to the Executive, membership of the Management Team includes Heads of Academic Departments and Managers of most functional areas, i.e. Research, Innovation, EDI, HR, Estates and Campus Services, Capital Projects, ICT, Finance, Student Experience etc.).

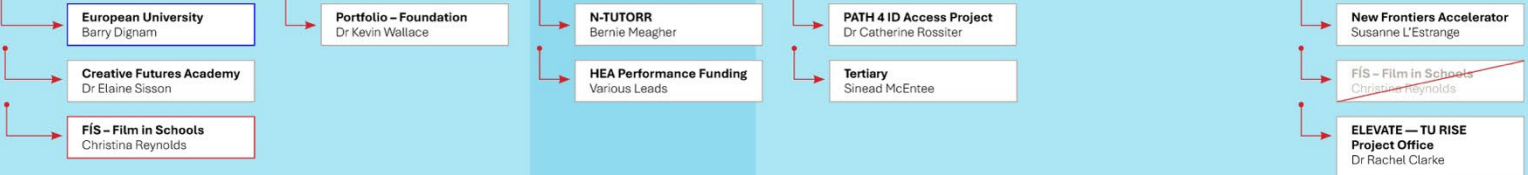
Institute Governance



Institute Executive & Senior Leadership



Major Initiatives & Projects



Climate and Sustainability Governance Overview

Effective governance is crucial for IADT to effectively implement and exceed the climate and sustainability mandate by 2030. It requires the involvement and collaboration of a wide variety of internal and external stakeholders, including the full staff and student body, suppliers, contractors and consultants, incubator client companies and public visitors to the campus. In this section, we will highlight the governance structure and processes that support IADT's climate and sustainability structures and efforts.

Governance Structure

IADT recognises the importance of establishing clear governance structures to ensure accountability, transparency, and effective decision-making. Led by the **Climate and Sustainability Committee**, the Committee will be responsible for overseeing of IADT's sustainability initiatives, setting targets and monitoring progress. The Committee will comprise of representatives from key departments across the Institute to oversee our climate and sustainability initiatives. The Committee will include student representatives, ensuring that the student voice is heard and incorporated into the decision-making process.

The Chair of the **Climate and Sustainability Committee** is the Climate and Sustainability Champion, Rónán O Muirthile, Head of Faculty, Film, Art & Creative Technologies.

The Champion will report to the Executive every quarter and to the Governing Body twice annually. This will provide oversight of the design and development of climate and sustainability strategy, targets and performance metrics.

Stakeholder engagement

IADT will engage with external stakeholders including Dún Laoghaire Rathdown County Council, local business sustainability staff members and representatives, suppliers, and local community groups to understand expectations and, where possible, incorporate their feedback into IADT's sustainability efforts. The engagement with external stakeholders will provide the Committee with access to identify risks and opportunities to build collaborative relationships based on trust and mutual benefits in the local region.

Governance Process

To ensure climate and sustainability efforts are aligned with IADT's Institutional strategy and objectives, several processes will be established and improved including:

Risk Management: A comprehensive risk management framework that identifies, assesses, and manages environmental, social and governance (ESG) risks and opportunities.

Sustainability Reporting: An annual sustainability report that provides stakeholders with information on IADT's sustainability performance, including progress against targets and initiatives. This report is to be independently verified to ensure accuracy and transparency.

Stakeholder Engagement: Engage with stakeholders, including staff, students, local communities, industry partners, funding agencies, and local councils, to understand their expectations and incorporate their feedback into future sustainability efforts and resources. This engagement will support IADT to identify risks and opportunities and to build relationships based on trust and mutual benefits.

Education and Training: IADT encourages and provides education and training opportunities for staff and students to increase their understanding of climate action and sustainability and to equip them with the skills to implement practices in their daily lives. By establishing clear governance structures and process, IADT are committed to achieving our sustainability goals and contributing to a more sustainable future.

IADT Strategic Plan

Sustainability is now one of the 6 pillars of IADT's new [Strategic Plan 2024–2028](#).

As articulated in the strategy,

“We will actively incorporate sustainable practice into daily campus life; in how we teach and learn, how we manage and inhabit our physical space, how we use our scarce resources. We will ensure our future sustainability as a leading academic institution.”

The following priorities have been established.

- 2.1** Sustainability will remain a fundamental focus of the organisation and we will introduce a series of positive practical measures that will support us on our journey towards achieving a net zero campus.
- 2.2** We will embed climate action and awareness in all our teaching and learning ensuring all programmes are rooted in sustainable practices.
- 2.3** We will work with staff and other stakeholders to develop curricula that ensure students have agency and are empowered to become active global citizens.
- 2.4** We will ensure sustainable development is embedded in our approach to governance, leadership and operations, making sustainable practices a part of everyday life.
- 2.5** We will act in a way that assures, protects and secures our future as an established and efficient organisation, as we implement our vision to become Ireland's university for the Creative Industries.
- 2.6** We will grow our portfolio of funded projects to secure our organisational sustainability.
- 2.7** We will grow our student numbers and our funded research profile to ensure our financial sustainability.

IADT's implementation and reporting plan for its Strategic Plan 2024–28 consists of the agreement of a set of objectives and key results (OKRs) that link the Strategic Plan's priorities and actions with the performance objectives (POs) and indicators found in IADT's [Performance Agreement with the HEA \(2024–28\)](#) and other commitments. IADT's OKR framework consists of 32 Objectives (reflecting the 78 Strategic Plan Actions) with a set of Key Results for the current year identified, and further results to be identified for each year of the Plan.

Three objectives in this framework relate directly to the sustainability pillar of the Strategic Plan and the performance objective on education for sustainable development: educating sustainable citizens, reducing carbon footprint, and sustainable organisational practices. Specific key results are aligned with several commitments, including:

Objective 5: We will embed climate action and awareness in all our teaching and learning ensuring all programmes are rooted in sustainable practices.

Objective 8: We will ensure sustainable development is embedded in our approach to governance, leadership and operations, making sustainable practices a part of everyday life.

Engaging Our People and Staff Training

Informal — Green Week / Green Team engagements

To date the engagement of staff and students in Green Week and Green Team engagements has been informal. The Institute hosts an annual Green Week to promote environmental awareness among the entire IADT community. Staff and student participation across the programme of activities is generally very strong, with positive engagement recorded across all stakeholder groups. The success of Green Week has been largely influenced by the informal and optional nature of the programme.

The Climate and Sustainability Committee will seek to build on the current enthusiasm and optimism to create more formal and accredited/audited training and education needs that can be embedded in Staff CPD programmes and across the curriculum (progress as per details further below).

Formal — CPD and Accredited training for IADT Staff

The Institute currently provides access to online Continuing Professional Development (CPD) courses via the LinkedIn training platform, with over 20 short/micro-courses on Sustainability available for staff. Feedback from the Energy Team recommended that formal training is provided for staff in

- Energy Awareness
- Climate Action Fundamentals
- ESG

Formal – CPD and Accredited training for Managers

Consistent with the Climate action mandate CPD training is being rolled out for all managers.

Carbon Literacy Training is being provided by *Sustineo*, who specialise in Climate Action and Sustainability workshops, having delivered them since 2015. A team of with high experience, including Climate Reality Leaders, personally trained by former US Vice President Al Gore, contextualise training by communicating the urgency of the climate crisis. They are responsible for the Design, Development and Delivery of training courses to meet client needs. *Sustineo* have a track record of delivering course to high profile clients such as:

- Association of Energy Engineers (AEE)
- The Climate Ready Academy Skillnet, including a transport leaders programme
- Carlow Kilkenny and Waterford Chambers
- Sustainable Energy Authority of Ireland (SEAI)
- Over a hundred other Climate Action workshops

Training focuses on strategies to save energy, reduce emissions and enhance environmental awareness. As sustainability practitioners themselves, their easily accessible training approach for businesses, communities and the public sector aims to bring credibility with a broad range of field experience in measuring environmental impact, reducing it and developing nature-based solutions.

Senior executives completed the following programmes:

Name	Course Name	Provider	Level	Credits	Completed
David Smith, President	Professional Certificate in Climate Action and Sustainability Reporting	IPA	9	30	31/5/24
Rónán O Muirthile, Head of Faculty	Professional Certificate in Climate Action and Sustainability Reporting	IPA	9	30	31/5/24
Daithí Mac Síthigh, Director of Strategy	Professional Certificate in Climate Action and Sustainability Reporting	IPA	9	30	31/5/24

Recognising the staff demand and the regulatory environment, IADT has identified a number of accredited programmes which will be made available to all staff. The first among these was a Level 9 **Certificate for Education Sustainability** offered by ATU. Education for Sustainable Development (ESD) or Education for Sustainability promotes education that seeks to balance human and economic well-being with cultural traditions and respect for the Earth's natural resources. The ESD certificate applies transdisciplinary educational methods and approaches to develop an ethic for lifelong learning, fosters respect for human needs that are compatible with the sustainable use of natural resources and the needs of the planet, and nurtures a sense of cooperation and global solidarity (*UNESCO Decade of ESD, 2005–2014*). This Level 9 accredited Certificate was offered free to all IADT staff under the NTUTORR transformation programme in February 2023.

Secondly, and consistent with the Institute's commitment to delivering on HE System Level priorities, including enhanced and competency-based governance. The Institute Executive Leadership Team have committed to formal CPD programmes under the following strategic themes; Digital Transformation; Climate and Sustainability; Future Governance. Executive members are currently engaged on the **Leading for Sustainability** programme with the Institute of Directors in Ireland.

Developing the Curriculum

IADT is committed to introducing sustainable practices in all its teaching and learning. This includes a specific programme learning outcome that speaks to this and ensure sustainable practices are embedded in all learning.

In the screen arts we support the greening of Irish media production and using the ALBERT Carbon Calculator in assessing the environmental impact of productions. The ALBERT calculator is currently the industry standard in measuring the environmental impact of creative productions.¹

As businesses strive to meet the challenges and demands of global warming, climate change and sustainability, there is an increased need for graduates who have knowledge and competencies to engage in a meaningful way to develop new models for sustainable business. To this end the Faculty of Enterprise and Humanities have launched a Level 9 *Postgraduate Diploma in Business – Circular Economy Entrepreneurship* which is designed to create critically aware and relevantly skilled potential entrepreneurs and business people who have a depth of understanding of the Circular Economy – its roots and antecedents and its potential for the future.

Several programmes now offer modules that are focused on this area including an Introduction to Sustainability in the Business Management programme, which will be adapted across all IADT programmes into the future. The Faculty of Film Art and Creative Technologies is introducing electives in sustainability in year 1 and year 2.

