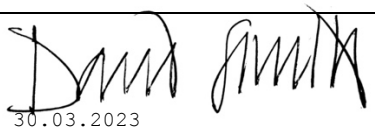
Institute Climate Action Roadmap

Document reference and version Number	IADT Climate Action Roadmap v1.1 (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	September 2023
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	March 2023 - First version draft
Policy Author(s)	IADT Sustainability Champion, President, Estates & Campus Services Team
Policy Owner	Sustainability & Climate Action Committee
Approval by Executive	March 2023
Signed by President	 30.03.2023

Sustainability &
Climate Action Committee

Institute of Art, Design + Technology Dún Laoghaire

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1. Introduction and Progress to date

Introduction

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. The Roadmap is designed to be specific in meeting the requirements of the Climate Action Mandate and to be flexible to incorporate new and emerging technologies that have the potential to optimise the resources available to IADT with an aim to align with future targets.

Climate change is a global issue and to support the National Climate Mandate, IADT will seek to address the challenge utilising a multi-faceted approach. In the initial phase IADT will focus on energy efficiency and energy related cardon targets and initiate the implementation of measures to deliver on the Clean Vehicles Directive on potential future procurement targets. Structures and processes will be formalised to support the annual reporting on the implementation of the roadmap and provide an analysis of the impact of the actions.

Progress to Date

IADT signed up to the OPW's *Optimising Power at Work* campaign in September 2019. An Energy Team was also established in November 2019 and held regular meetings up to end of Academic Year 2021/2022. The Energy Team has run campaigns for Green Week each year, supported by the *Optimising Power at Work* campaign. They have also provided a number of training and awareness sessions to both staff and students at IADT.

The Estates & Campus Services team have completed a number of 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 1 for a list of these projects*).

IADT is a member and active participant of EAUC the alliance for sustainability leadership in education. This cross-border group, meeting quarterly to discuss learnings and share knowledge between educators in Ireland and the United Kingdom.

A *Sustainability Policy* and a *Bio-Diversity Policy* have been drafted by the Estates & Campus team. Both policies have been reviewed and endorsed by the Institute Executive. Subject to a number of minor amendments and alignment with wider Institutional ESG activities the policies should be approved by end of this Academic Year and available for issuing to the staff, students, stakeholders and service providers.

2. 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 comprising 23 members 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).