The Good Guide

[The Good Guide to Creative Practice for Students](#) was launched on the 1st of October 2024. This guide is designed to equip students with practical principles to embrace ethical, sustainable, and inclusive practices in their creative work.

The launch event welcomed an exciting line-up of speakers to showcase student work.

- **Keynote Speaker:** Harrison Gardner, eco-builder and sustainability designer, known for his work on RTÉ One's *Build Your Own Home*, spoke about *Unbuilding yesterday and building tomorrow with the day before*.
- **Speaker:** Dr Patricia Gibson, IADT lecturer, presented *Towards AI for Good: Critical Perspectives*

¹ <https://wearealbert.org/>

around the Social, Ethical and Environmental impact of AI.

- **Student Lightning Talks:** Former and current students shared their perspectives and projects that embody the values of *The Good Guide*.
- **Exhibition of Student Work:** A selection of projects from the BA in Visual Communication Graphic Design and MA in Design for Change.

What is [The Good Guide](#)?

At its core, *The Good Guide* is built around three essential pillars:

- **People** — promoting equality, diversity, and inclusion (EDI) in creative endeavours.
- **Planet** — advancing sustainability to minimise environmental harm.
- **Tech for Good** — raising awareness about the ethical use of technology, ensuring it is accessible to all and harnessed for positive social impact.

The guide simplifies complex ideas and supports your creative education journey, helping you make a positive difference for both people and the planet as you move into your future career.

NTUTORR

National Technological University Transformation for Recovery and Resilience national project is an innovative collaboration across the technological higher education sector in Ireland to transform the student experience.

It is transforming the learner experience in the technological university sector through technology and staff/student collaboration, in alignment with sustainable development goals.

The following activities focused on climate and sustainability issues have been funded or are ongoing.

January 2024

Official Launch of IADT's new Climate electives developed by N-TUTORR Academic Champions, lecturers Clyde Doyle & Hilary Kenna, Faculty of Film, Art & Creative Technologies.

- Climate Conversations (Year 1)
- Climate Connections (Year 2)

Guest Speaker: Laura Costello, Director of Strategy: Purpose & Planet at thinkhouse.com.

Leading Irish creative campaigning for planet-centred design, advertising and branding, Forbes named Laura as one of 43 people changing advertising for the climate.

Laura is also a leading member of the Irish chapter of Purpose Disruptors and runs the Good Life Project 2030 in Ireland, a speculative futures design project [featured at COP26](#).

Guest Speaker: Dr. Emer Emily Neenan, Lecturer at South East Technological University (SETU).

Doctoral studies focused on Earth Science and climate change education in Ireland.

February 2024

During N-TUTORR Week, a week-long series of student-led events, several Climate Crisis activities took place:-

IADT 2050: A Sustainable Utopia

Students who had participated in the recently launched elective module 'Climate Conversations', were invited to enter into an art competition, IADT 2050: A Sustainable Utopia'. The rationale was to encourage students to channel their learning creatively and imaginatively and to continue this important conversation beyond the module. Winners were announced at the finale of N-TUTORR week.

Climate Conversations from the Front Line

An international panel of youth climate activists visited IADT for an informative panel discussion. The panel generously shared their journeys and rationale for activism. Highlighting the need for activists to look after their mental health and support each other in the face of the global climate change crisis.

Chaired by Saoi O'Connor, Global North / Alliance of Non-Governmental Radical Youth with panel members:

Saoirse Exton, Youth Advisor to the Secretary-General for Western Europe

Dylan Hamilton, Scotland / (ANGRY Alliance)

Salam El Youssef, Fridays for Future, Denmark

Rianka Gill, Activist & Climate Justice spokesperson, London.

Introduction to Pocket Forests Lecture

A hybrid lecture by Guest Speaker Catherine Cleary of Pocket Forests: Grow a Native Forest in an Urban Area. Attendees learnt that you don't need a large space to grow trees. The talk explained how pocket forests work and promoted their work and the support available to anyone: schools, groups, clubs, universities, businesses, and housing bodies in site evaluation, building communities, site preparation, planting, and ongoing advice regarding care and maintenance.

Botanical Educational (BOED) Pilot Project Launch

A Botanical Education (BOED) student-led pilot project launched during N-TUTORR Week. The project promoted planting seeds. An easy-to-use starter kit that included flower seeds, plant pots, and compost was made available to all to encourage interest in the growing - gathering seeds - growing cycle and the sustainable nature of that practice.

April 2024

66 Voices & The Good Guide to (sustainable) Creative Practice for Students

Staff and students from IADT shared artefacts created under the N-TUTORR Sustainability theme at The National Partners in Innovation and Change Fellowship Showcase & Conference at Croke Park Conference Centre. The conference was attended by close to 500 people (in-person and online).

An immersive sensory LED installation, '66 Voices,' based on research conducted with fellow students into the housing crisis

Design and development of 'The Good Guide to Creative Practice for Students'.

66 Voices was also exhibited at the 2024 Dublin Learning City launch and featured on RTÉ's Radio Oliver Callan Show in June 2024.

May 2024

N-TUTORR Masterclass – 'Reflections on how N-TUTORR has catalysed collaboration in Education for Sustainable Development'

- Led by Dr Mark Kelly, ATU, Head of Centre for Sustainability, students across the N-TUTORR partners

were invited to present projects related to the Education for Sustainability theme.

- Heitor Laforga de Araujo Monteiro is an IADT graduate, designer, and creative who leverages design for good and visual communication to promote and inspire positive change. The masterclasses are online and available to all TU sector staff and students.

September 2024

Harrison Gardner of Common Knowledge officially launched the Good Guide to Sustainable Creative Practice, a non-profit social enterprise based in the west of Ireland. The group shares skills in building, making, mending, and growing because it believes we all have the knowledge needed to create a sustainable future.

The success of the initial fellowship project has led to Phase 2 funding to develop a complimentary Good Guide Toolkit resource, which is due for completion by December 2024.

October 2024

2 x Climate Crisis Events with Sally Weintrobe

Pitchdrop and N-TUTORR collaborated to organise 2 x Climate Crisis events with Guest Speaker Sally Weintrobe, Psychoanalyst and author of *The Psychological Roots of the Climate Crisis*.

Sally delivered an in-person workshop in IADT on the Climate Crisis, followed later in the month by an online discussion drawing on the psychological roots of the crisis, including a lively Question-and-answer session. The online session was chaired by Dr Ian Hughes, Senior Research Fellow, UCC, and Senior Policy Advisor in science, technology and innovation (STI) for the Department of Jobs, Enterprise and Innovation.

Installation of an eco-friendly Risograph printer at IADT

The Risograph offers a sustainable and energy-efficient printing solution unlike many alternative printing solutions. It's versatility enables users to create multi-layered prints using a digital process that yields aesthetically pleasing analogue results. Unlike more traditional methods, Risograph printers are eco-friendly because they use soy-based (non-toxic) inks, consume less energy, and require only a single print for the stencil to be fully inked. Their affordable printing cost and unique aesthetic qualities make them an especially valuable tool for art, design, and media students.

Area	Project Name	Abstract	Owner
N-TUTORR Fellowships			
Fellowship	IADT Campus Student Grow Garden	The project objective is to create a student garden on campus to produce an alternative food source that students are able to access over the course of the academic year + learn useful skills re. gardening for sustainability.	Eoin Hicks Smyth Bryce Manoovalo
Fellowship	Researching and developing an ecological friendly print studio to improve student accessibility	The aim of this project is to set up a staff and student team to facilitate research into innovations in ecological non-toxic printmaking and to set up an ecologically friendly print studio	Cora Cummiuns Hanna Isseyeagh Moya Woods Alice McQuail Bernadette Ryan
Fellowship	1st year FFACT Connect module co-redesign	The lecturer and fellowship project students completed a Digital Transformation for Sustainable Development module in the United Nations System Staff College (UNSSC). They gave feedback from this asynchronous learning resource which will guide the lecturer to create content for a session on Sustainability for the 1st year FFACT Connect students (c400 students). The lecturer also intends to complete a Digital Sustainability for Climate Action module from the UNSSC to incorporate further content for this session.	Lecturer: Louise Glynn Students: Ethan Taylor, India Heath, Jasmim Lobos, Jennifer Reynolds Jessica Doyle, Lara Rosello Peres, Lea Stern, Olamide Akintemi, Rachel Werner, Shauna Mc Carthy Reid
Fellowship	An ethical guide for sustainable and inclusive creative practice for students of creative arts, design & media technologies	Students of the creative arts are studying during a time of unprecedented change in their creative practice. The emergence of AI, the depletion of our natural environment and increasingly diverse communities, necessitate young creatives understand the impact of their practice on society and the planet into the future.	Dr Hillary Kenna
N-TUTORR Student Champions			
Student Champion	Jessica has taken the Sustainability theme.	Plans: Launched the IADT Environmental Society Sept/Oct - organised 2 x swap shops to promote implementing sustainability into everyday life Jan - May - 2 more swap shops being planned December - attending COP 28 January - planning a Climate Cafe, it allows students to begin seeing themselves in sustainability and implementing it into their academic life and art practices. February - planning sustainability panel on Climate Justice and Art (2 x speakers secured to date)	Jessica Dunne

Sample of proposed approaches to embed N-TUTORR themes locally			
Experiential Design Group 1		sustAln	Shirley Casey
		SustAln is a powerful AI tool which empowers lecturers to teach and incorporate Sustainability into their practices. SustAln will empower lecturers to bring sustainability into their teaching practices, help create healthy discussions and bring energy to discussing such matters. SustAln will seek to note emerging trends and new ideas which will help with research and work towards greener future.	
Experiential Design Group 2		That's Debatable	Shirley Casey
		Is Humanity running out of luck? Get into teams with at least one team for opposing and one for the argument. This is a no holds debate go as absurd as you need to win.	
N-TUTORR Academic Champions			
Sustainability Module		1st / 2nd year module on Sustainability in development. Key issues include climate-related topics, materials and practices. Potentially every first year could undertake a compulsory core module on sustainability. Goal is to incorporate it into the core modules, but no final decisions have been made. Meeting with various programs to gain a comprehensive understanding of the concept.	Dr Hillary Kenna Clyde Doyle
N-TUTORR Masterclasses			
	N-TUTORR Masterclass on Education for Sustainability February 14th 2023	IADT staff members attended the N-TUTORR national event masterclass on Sustainability in Education	
	N-TUTORR Masterclass on Education for Sustainability September 20th 2023	IADT staff members attended the N-TUTORR national masterclass on Sustainability in Education	
	IADT FOLLOW-ON session re. aligning assessment with sustainability practices - September 20th 2023	Locally organized follow up session about sustainability in education.	
MicroCredentials (proposed)			
	Sustainability in Education MicroCredential/ Digital Badge	Preliminary discussions around a Sustainability in Education asynchronous digital badge or micro-credential. Elaine Sisson, Ciaran Eaton, Stefan Paz Berios, Paul Curran, Hilary Kenna, Clyde Doyle, Elena Somoza. Target audience potentially 3rd level educators in a CPD environment.	
Needs Identified in N-TUTORR Training Needs Analysis			

	Training in the ALBERT method of carbon footprint calculation	Yet to be scheduled but anticipated to be included in the IADT N-TUTORR Training Plan	
	Sustainability in Education Training	Yet to be scheduled but anticipated to be included in the IADT N-TUTORR Training Plan. Potentially the MicroCredential/ Digital Badge mentioned above will address this need.	
VR Immersive Learning Environment for Climate & Sustainability Literacy			
Enabling Digital Ecosystems (underpinned by sustainability, digital transformation, UDL principles)	VR Immersive Learning Environment for Climate and Sustainability Literacy	This project aims to encompass some of the key pillars of the N-TUTORR curriculum such as Sustainability, Digital Transformation and Universal Access. It proposes to use immersive technologies in the development of new pedagogical approaches, such as embodied and experiential learning experiences, in order to teach complex concepts of climate emergency and sustainability literacy. Immersive technologies can enable students to design and develop experiences and simulations of existing and speculative environmental impacts not possible through other forms of media. It can also facilitate sustainable collaborative learning with students and faculty from other geographic locations and cultures. The opportunity for immersive and interactive learning enhances comprehension and retention of challenging subjects.	Hilary Kenna & Rob Griffin

Achieving Our Carbon Targets – Update 2024

Achieving the Carbon Emissions Reduction targets by 2030

The Climate Action Mandate sets a carbon emission reduction target of 51% by 2030 for IADT. The mandate defines greenhouse gas emissions as energy-related carbon dioxide equivalent emissions. The baseline for this reduction is the average of our 2016 to 2018 emissions. The target is split into two parts — (i) thermal energy emissions (for heating and transport) and (ii) overall energy-related emissions (including electricity). IADT does not have transport vehicles, therefore, our thermal energy emissions are based on heating only.

Energy Reductions

Savings in the Atrium after EEDPP project was complete:

Electricity 15,6076 kWh

Gas 20,4081 kWh

Carbon Emissions

The baseline for our total carbon reduction target is **1,257,831 kgCO₂**, which is our average total carbon emissions between 2016 to 2018. If no new carbon reduction projects were implemented between now and 2030, our total carbon emissions would be **528,183kgCO₂** per annum and our thermal (heating) emissions would be **367,450 kgCO₂** per annum based on reduction due to decarbonisation of the electricity supply network or the grid.

Campus Growth

A new Digital Media Building, incorporating a new student restaurant and associated kitchen is under construction on campus with an expected completion in Q1 2025. It will consist of 7,208 m² and will have the potential to add capacity for up to 600 additional students/staff. This new building will increase our carbon emissions by **129,285 kgCO₂** per annum based on design information and projected usage.

IADT intends to occupy a new office space in Dún Laoghaire in Q2 2023. It will consist of 230 m² floor area and will be occupied by staff members. This additional office space is estimated to increase the Institute's carbon emissions by **5,111 kgCO₂** per annum.

Carbon Emissions Reduction Analysis

The most significant emitter of carbon emissions on our campus is the Quadrangle building. The building is a former landed estate and industrial school, with buildings constructed between the 18th century to 1954 and extensions in the 1980's. These interconnected spaces are significantly deficient in terms of compliance with the Building Regulations, most specifically Parts L, B and M. It has a D2 DEC, which indicates a low energy efficiency and also has a limited energy management system.

It is recognised that in order to upgrade and refurbish the Quadrangle building to a minimum BER of B, sufficient space must be provided to allow decanting of students and staff for the substation upgrade works / deep retrofit.

Therefore, this project relies on the completion and occupancy of the new Digital Media Building, which is due to be completed in Q1 of 2025. A design team will need to conduct a detailed exercise to establish the number of phases required for this project. This will depend on both decanting capacity logistics and available funding. To show results in line with the glide path for the 2030 targets, the refurbishment work would need to be completed within 4 years which is ambitious but achievable depending on the number of phases and availability of required funding.

In addition to above, the Institute maintains an 'Opportunity Register' which outlines several projects under consideration to reduce our carbon emissions. Refer to *Appendix 2* for a summary list of the projects in our Opportunities Register. These opportunities will be assessed and reviewed periodically in consultation with

SEAI to identify which are feasible and offer the most carbon emissions savings.

This review will also identify any funding gaps and inform future applications for the likes of the EEDPP scheme.

Gap to Target Update 2024

Based on our current gap to target model with no projects modelled, there is a gap to our 2030 thermal energy emission reduction target of 367,450 kgCO₂.

The refurbishment of the Quadrangle building has been identified as a project that would enable us to substantially bridge this gap. The project would include the deep retrofit of the building fabric and the installation of a building management system, heat pumps and PV panels.

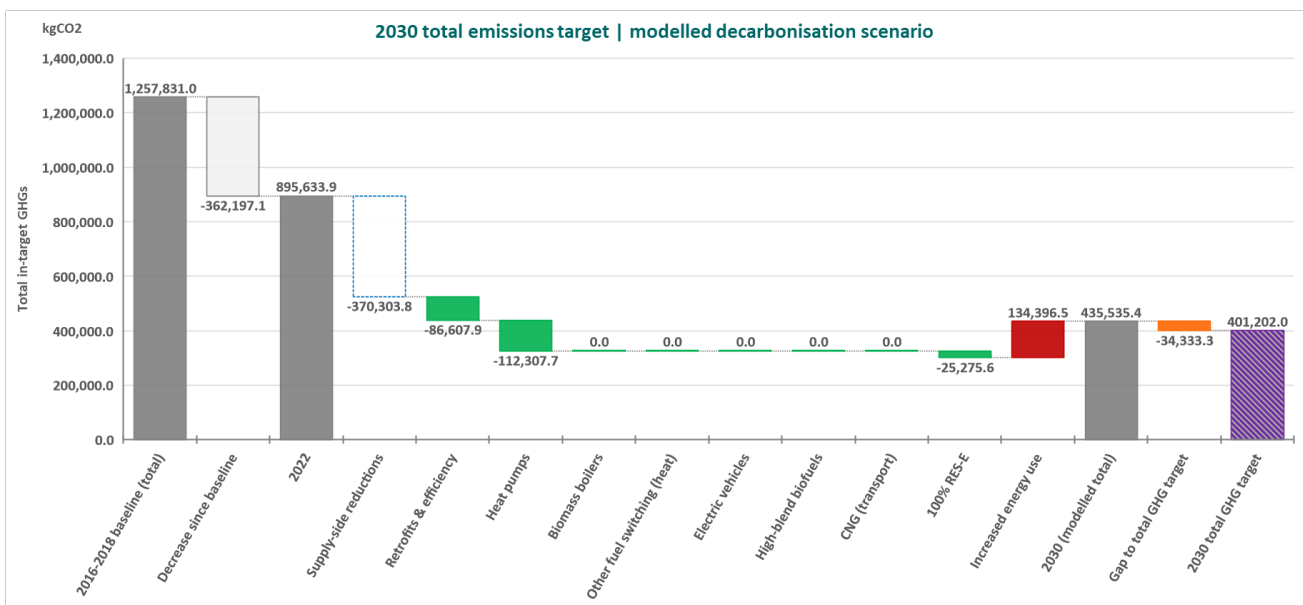
Modelling the Quadrangle projects in the gap to target tool, this project is estimated to bridge our gap to our thermal carbon emissions target and leave us with a **34,333 kgCO₂** gap to our total carbon emissions reductions by 2030. A submission was made in Q3 2023 by IADT to the HEA (Higher Education Authority) to secure funding for the Quadrangle project and this is currently under review by the HEA.

As part of the SEAI Energy Auditing Compliance Scheme, IADT issued an energy audit tender in Q3 2023, to engage a 3rd party auditor to complete an energy audit of the campus in line with SI 426 by Q1 2024. This audit was completed by KSM in 2024 the summary analysis is available in **Appendix 3**.

This audit will assist IADT in implementing an energy management system, identify opportunities to reduce our carbon emissions, a building stock plan and provide an energy masterplan for the campus.

The Institute’s ‘Opportunities Register’ identifies several potential projects which could offer carbon emissions savings. These will be assessed and reviewed as part of the energy audits. The campus energy masterplan will identify the projects, associated timelines and budgets required to achieve our 2030 total carbon emissions target. IADT will leverage the masterplan to obtain the required resources to implement the recommendations.

The **Sustainability & Climate Action Committee** and our Estates & Campus Services Team will continue to work with the Office of Public Works as part of the *Optimising Power @ Work* staff energy conservation campaign. This will support our staff to conserve their electrical usage at work.



Graph 1. IADT 2030 total emissions target & modelled decarbonisation projects

Achieving Our Energy Targets – Update 2024

Achieving the Energy Efficiency target by 2030

The Climate Action Mandate sets an energy efficiency target of 50% improvement by 2030 for IADT. The baseline for this reduction is our 2009 energy usage.

Energy Efficiency

The Institutes energy efficiency is measured using Energy Performance Index (EnPI), this is calculated using our annual energy consumption and measuring it against our annual activity.

The baseline for our energy efficiency improvement target is the Institutes energy performance indicator from 2009. Each subsequent year the calculated EnPI is normalised to allow it to be correlated to the 2009 baseline.

If no new energy efficiency improvement projects were implemented by the Institute between now and 2030, our total energy efficiency reduction would be 42%.

Campus Growth

The new Digital Media Building under construction will consist of **7,208 m²** and will add capacity for close to 600 additional students/staff upon completion in Q1 2025. This new building will increase our energy usage by an estimated **1,320,330 kWh**.

IADT have occupied a new office space in Dún Laoghaire this year at Carnegie House. It consists of 230 m² and will be accommodate staff members. This additional office space will increase our energy usage by an estimated **33,350 kWh**.