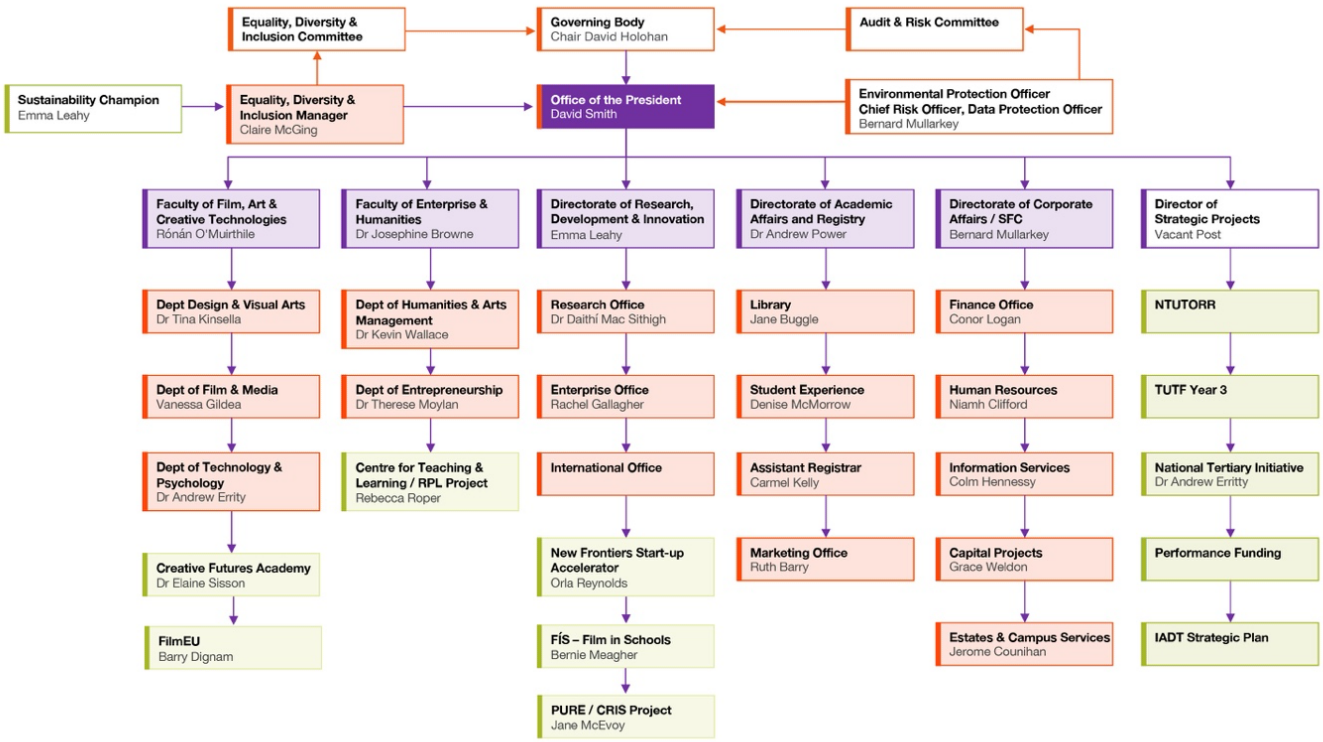


Figure 1. Organisational Chart and Governance Structures

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 sand 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. Lead by the Climate and Sustainability Committee, the Committee will be responsible for overseeing of IADTs 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 Interim Climate and Sustainability Champion, Emma Leahy, VP Research, Development and Innovation. The Champion reports 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.

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 IADTs 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 IADTs 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.

Climate and Sustainability Framework

IADTs 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[1] and resource efficiency while ensuring that the needs of the current and future generations are met. 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 adaption

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.

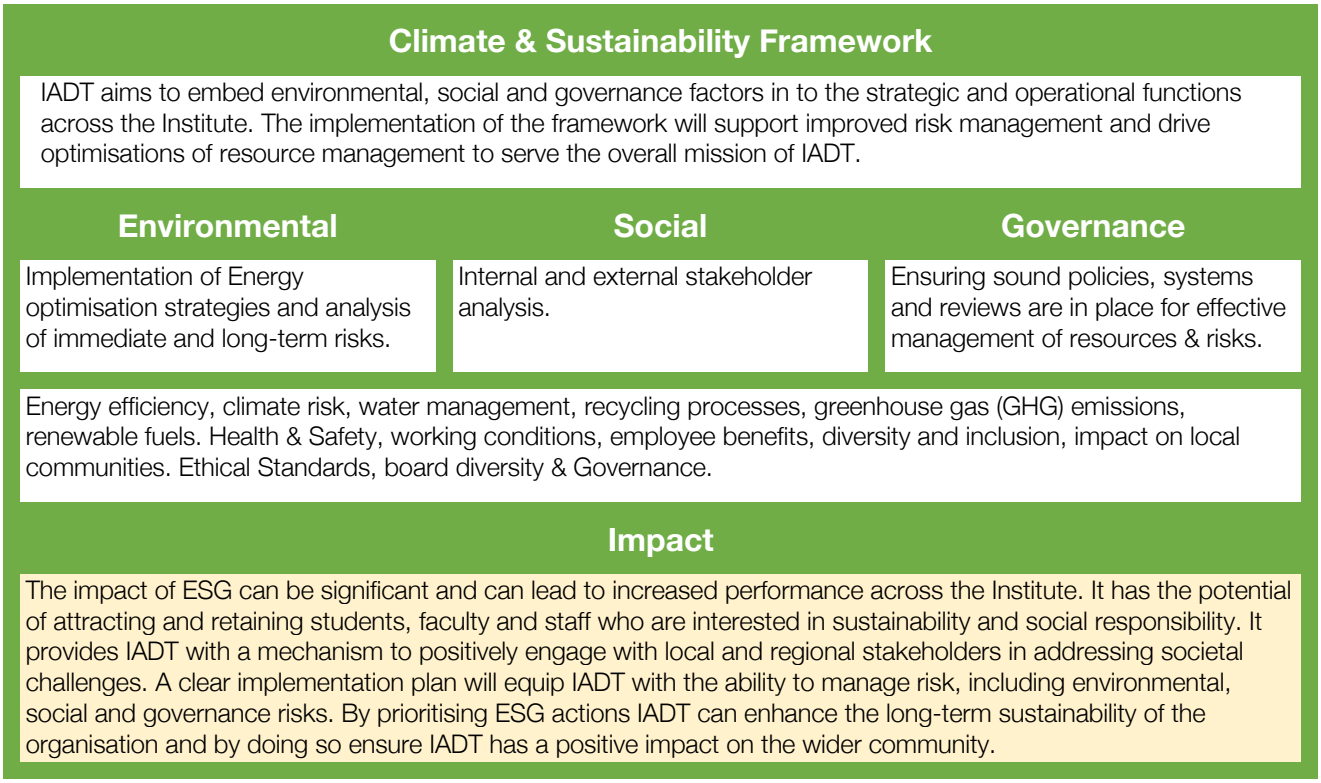


Figure 2. ESG Framework

[1] Climate Action and Low Carbon Development (Amendment) Act 2021

Towards Targeted and Sustainable Leadership for Climate Action

Consistent with most HEIs, the general responsibility for wider matters relating to Environmental, Energy and Sustainability action/priorities has historically resided within the Directorate of Corporate Affairs and specifically within the portfolio of the Campus, Estates and Campus Services manager.

The Institute's record and actions to date are in the majority down to the singular efforts of Management and staff in these areas. However, throughout the term of our current strategy, the Institute Executive, Management Team and broader IADT community have acquired a deeper and wider understanding of Environmental and Social Governance (ESG) principles, UN Sustainable Development Goals (SDGs) and impact assessment methodologies (B Corporation Assessment) to support the Institute's ambition to deliver on national 2030 objectives. However, and again despite increased awareness, responsibility for monitoring and implementing policies and actions has remained somewhat siloed at the time of authoring this initial Plan.

Institute Energy Team

Following the Institute's commitment and participation in the Office of Public Works – *Optimising Power @Work* programme, the Institute convened its first Energy Team in Q1 of 2020 (*see* membership below). The Energy Performance Officer (EPO), Bernard Mullarkey, Secretary Financial Controller, oversees the Energy Team with the support of the Assistant Estates Manager. The Energy Team was focused on monitoring and supporting wider energy awareness and energy reduction initiatives across IADT. The establishment of the 'Team' also initiated a broader cross-campus 'conversation' on sustainability – with the Team encouraged to develop and implement sustainability initiatives aimed at supporting the operation of an environmentally friendly and energy efficient Institute. Key elements during the first phase of their activity was the adoption and use of energy monitoring and reporting technology (metering) to provide up-to-date consumption reports, analysis and conservation targets towards our 2030 obligations.

The Assistant Estates Manager was "appointed" as the Institute's Energy Officer and was supported in their role by nominated "influencers" across all functional areas of the Institute. The Team was also enhanced by the addition of third-party expertise to monitor, evaluate and guide the working-group.

IADT Energy Team 2020–2022	
Edel Donnelly	Institute Energy Officer / Asst. Estates Manager
Rónán Ó Muirthile	IADT Executive / Head of Faculty
Somhairle Brennan	IADT Student's Union President
Georgina Murray	IADT Professional Staff / HR
Turlough Conway	IADT Professional & Technical Staff / ICT
Fionnghuala Ni Neill	IADT Professional Staff / Media Cube
Grainne Elmore	IADT Academic Staff
Sandra Newell	IADT Professional Staff / Estates
Michael Ebrill	PowerTherm Ltd – External Experts

Figure 3. Energy Team Membership

Following IADT's full-return to on campus delivery in September 2022, Estates and Campus Services sought to reconvene the Energy Team to work on a number of emerging priorities. However – and in light of the need to develop a *Climate Action Plan* and appoint an Executive Level Sustainability Champion – the Executive decided to "retire" the existing Energy Team and establish a new competency-based **Sustainability & Climate Action Committee** with a broader and revised remit, one that will provide oversight, policy advice, implementation plans and support stakeholder

engagement. This new committee (or sub-committee of same) will continue the work of the **Energy Team**, take responsibility for **Sustainable Travel and Mobility Planning** (with DLR), and support IADTSU in achieving **Green Campus** status. Further to this, the committee will lead on wider ESG priorities and initiatives across the whole IADT community and campus amenities.