Gap to Target

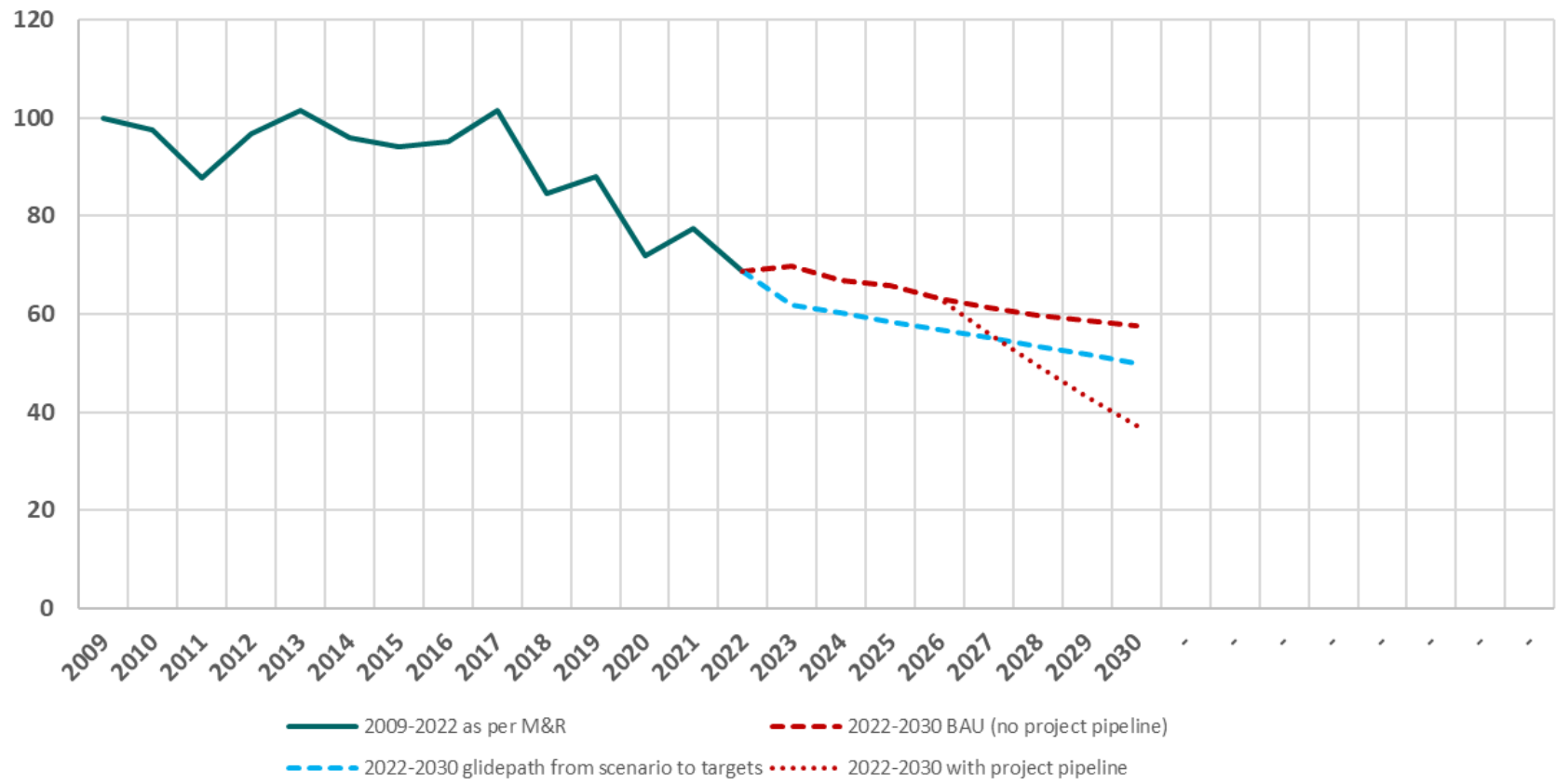
Based on our current gap to target model with no projects modelled, there is a gap of 8% to our 2030 energy efficiency target of 50%.

The refurbishment of the Quadrangle building has been identified in our Carbon Targets section as a project that would enable us to bridge this gap.

Modelling the multiple phased Quadrangle projects estimations in the gap to target tool, allows us to achieve to our energy efficiency improvements of 50%.

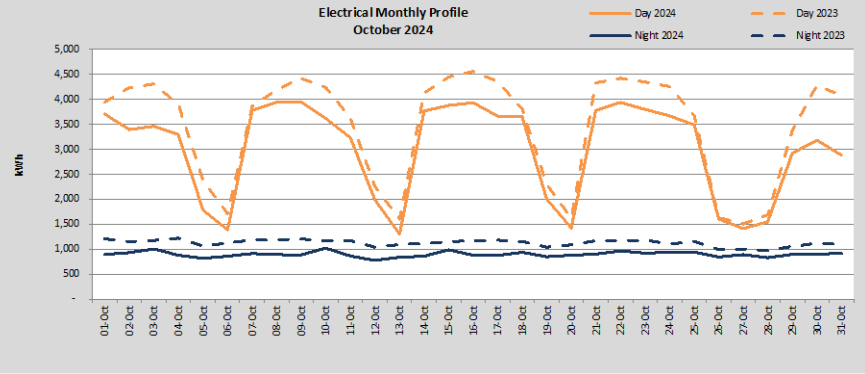
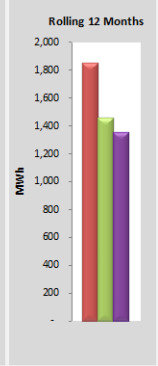
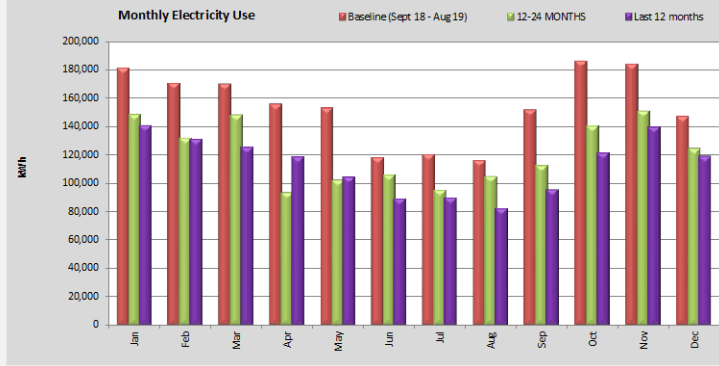
As part of the SEAI Energy Auditing Compliance Scheme, IADT intend to engage 3rd party auditors to complete an energy audit of the campus in line with SI 426 of 2014. This audit will assist IADT in implementing an energy management system and identifying opportunities to improve our energy efficiency. It will also identify the resources required to achieve our energy related carbon emissions reduction targets.

The Institute's current 'Opportunity Register' identifies several potential projects which could offer energy efficiency improvements. Refer to **Appendix 3** for an overview of the projects in our Opportunities Register. These will be analysed, along with any recommendations from our energy audits. A plan is being put in place to implement the projects required to achieve our 2030 total energy efficiency target.

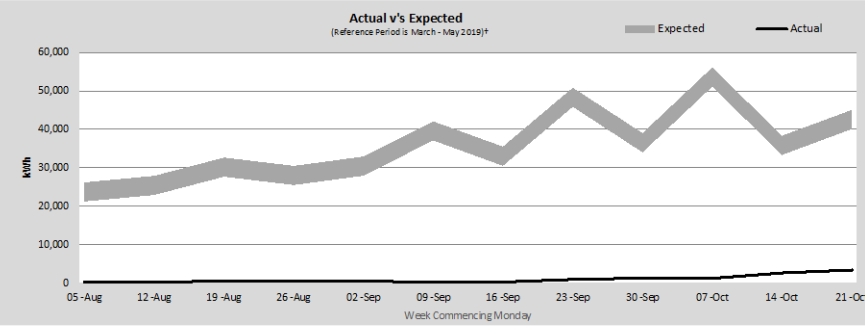
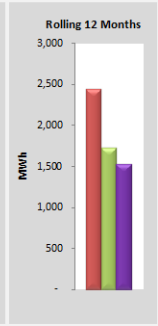
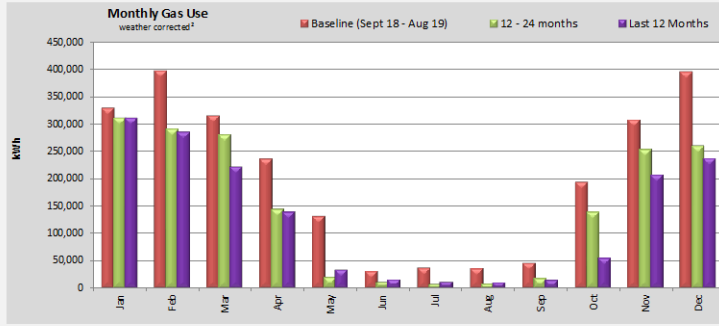


Graph 2. IADT 2030 total energy efficiency target & modelled energy efficiency projects

Electricity



Gas



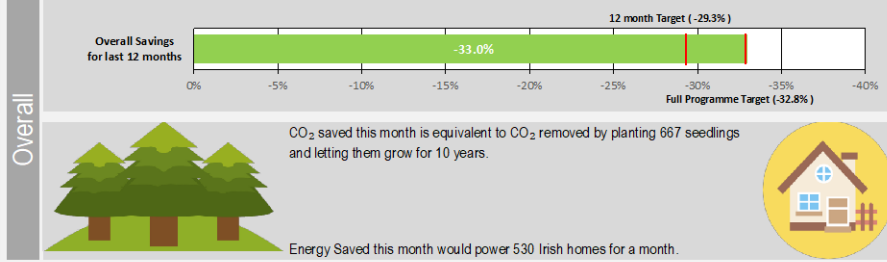
Savings

Electricity

Consumption over the last 12 months was 26.9% lower than baseline.
 Electricity consumption this month is 34.8% lower than baseline.
 Approximate cost of electricity this month is €17,720, with a saving for the last 12 months of €72,690 compared to the baseline.¹ CO₂ produced to generate electricity this month was 31 tonnes.

Gas

Consumption over the last 12 months was 37.6% lower than baseline.²
 Monthly gas consumption was 72.2% lower than baseline.²
 In the last 4 weeks, gas use was 94.9% lower than expected.²
 Approximate cost of gas this month is €2,930, with a saving for the last 12 months of €35,510¹ compared to the baseline (weather corrected gas use). CO₂ produced by gas use this month was 11 tonnes.



¹Prices per kWh are €0.22 for Electricity and €0.05 for Gas. Prices inc VAT, and are based on billing.
²Weather Corrected gas use means all gas use corrected to Dublin Mean using OPW Degree Day Method.