The establishment of this centralised competency-based committee* was discussed and endorsed by Governing Body.

**Final Terms of Reference and Committee Membership are expected to be approved and in place by end of April 2023.*

3. 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).

- Information Sessions and awareness building on Climate Action, Heat Pumps, SEAI Grants, EV Cars & IADT sustainability actions.
- All Staff communications on the adoption of UN sustainability Development Goals.
- All Staff communication on availability of SEAI Carbon Basics Training courses for Public Sector[2]
- Targeted training for department for SEAI Energy Academy, SEAI Engaging People at Work Accelerator, SEAI Energy Basics and Carbon Basics training, SEAI Demonstrating Exemplar Energy Management and SEAI Public Sector partnership programme.
- Enhancing engagement and awareness through Energy Awareness quizzes and staff competitions for project ideas in the categories of environmental, conservation or energy awareness.
- Reduce, Reuse, Recycle waste separation programme and event.
- Gender Equality Today for a Sustainable Tomorrow presentation – speaker Clare O'Connor, Energy Policy Officer, Friends of the Earth.
- Promotion of UCD's lunchtime talks on sustainability topics (available to IADT staff).

A communication plan will be put in place to communicate the importance of Green Week and creating a sustainable campus and environment. The aim of the communication plan will be to reach the entire campus population to explain how staff and students can participate in making a difference in reducing IADTs environmental footprint.

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

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

[2] https://energylink.seai.ie

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. Topics covered include the *Governance Agenda* and the growing importance of sustainability in the context of directors' duties and the board's role; The *Net Zero Agenda* and delivering on our carbon reduction commitments; The *Wider Environmental Agenda* and the circular economy; The *Social Agenda* and the impact of environmental and sustainability actions on external stakeholders and promoting good citizenship.

Finally, and to support the wider staff community, IADT has licensed online training from work place compliance experts Legal Island on ***Environmental, Social, and Governance (ESG) in the Workplace***. This course will develop IADT staff's understanding of the core principles of ESG and the impact they have on behaviours and processes in the workplace. It provides practical examples and useful tips on how they can contribute and assist the Institute in delivering our Climate Action Plan and wider ESG goals. It is planned for Management and Senior Staff (incl. Programme Chairs and Professional Management) to complete this programme during April 2023 with the reaming staff expected to complete the training before the end of this Academic Year.

4. Achieving Our Carbon Targets

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.

Carbon Emissions

The baseline for our total carbon reduction target is **1,257,831 kgCO_2**, 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 **567,313 kgCO_2** per annum and our thermal (heating) emissions would be **420,284 kgCO_2** 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 kgCO_2** 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 kgCO_2** 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.

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. In order to be completed and 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

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 **420,284 kgCO_2**.

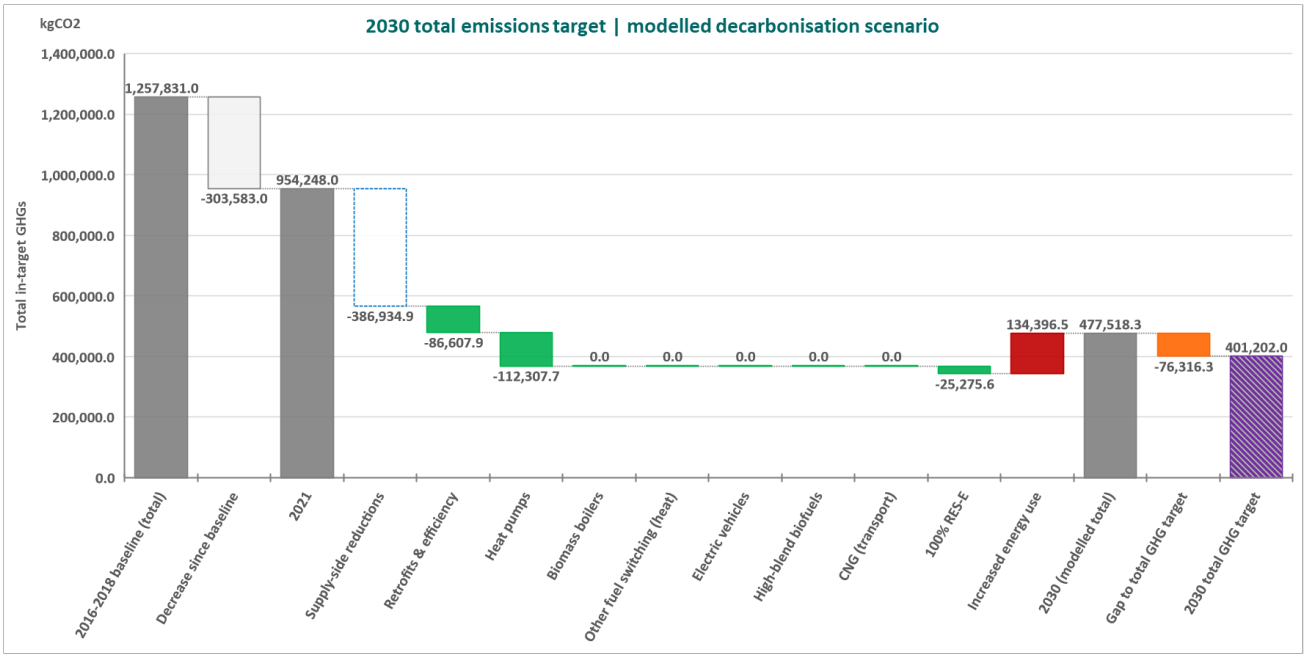
The refurbishment of the Quadrangle building has been identified as a project that would enable us to substantially bridge this gap. The project would include the deep retrofit of the building fabric and the installation of a building management system, heat pumps and PV panels.

Modelling the Quadrangle projects in the gap to target tool, leaves us with a **76,316 kgCO_2** gap to our total carbon emissions reductions by 2030.

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 by Q3 2023. This audit will assist IADT in implementing an energy management system and identifying opportunities to reduce our carbon emissions.

The Institute's 'Opportunities Register' identifies several potential projects which could offer carbon emissions savings. These will be assessed and reviewed periodically in consultation with SEAI along with any recommendations from our energy audits. A plan will be put in place to implement the projects required to achieve our 2030 total carbon emissions target.

In addition to above, IADT's soon to be convened **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

5. Achieving Our Energy Targets

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 35%.

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

Energy Efficiency Improvement Analysis

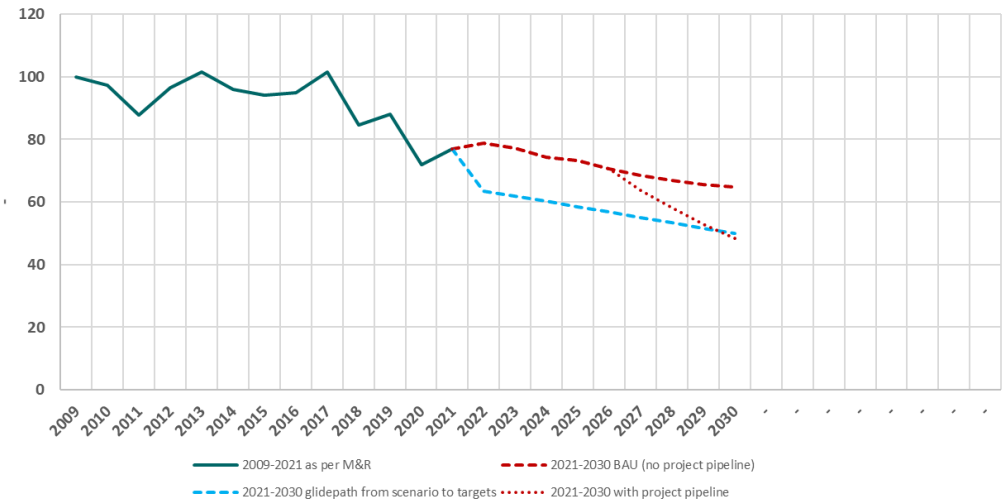
Refer to Carbon Emission Reduction under section 3.1 for details of our largest energy user, the Quadrangle Building. It also outlines our plans to apply for funding to carry out a deep retrofit of this building.