Figure 2. Energy Profile Reductions Optimising Power at Work (OPW)

Energy & Environmental Management – 2024 update

Energy Master Plan

In March 2024, KSM Horizon completed an Energy Master Plan which assessed current energy usage and identified strategic actions to achieve sustainability goals. The plan outlines short to medium-term opportunities for energy reduction and details the Building Energy Rating (BER) improvement measures needed to attain a B2 rating for all buildings across the campus. IADT will seek to implement these additional improvements over time. The central pillar of which is the replacement of the gas boilers and deep retrofit of the Quadrangle building. **See Appendix 3 for full updated list of relevant projects.**

Overall Energy Usage

IADT can show meaningful reductions in our Gas and energy usage since 2015 through various energy efficiency measures and improvements.

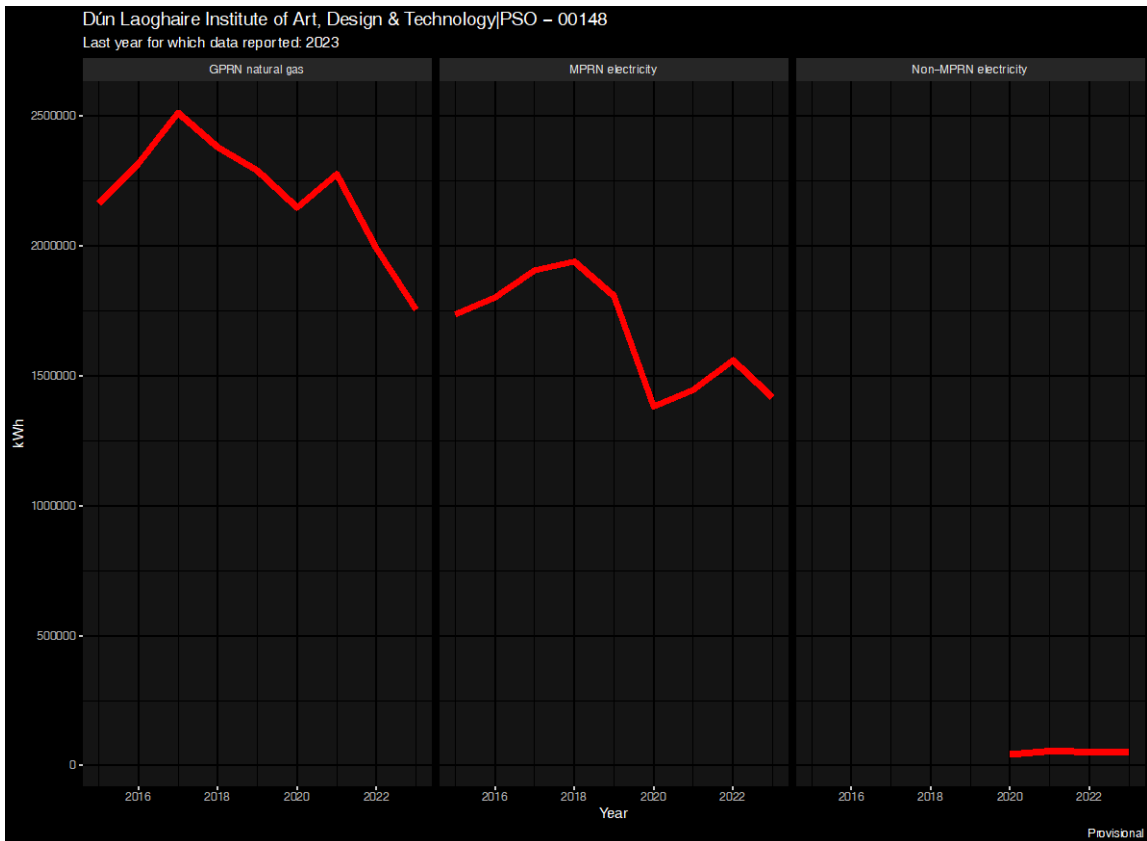
Dún Laoghaire Institute of Art, Design & Technology | PSO-00148

Last year for which data reported: 2023

Data status: Provisional

Energy	Unit	2015	2016	2017	2018	2019	2020	2021	2022	2023
GPRN natural gas	kWh	2,161,602	2,317,241	2,512,205	2,379,600	2,286,567	2,147,267	2,275,788	1,989,700	1,754,571
MPRN electricity	kWh	1,736,304	1,800,975	1,905,654	1,939,692	1,807,032	1,381,857	1,445,686	1,559,851	1,416,414
Non-MPRN electricity	kWh	0	0	0	0	0	42,648	55,850	52,500	50,350

Table 2. Overall Energy Reductions to 2023



Graph 3. Graphical representations of energy reductions to 2023.

Green Public Procurement

IADT is fully cognisant of our responsibilities under Green Procurement objectives, however as a “small public body”, the Institute does not have a dedicated Procurement Office (or officer); as such, the majority of the Institute’s procurement is via the Office of Government Procurement and our progress in Green Procurement will remain largely “in-step” with advances and progress achieved by the OGP.

In developing Evaluation and Award Criteria for any Procurement Process, IADT Managers must review the Key Actions from the Government GPP document in respect of the category of procurement involved and where appropriate select the relevant criteria for inclusion. The relevant Manager or Procurement Team must then allocate an appropriate weighting to these criteria. All decisions relating to the inclusion or otherwise of such criteria must be formally documented and retained on the Purchasing File, specifically any decision not to include GPP criteria must be fully documented together with the rationale for the decisions being made.

- All GPP decisions should be made in line with the Government Circular 20/2019, ‘Promoting the use of Environmental and Social Considerations in Public Procurement’ and the Institute’s Procurement Policy (updated September 2022), Section 9 Sustainable Procurement and Procurement to Support Climate Change initiative.
- Procurement managers will be cognisant of and use where appropriate the EPA Guidance on Green Procurement (2021). Managers will also consider using the OGP’s GPP Criteria Search which is an online tool which allows the user to rapidly find, select, and download the GPP criteria relevant to a specific procurement. This tool was developed in collaboration with the EPA and the Department of the Environment, Climate and Communications, with support from the Public Service Innovation Fund.
- IADT will set up a central register to record data on the Institute’s GPP implementation consistent with the reporting template and guidance developed for government department reporting.
- The Estates & Campus Services office is cognisant of more sustainable procurement options allowing for longer life cycles.
- IADT will specify low carbon construction methods and low carbon cement material as far as practicable for directly procured or supported construction projects from 2023.
- The following are some examples of green initiatives implemented:
 - *Three stream waste stations across the campus and segregated waste collection. Including recycling of wood, metal, glass and WEEE collection.*
 - *Compostable take away cutlery and crockery in the canteen*
 - *Specifying quality furniture and fittings that have long life cycles*
 - *Use of sustainable cleaning products*
 - *Use of water-based paints*
 - *Replacement of damaged luminaires by LEDs with room controls*
 - *Replacement of old boilers by condensing boilers (stop gap until eventual switch over to heat pumps)*
 - *Cleaning Services Tender called for sustainable eco-friendly/sustainable product is to be used where possible*
 - *Use Triple E luminaires, controls and equipment only*
- The new Digital Media Building as part of the Higher Education PPP Bundle 1 was specified to be an A2 rated NZEB building and BREEAM Excellent rated with no fossil fuel energy sources used.

Additionally, and in support of biodiversity and sustainability, the Estates & Campus office are reducing the cutting of large grass areas to encourage wildlife and wildflowers. To assist in reducing waste the Estates & Campus office also offers both reusable cups and stainless-steel reusable water bottles at cost price to staff and students.

The Institute's Procurement Policy was updated in 2023 to state that no new fossil fuel heating will be procured or designed when procuring works, services and design services and this detail will be included in the relevant tender documentation as required.

Baselining and Reducing Resource Use

At the time of preparing the Roadmap (Nov 2024) the Institute had no formal policy or practice in place to monitor and track general resource consumption across its business units and teaching facilities. Consequently, no established baselines are in place to measure the ongoing and ad-hoc resource reductions evident across centres.

The Institute will track the use of water and production of waste from Q4 2023. The utility bills for both water and waste will be recorded and monitored via a tracking spreadsheet. The waste production will be tracked separately for general waste, recyclables and organic waste. The Institute will utilise this tracking information to identify high usage areas. A plan will subsequently be put in place to reduce the water usage and waste production across the campus.

There is no question that the impact of the Covid-19 pandemic utterly transformed and disrupted the Institute's operations and established practices. Like many HEIs the pandemic accelerated the wider digital transformation of teaching and learning and embedded new pedagogic strategies that remain in use today. Such operational eco-efficiencies contribute to an overall decline in energy usage and material consumption. National initiatives such as NTUTORR will see further advances in sustainability in this regard as the technological HE sector moves towards the "digitalisation of our curricula" post-Covid.

Immediate and tangible reductions are evident in the widespread reduction in paper use and printing services among both staff and students. Paper expenditure has reduced by approximately 30%* from 2019 (*note this figure has not been adjusted to account for the hyper-inflation experienced across the paper industry with double-digit price increases on average every six months for the last 2 years). A clearer indicator of the reduction in paper usage is the significant decline in income across IADT printing and photocopying services which is currently at 70% less than 2019 levels.

The net effect of this reduction is most apparent in functional areas such as the HR Office, who have engaged heavily in moving processes online and reducing paper requirements and printing, and advancing the digitalisation of their practices as they move towards a near "paper-free" administrative office

HR have moved the following key paper-based /manual processes online:

- Staff onboarding and induction
- Staff online training and development
- Interview & recruitment boards
- In addition, we have rolled out more simplified HR systems which are Technology enhanced:
- E-Recruit (new updated due in 2023)
- HR Portal
- Staff Intranet
- Adobe sign process for all HR correspondence including – contracts, commencement forms, forms, interview board papers.

As HR Administrative processes were streamlined the office lead out and supported other functional areas in their adoption of online processes and practices across the Institute, including Estates and Campus Services who utilise digital tender submissions by default unless an exception need arises for hard copy submissions.

Finally, the Materiality Assessment will need to be **repeated in Q1 of 2025** with the findings used to further progress ESG priorities across IADT.

Improving Our Buildings, Campus Amenity and Mobility plans

The future strategy for Sustainable Design as outlined in IADT's Sustainability Policy is to develop low- carbon impact buildings that will:

- use passive design measures, and
- are low energy consumers, and
- are sustainable buildings designed to be energy efficient, and
- for our buildings to provide healthier environments.

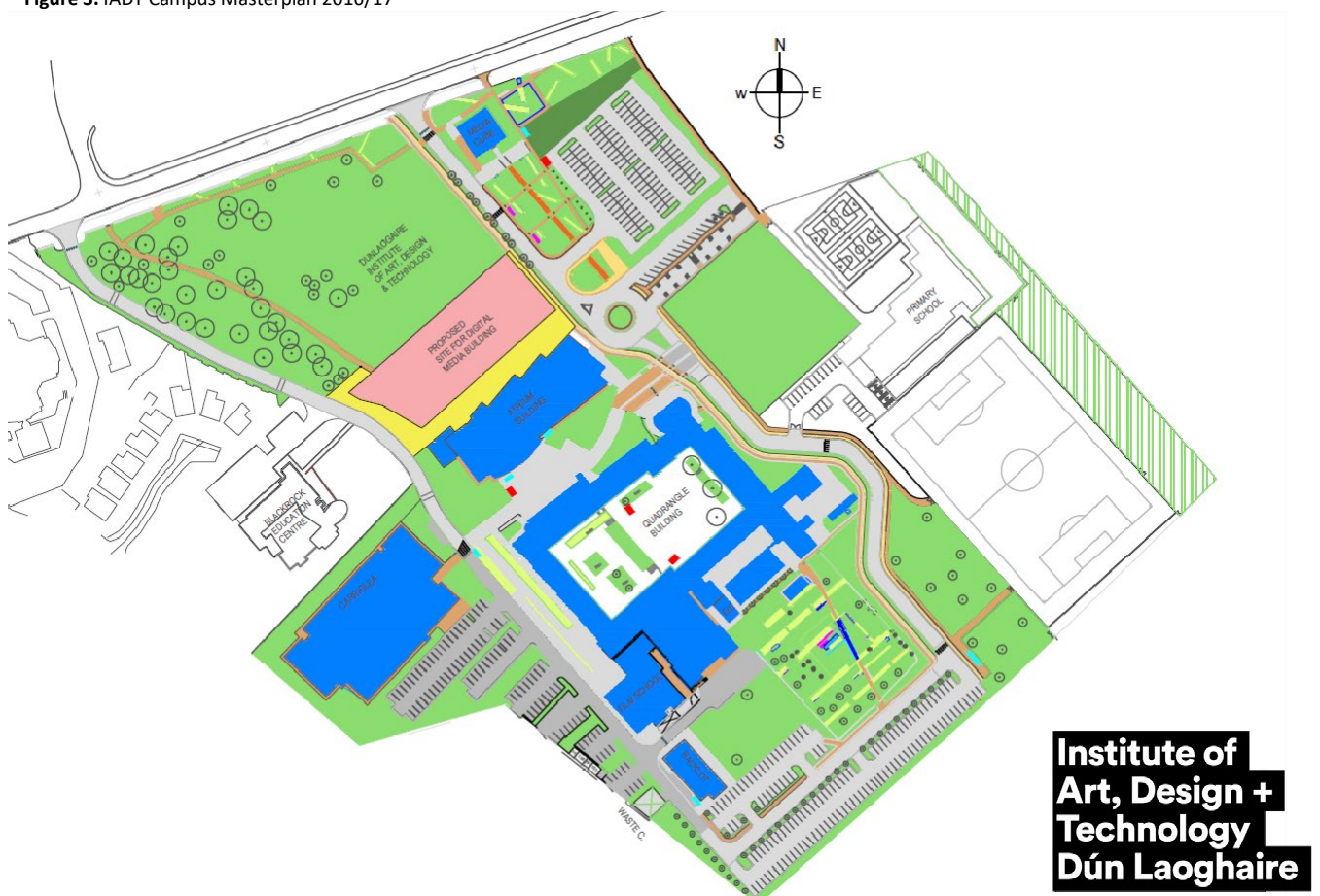
IADT have incorporated the 17 UN Sustainable Development Goals into their Sustainable Policy and will strive through their development of the campus to embed these goals into all future building designs (and upgrades) to ensure that capital investment and actions taken will significantly contribute to the 51% carbon reduction targets set out for 2030 by Government in the Climate Action Plan 2021.

Sustainable development in line with the UN Goals promotes resource conservation of our limited natural resources. Future design strategies employed by IADT will include a whole life cycle approach to management and planning of the development, energy efficiency with a specific focus on climate actions to reduce the carbon footprint of the campus, improving the environmental and pedagogical quality of the occupied spaces, material selection and use, waste management, water management and conservation and enhancing the ecological value of the campus through biodiversity measures.

Existing Building and Campus profile

IADT is situated on a single campus on Kill Avenue in Dún Laoghaire, Co Dublin. The overall campus is c9.5 hectares and is located c2km from Dún Laoghaire town centre.

Figure 3. IADT Campus Masterplan 2016/17



**Institute of
Art, Design +
Technology
Dún Laoghaire**

The primary buildings on the Campus are:

- **Quadrangle Building;** this is a former landed estate and industrial school with buildings constructed from dates in the 18th Century through to 1954. These buildings are significantly deficient in terms of compliance with the Building Regulations and energy management. This building hosts the Institute administration, a wide range of teaching spaces and a range of technical workshops, the student union and recreational spaces.
- **Atrium Building;** This building was constructed in 1998 on the establishment of the Institute. It currently hosts the Institute Student Canteen, the Institute Library as well as a range of teaching spaces.
- **Carriglea Building;** This building was constructed in 2004 and hosts a portion of our student services area along with a selection of teaching spaces.
- **Media Cube;** This building was constructed in 2007 and is the Institute's enterprise development centre.
- **Backlot;** This building was constructed from the Institute's own resources in 2012 and hosts teaching spaces along with some support provisions.
- **National Film School;** This building was constructed in 2013 and hosts two specialist tv studios, a radio studio along with teaching spaces.
- **Digital Media Building;** This NZEB building is part of Higher Education PPP 'Bundle 1'. Works commenced on site in December 2022, and it is planned to be completed Q1 2025 and will host a range of teaching spaces along with a new student restaurant.



Figure 4. Architectural render, Digital Media Building

As note previously the most significant emitter of carbon emissions on our campus is the Quadrangle building with a D2 DEC rating. Despite a rolling programme of upgrades and environmental improvements, our incremental investment in the Quadrangle remains inadequate to fully address the building's poor energy efficiency standards.

Buildings Update 2024

Proposed changes to the Quadrangle

The Climate Action Mandate sets a carbon emission reduction target of 51% by 2030 for IADT (the Institute). The target is split into two parts — (i) thermal energy emissions (for heating and transport) and (ii) overall energy-related emissions (including electricity).

IADT's current *Climate Action Roadmap* notes the baseline for our 2030 total carbon reductions target of **1,257,831 KgCO₂**, which is based on our average total carbon emissions between 2016 to 2018. If no new carbon reduction projects were implemented between now and 2030, our total carbon emissions would be **567,313 KgCO₂** per annum and our thermal (heating) emissions would be **420,284 KgCO₂** per annum taking account of the decarbonisation of the electricity supply network (the grid).

The refurbishment of the Quadrangle building has been identified in our initial draft Climate Action Roadmap, as the project that would enable us to substantially bridge this gap. As modelled in the GTT tool, this project would include the deep retrofit of the building fabric and provision of a sustainable energy management system. The thermal energy carbon emissions savings in this calculation are estimated to be **224,191.2 kgCO₂**. Therefore, the gap to target would be reduced to an estimated **76,316 KgCO₂**. (see section 5.5 for additional information on the energy consumption and gap to target).

Therefore, the Quadrangle building refurbishment, without considering any new developments or off campus facilities, would be estimated to achieve 100% of the Institutes 2030 thermal energy carbon emission reduction target and 75% of our 2030 total energy carbon emission targets.

A note on Embodied Carbon

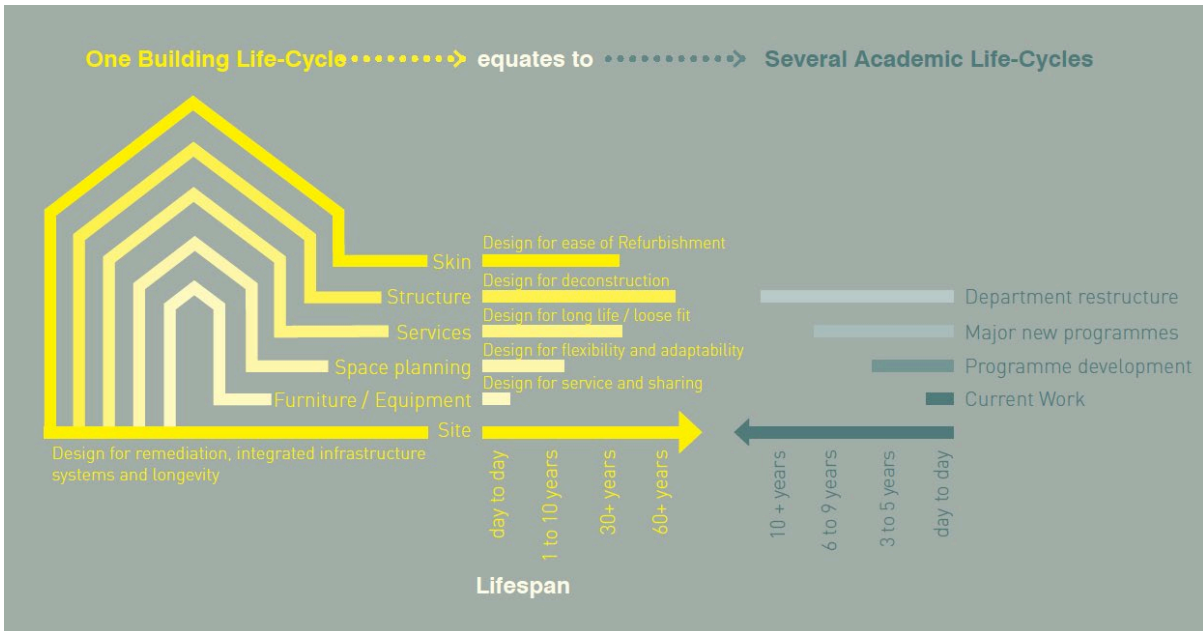
The *Climate Action Plan* outlines a key target to decrease embodied carbon of construction materials produced and used by at least 30% by 2030. In support of this target the project will focus on adaptive reuse to minimise demolitions, selection and specification of alternative low carbon materials including robust embodied lifecycle assessments (green procurement principles). In addition, the project design team will be tasked with adopting designing with the modern methods of construction as a design key performance indicator.

It is recognised at both Government and EU level that renovation is one of the most powerful tools for extending the life of Europe's buildings and reducing their impact on the environment. During the design phases of the project, it is intended to use Level(s) to assist the design team to take the whole of life impact of both the embodied and operational emissions into consideration when designing and detailing the building. Furthermore, our building life cycle assessment [Level(s)] supports our core briefing requirement that the resultant design solution will be both flexible and adaptable.