Gap to Target

Based on our current gap to target model with no projects modelled, there is a gap of 15% 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 substantially.

Modelling the multiple phased Quadrangle projects estimations in the gap to target tool, allows us to achieve to our energy efficiency improvements of 51.%.



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

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.

The Institute's current 'Opportunity Register' identifies several potential projects which could offer energy efficiency improvements. Refer to *Appendix 1* for an overview of the projects in our Opportunities Register. These will be analysed, along with any recommendations from our energy audits. A plan will be put in place to implement the projects required to achieve our 2030 total energy efficiency target.

6. Energy & Environmental Management Systems and Accreditation

The Climate Action Mandate requires IADT to have an energy management system in place.

Our Assistant Estates & Campus Services Manager will attend the SEAI three-day Energy Map training, commencing on the 26th of April. The Institute will engage with our SEAI project support manager to determine if tailored Energy Map training is required. The institute intent to engage a 3rd party to complete the Energy Map advanced diagnostics assessment.

This assessment will outline energy management recommendations for the Institute, which will be reviewed and assessed with SEAI with respect to feasibility and available funding. The Institute will start planning and implementing the recommendations by Q1 2024.

7. 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.

— *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 Insitute's *Procurement Policy* will be 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.

8. Baselining and Reducing Resource Use

At the time of preparing the Roadmap (March 2023) 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.

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, a Materiality Assessment will be undertaken in Q2 of 2023, with the findings used to further progress ESG priorities across IADT.

9. 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.

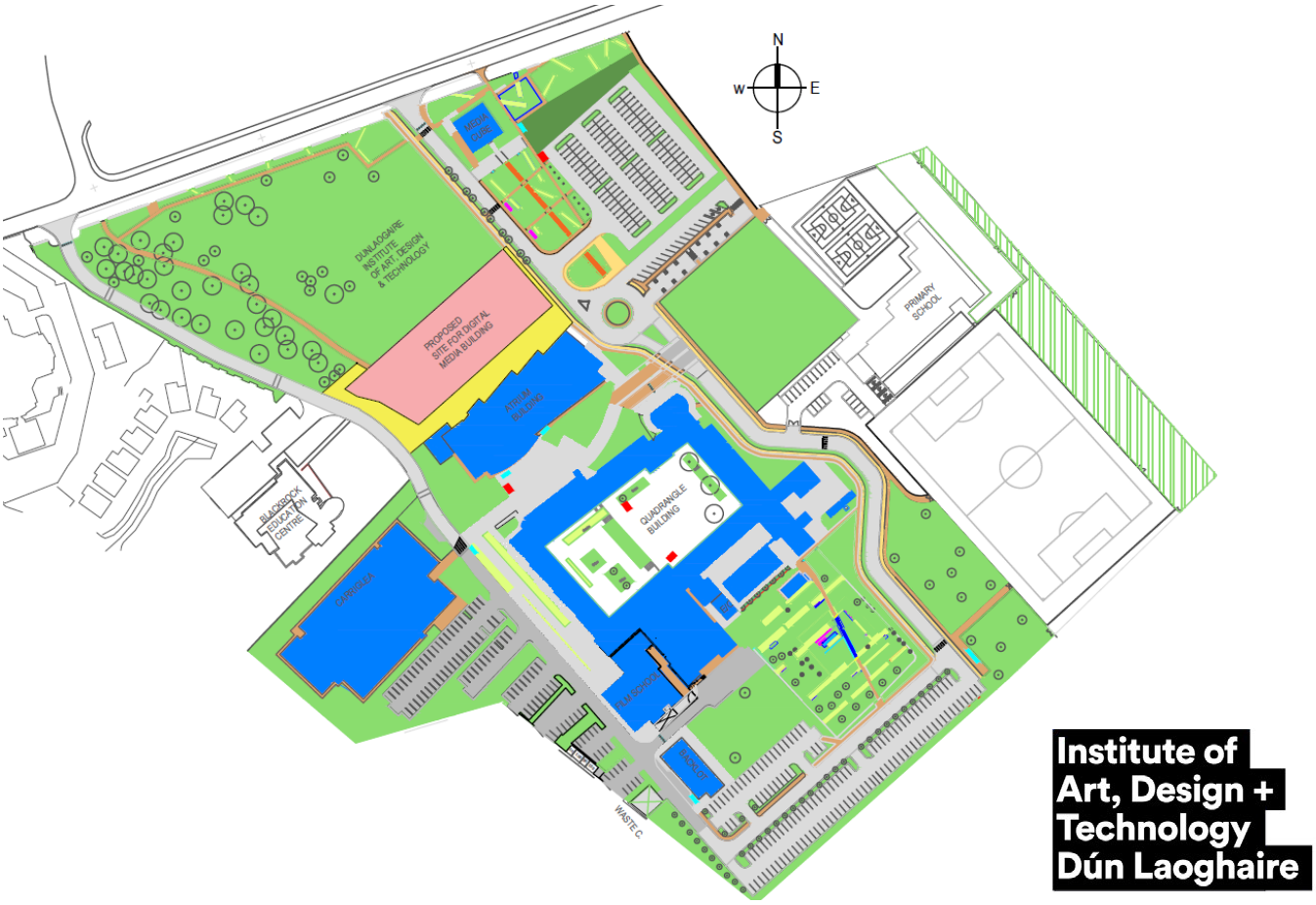


Figure 4. IADT Campus Masterplan 2016/17

The primary buildings on the Campus are:

- **Quadrangle Buildin**g; 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 5. 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.

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.

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 3. Environmental Upgrades and Minor Capital Projects

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 (ie. 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, Mounttown, 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 Crofton 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).

10. Optional Content

Case Study 1

Project
Film EU Dublin Agreement to Improve Sustainability in Film & Media Education The "Dublin Agreement" – in June 2022, at the European University Film EU Summit, IADT and European partners pledged landmark actions to improve sustainability in Film, Media and TV education and professional sectors.
Context
FilmEU — a collaboration between institutions and students involved in Film and the Media arts — launched ten collaborative steps to ensure our students acquire the skills to make their productions more environmentally sustainable. These commitments will provide practitioners with a suite of practical steps they can take in order to reduce the environmental impact of their productions. FilmEU incorporates sustainability as a central value and is committed to examining and implementing sustainable 'best practices' at all design and implementation levels. FilmEU is already making positive changes as partners work to deliver upon the digital and green transitions. In addition, we focus on sustainable film education through our green production practices across pedagogical and experimental pilots, and we are already delivering students and professional micro-credentials programmes on sustainable green production.
Environmental Actions / Impacts
The "Dublin Agreement" – Joint Actions on Sustainability include: 1. Partners will develop micro-credential courses to certify green consultants for the film and media industries following Creative Europe, EU and national recommendations. *(Status – achieved and being implemented)* 2. We will embed sustainability explicitly in our undergraduate and postgraduate programmes teaching students how to calculate the environmental impact of their productions. *(Status – In progress and ongoing, already explicitly in new Joint International BA and available in IADT elective choices for 2023).* 3. By the end of 2022 we will audit our joint MA production reducing their impact and by 2024 at the latest all production in our schools will be calculated by trained students reducing impact where possible. *(Status In progress – All new programmes must embed sustainability explicitly in the curriculum)* 4. We will set Environmental Sustainability as the FilmEU Challenge for 2022/23. In that pilot, we will test our sustainability practices. *(Status – achieved and report due June 2023)* *5.* We will continue to improve the sustainability of our campuses as a priority. *(Status – In progress and ongoing, Individual responsibility of each partner).* 6. We will explore work / life balance in our programmes and production. *(Status – In progress, Part of the FilmEU+ workplan for 2023–2025)* *7.* We will examine the sustainability of our future mobilities and prioritise sustainable mobility practices. *(Status – not commenced)* 8. We will endeavour to reduce the impact of our media and data footprint. *(Status – In progress, KPIs agreed and Action plan part of the FilmEU+ workplan for 2023–2025)* 9. We will share our best practices with other HEIs including GEECT and CILECT schools. *(Status – not commenced FilmEU sustainable production toolkit will be released in October 2023)* 10. We will offset by doing – raising awareness, improving our communities and reaching out to other communities. *(Status– In progress and ongoing).*