Quadrangle Building Re-Imagined

One of the key objectives of the proposals is to create spaces which are flexible and adaptable in day to day use and across the lifespan of the buildings to ensure their sustainable use.

The diagram on the below illustrates the principles of designing sustainable and robust buildings which are flexible and adaptable in their use. The site being the most permanent and difficult to change through to the furniture and equipment which will change on a more regular basis.



The diagram above is adapted from Stewart Brand's 'How Buildings Learn' diagram / Useful Projects' 'Circular Economy how buildings learn' diagram & Fiona Duggan's diagram for King's College London.

To create spaces which are flexible and adaptable to change in use and technology requires consideration of:

- A shell /skin which is thermally efficient
- Robust finishes which require minimal maintenance
- Power and data routes which run in line with primary circulation routes to allow for ease of adaption
- Even lighting throughout to maximise furniture layout options
- Integrated acoustic strategy to address multiple uses
- Environmental services that can be easily repaired and upgraded
- Flexible power distribution through the floor to maximise layout flexibility
- storage space to support studios
- opportunities for display - to allow students / courses to present their identity



Upgrading the envelope

Environmental Improvements and Minor Capital Projects 2018 – 2022 (c. €400K investment)	
Building/Location	Project & Improvements
Roisin Hogan House/North Quad.	BMS upgrade – 2022/2023
Atrium	EEDPP upgrade works – 2022/2023
Media Cube	Plant BEMS and condensing boiler upgrade – 2022
Quadrangle / QS108	Internal lighting & controls upgrade – 2021
Campus Grounds & Amenity	Removal and replanting of columnar oak trees – 2021
Campus Grounds & Amenity	Planting of established trees to replace old trees – 2021

Quadrangle	New Energy Efficient water heater installed – 2020
Carriglea	Condensing Cascading Boiler upgrades — 2019
Atrium	BMS upgrade – 2019
Quadrangle	Condensing Cascading Boiler upgrades — 2018

Figure 5. Environmental Upgrades and Minor Capital Projects

Display Energy Certificates are located in every building on the IADT campus. These will be updated on a yearly basis going forward and where possible, the Institute will not install heating systems that use fossil fuels after 2023.

We will review the requirements of SI393/2021 (European Union (Energy Performance of Buildings) Regs 2021) and draw up a plan by or before Q1 2024 to address the applicable requirements including but not limited to heating control systems and EV charging points.

Mobility / Travel Plan

The *Climate Action Plan, 2021* outlines that the overarching goal for transport is to successfully reduce emissions from the transport sector while maximising the benefits of the transition to a cleaner, safer and more sustainable transport system for all, without negatively damaging economic well-being and without adversely impacting different social groups.

Furthermore, Government planning policy also seeks to promote compact urban growth to achieve sustainable development as well as action on climate change and congestion. The current development and expansion of IADT – through the Digital Media Building – fulfils these criteria as its development is on an already established and strategically located campus and is fully in accordance with sustainable development principles (i.e. by decreasing the distance students and staff must travel for third-level education and work).

Our location provides excellent connectivity via public transport, cycling and walking.

- **Walking** – the existing campus has segregated and shared footpaths, which link with the existing footpaths on Kill Avenue. The closest bus stops can be reached within 5 minutes’ walk and the residential areas Blackrock, Deansgrange, Dún Laoghaire, Foxrock, Glenageary, Monkstown, Mounckown, and Sallynoggin are all located within a 20 minute walk of the campus.
- **Cycling** — cycle lanes are provided on Kill Avenue and beyond, with shared surfaces provided on-campus. Dún Laoghaire and Blackrock, and access to the DART are located within a 15 minute cycle of the campus.
- **Bus** — bus stops are located on both sides of Kill Avenue within less 5 minutes’ walking distance. Bus services available include the frequent 46A Dublin Bus and 75 Go-Ahead, both of which provides connection to the Dún Laoghaire DART station.
- **Rail** — the nearest DART station is Dún Laoghaire station on Crogon Road (terminus of 46A and 75 bus routes) approximately 2.4km from the site or 30 minutes’ walk or 10 minutes via bus.

A potential key metric to deliver reduced emissions in unsustainable transport modes includes “sustainable transport journeys and demand management measures” and reducing car trips is essential. IADT is a partner organisation with Smarter Travel Campus, which includes assistance with the promotion of Active Travel initiatives and sustainable transport promotion, and thus IADT currently promotes the use of sustainable transport through a number of measures.

Currently, IADT has several uncovered bicycle parking spaces (130no approx.) on campus, however these are considered inadequate to meet the future increasing demand from staff and students. We plan that by 2025 there will be sufficient additional sheltered bike parking facilities provided, including covered to accommodate and encourage the growing number of bicycle-users.

In 2023, we will identify and implement an additional 20no. bicycle parking spaces and will explore the potential for using the existing overhang at the south side of the Atrium building as an area for covered bicycle parking.

We will carry out a yearly audit on the use of bicycle facilities (parking, showers, lockers, drying room) and implement improvements as required.

IADT will promote bicycle use through the hosting of events such as annual try a bike initiative on campus, annual briefing by HR of bike to work scheme, annual bicycle repair and maintenance tutorials for staff.

To secure planning permission for development on the campus in recent years, IADT developed a *Mobility Management Plan* (now referred to as a *Travel Plan* in accordance with the *National Transport Authority's (NTA) Transport Strategy for the Greater Dublin Area, 2016-2035*). This document is individually tailored to the IADT campus with the aim of promoting more sustainable modes of travel and includes a package of measures which are identified, piloted and monitored on an ongoing basis.

Ultimately given our strategic location, the size of our community (staff and students) and the needs of the wider neighbouring community, IADT should be actively engaging with Dún Laoghaire Rathdown County Council with a view to establishing part of the campus as a sustainable mobility hub (encompassing EV Charging, E-Scooters, E-Bikes, Shared Bike Schemes and Public Transport)

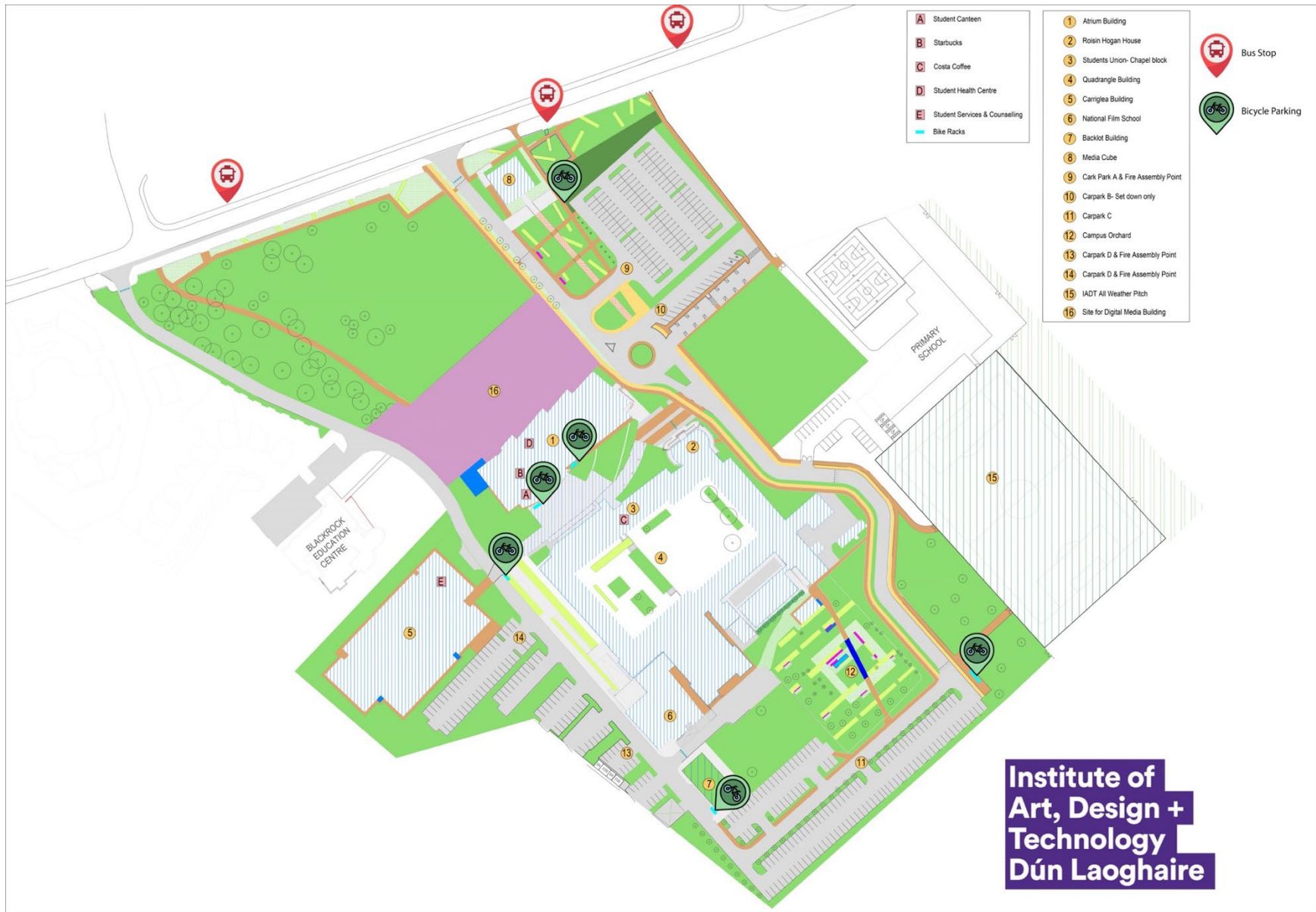


Figure 6. IADT Smart Travel Plan

Appendix 1

Climate and Sustainability Framework

IADT's climate and sustainability framework sets out initial guidelines, principles, and policies that guide staff, students and stakeholders in addressing the challenges of climate change and promoting sustainable development. The framework focuses on reducing greenhouse gas emissions, conserving natural resources, promoting renewable energy, and reducing waste.

The framework is built on the principles of sustainable development, which emphasises the need to balance economic, social, and environmental objectives. The aim is to support IADT with a structure to foster a transition to low-carbon and resource efficiency while ensuring that the needs of the current and future generations are met.¹

Key components of the framework include:

- Greenhouse Gas (GHG) emissions reduction targets**
- Renewable energy**
- Resource and conservation**
- Circular Economy**
- Sustainable transportation**
- Sustainable food systems**
- Climate adaptation**

Overall, the climate and sustainability framework provide a guide that can be used to address the urgent challenges of climate change and promote sustainable development.