11. Appendix 1

Sustainability Projects and Initiatives Completed to Date

1. Atrium Building Upgrades in 2022 as part of EEDPP, it included the following interventions and upgrades:
    a. *Air tightness and thermal imaging survey. Localised works completed to address deficiencies found. Repeating the testing post project completion.*
    b. *Installation of a new air source heat pumps for domestic hot water production.*
    c. *Upgrading of all lighting to LED luminaires coupled with installing of presence and daylight controls in all rooms, corridors and stairwells.*
    d. *Energy meters installed to monitor lighting electrical demand at the local electrical boards.*
    e. *Insulation upgrade and new membrane on the roof over part of building*
    f. *Additional insulation in the ceiling void of the top floor.*
    g. *Automatic power off switches installed in all computer labs.*
    h. *TRVs installed on all radiators throughout the building.*
    i. *Check meters installed on main utilities and heat meters to monitor performance of heat pump.*

2. 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.
3. *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.*
4. Media Cube BMS and condensing boiler upgrade in 2022.
5. *Preparatory work was undertaken to review the feasibility of installing EV charging points on campus in 2022.*
6. Campus External Lighting Upgrades in 2021. Including the replacement of damaged luminaires with new LED luminaires.
7. *Planting of established trees to replace old trees which had fallen during storms or reached the end of life in 2021.*
8. Leak Survey and Repairs in 2020 which sourced a large leak on the water utility supply to the campus.
9. *Carriglea condensing boiler upgrades in 2019*
10. Quadrangle condensing boiler upgrades in 2018 with associated new controls.
11. *Throughout the campus – Internal luminaire replacement of fluorescent/halogen to LED with controls appropriate to the spaces.*

12. Appendix 2

Opportunities Register Summary

1. Quadrangle Building Deep Retrofit and Reimagining
   — Deep retrofit, new windows/ventilation, heavily insulated, new LED luminaires with controls, air source heat pumps, new heating pipework, TRV's, upgrade of mechanical units and PV panels.
2. Carriglea Upgrade:
   — Heat pump for hot water supply, LED lighting and PIRs, insulation on top floors and on roof, override switches for power shut off in computer labs, TRVs on all radiators, check meters on main utilities and heat meters on heat pump.
3. Install heat pumps to supply hot water to the Media Cube and Backlot building.
4. *Change the policy on opening windows and doors for ventilation purposes. They are to remain closed and opened by staff/students as required. CO2 sensors remain in place to inform staff and students of CO2 levels in the rooms.*
5. Carry out periodical checks of temperatures in rooms and turn down TRVs where rooms are above 19°C.
6. *Add TRVs on all radiators in Backlot, Media Cube and the Quad where possible.*
7. Upgrade Carriglea BMS so that the system is controlling the heating in all spaces to 19°C only and the time schedules can be set from the BMS front end. Weather compensation introduced for heating system.
8. *Upgrade Backlot BMS so that the system is controlling the heating in all spaces to 19°C only and the time schedules can be set from the BMS front end. Weather compensation introduced for heating system.*
9. Close buildings that are not in use in the evenings, Saturdays and non-academic periods.
10. *Install PV panels on all buildings and in the carpark to offset the campus electricity load.*
11. Upgrade old boilers to condensing boilers in the Quadrangle courtyard.
12. *Upgrade internal and external lighting to LED type fittings and install PIRs.*
13. Upgrade mechanical ventilation equipment with energy efficient units.
14. *Replace existing recirculation air handling units with full fresh air and heat recovery systems. Install downstream area dampers and controls to reduce fan speed when rooms are not in use/dampers close.*
15. Review all building entrances and install draught lobbies where possible to reduce heat loss in heavily trafficked areas. (e.g. south entrance to Atrium building)

Glossary

IADT	Institute of Art, Design and Technology, Dún Laoghaire
EAUC	The Alliance for Sustainability Leadership in Education
kgCO_2	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