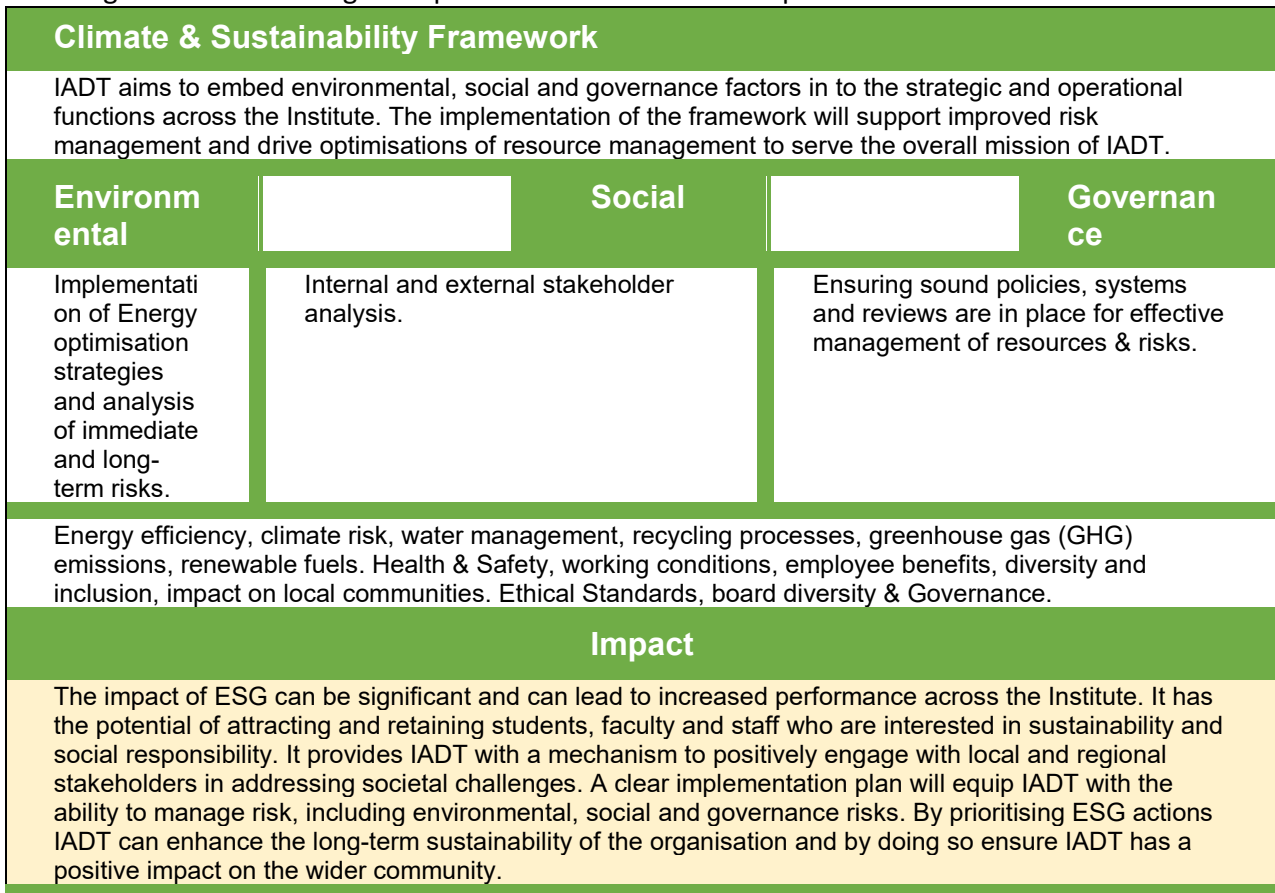


Figure 2. ESG Framework

Appendix 2

Sustainability Projects and Initiatives Completed to Date

Works completed 2024:

1. Replacement of florescent fittings with high performance LED fittings in Room number C012 and C014 in Carriglea building (Oct '24)
2. Installation of TRV's in Media Cube (Nov '24)
3. Atrium Building Upgrades in 2022 as part of EEDPP, it included the following interventions and upgrades:
4. Air tightness and thermal imaging survey. Localised works completed to address deficiencies found. Repeating the testing post project completion.
5. Installation of a new air source heat pumps for domestic hot water production.
6. Upgrading of all lighting to LED luminaires coupled with installing of presence and daylight controls in all rooms, corridors and stairwells.
7. Energy meters installed to monitor lighting electrical demand at the local electrical boards.
8. Insulation upgrade and new membrane on the roof over part of building
9. Additional insulation in the ceiling void of the top floor.
10. Automatic power off switches installed in all computer labs.
11. TRVs installed on all radiators throughout the building.
12. Check meters installed on main utilities and heat meters to monitor performance of heat pump.
13. This project has been retested for airtightness and thermal imaging and will be monitored in terms of energy usage over the coming years to monitor savings due to interventions.
14. Roisin Hogan House and North Quadrangle Building Management System upgrade in 2022. Including a connection back to the BMS front to allow for better control over the heating system.
15. Media Cube BMS and condensing boiler upgrade in 2022.
16. Preparatory work was undertaken to review the feasibility of installing EV charging points on campus in 2022.
17. Campus External Lighting Upgrades in 2021. Including the replacement of damaged luminaires with new LED luminaires.
18. Planting of established trees to replace old trees which had fallen during storms or reached the end of life in 2021.
19. Leak Survey and Repairs in 2020 which sourced a large leak on the water utility supply to the campus.
20. Carriglea condensing boiler upgrades in 2019
21. Quadrangle condensing boiler upgrades in 2018 with associated new controls.
22. Throughout the campus – Internal luminaire replacement of fluorescent/halogen to LED with controls appropriate to the spaces.
23. Throughout the campus – the temperature of the ICT rooms has been increased to 24°C. This will reduce our energy usage to cool these rooms, as they operate 24/7.

Appendix 3

Opportunities Register Summary – KSM Energy Survey

7.1. Short Term Measures

Table 13: Short Term Energy Reduction Measures- taken from SI426 reports

Measure Type	SI 426 Report Ref	Opportunity	Estimated Annual Savings			Score
			Fuel Type	[kWh]	[kgCO2]	
Internal lighting	Carriglea- 02	Upgrade all internal T5, T8, and CFL lamps to energy efficient LEDs	Electricity	24,776	8,176	30
	NFS-02	Upgrade all internal T8, T5, and CFL lamps to energy efficient LEDs	Electricity	14,337	4,731	37
	Media Cube -03	Upgrade all internal T8, T5, and CFL lamps to energy efficient LEDs	Electricity	3,754	1,239	33
	Backlot- 04	Upgrade all internal T8, T5, and CFL lamps to energy efficient LEDs	Electricity	4,302	1,428	40
			Total	47,170	15,575	
Solar PV- Building	NFS-06	Install Solar PV- 24.97 kWp	Electricity	24,737	8,163	75
	Media Cube- 06	Install Solar PV- 11kWp	Electricity	10,686	3,527	40
	Atrium 004	Install Solar PV system-55kWp	Electricity	54,414	17,957	37
	Backlot 08	Install Solar PV system- 6 kWp	Electricity	5,765	1,914	38
			95,602	31,560		
External Lighting		Upgrade Pitch lighting	Electricity	5,032	1,671	NA
		Upgrade Site lighting- Carpark B & D	Electricity	13,141	4,363	NA
		Upgrade Carpark A	Electricity	11,183	3,713	NA
		Upgrade Carpark D	Electricity	6,700	2,224	NA
			Total	36,056	11,971	
M&E upgrades	Atrium 05	Upgrade to heat pumps with backup gas boiler (50% load)	Gas	244,622	39,925	37
	Atrium06	Upgrade 3 No AHUs and associated extract fans	Gas	84,111	17,074	24
	Atrium 07	Upgrade of remaining extract fans, incl PIR etc. controls	Electricity	12,491	4,122	22
	Carriglea 03	Replace existing Hot Water cylinder with new High temperature heat pump	Gas	5,796	809	40
	Carriglea 06	Upgrade Fan Coil in PC labs & server room	Electricity	1,758	580	33
	Carriglea 08	Upgrade LPHW circuit pumps	Electricity	2,627	867	38
	Carriglea 07	Reconfiguration of Carriglea server room.	Electricity	10,629	3,508	75
			Total	362,033	66,885	
		Total kWh & Total kgCO2 savings		540,861	125,991	
		GHG (fossil fuel saving only) kgCO2 savings		40,734		

7.2. Medium Term Measures

Table 14: Medium Term Energy Reduction Measures

Measure Type	SI 426 Report Ref	Opportunity	Estimated Annual Savings			Score
			Fuel Type	[kWh]	[kgCO2]	
Solar PV Carparks	NA	Backlot PV Carpark	Electricity	85,030	8,176	
	NA	Carriglea PV Carpark	Electricity	52,465	4,731	
	NA	Media Cube PV Carpark	Electricity	31,660	1,239	
		Carpark Solar PV total			169,156	56,160
Deep retrofit of Quad	Quadrangle-003	Full Fabric Upgrade to current standards	Gas	495,000	121,275	24
	Quadrangle- 004	Heat pump- to provide space and domestic hot water heating	Gas	198,016	40,197	
	Quadrangle- 005	Install 200kW PV Array to SE facing roof	Elec	145,000	47,850	
	Quadrangle- 002	Upgrade of lighting to LED	Elec	72,713	23,995	
	Quadrangle- 007	Upgrade of heating controls with additional temperature stats	Gas	42,500	8,628	
		Quad retrofit total			953,229	221,155
		Total Medium kWh & KgCO2 Saving GHG (fossil fuel saving only) kgCO2 savings		1,122,385	277,315	
					149,310	

Glossary

IADT	Institute of Art, Design and Technology, Dún Laoghaire
EAUC	The Alliance for Sustainability Leadership in Education
kgCO₂	Kilograms of Carbon dioxide
FFACT	Faculty of Film, Art, Creative Technology
ICT	Information and Communications Technology
E&H	Faculty of Enterprise & Humanities
EnPI	Energy Performance Index
E&C	Estates and Campus Services
PMSS	Professional, Managerial & Support Staff
UN	United Nations
UCD	University College Dublin
SEAI	Sustainable Energy Authority of Ireland
EV	Electrical Vehicles
DEC	Display energy certificate
BER	Building Energy Rating
EnPI	Energy Performance Indicator
WEEE	Waste Electrical and Electronic Equipment
LED	Light Emitting Diode
PPP	Public Private Partnership
NZEB	Nearly Zero Energy Building
TUI	Teachers Union Ireland
EPA	Environmental Protection Agency
GPP	Green Public Procurement