Dublin and Dún Laoghaire Education and Training Board

Climate Action Roadmap

EDITION 3
2025

ddletb
Bord Oideachais agus Oiliúna Átha Cliath agus Dhún Laoghaire
Dublin and Dún Laoghaire Education and Training Board

Contents

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Document Control

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Executive Summary

This document provides an overview of Dublin and Dún Laoghaire Education and Training Board's (DDLETB) climate action targets and roadmap to 2030 and towards 2050. This is the third edition of DDLETB's Climate Action Roadmap and will continue to be updated annually in line with government policies and targets. It aims to demonstrate progress to date, identify gaps to targets and monitor progress.

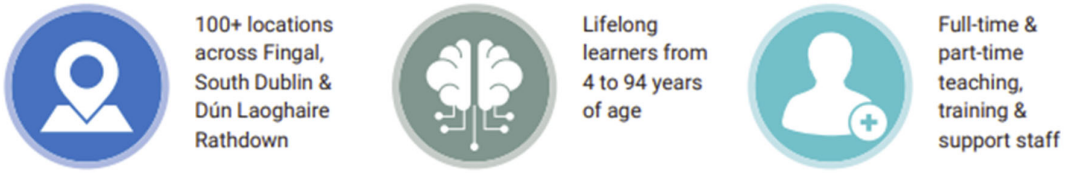
Climate action is the most pressing long-term global challenge of our time. DDLETB is committed to educating staff and learners on our climate action responsibilities and providing leadership and guidance on how to achieve the required 2030 and 2050 targets. These climate action targets are absolute, and this raises the bar higher and increases the size of the challenge (Public Sector Climate Action Strategy 2023 - 2025 2023).

In addition to providing an overview of DDLETB's climate action targets, this document sets out DDLETB's governance structures and ways of working, outlines the actions taken to date, gaps to meeting the targets, and presents a plan to achieve the required climate targets. Future iterations of this document will monitor and report on progress toward achieving these targets. DDLETB, with the support of the DDLETB Green Team, are committed to improving energy efficiency, increasing decarbonisation, reducing Greenhouse Gases (GHG) and implementing sustainable solutions to combat climate change throughout the organisation.

Introduction

Climate change is undoubtedly one of the greatest challenges of the current generation. The public sector will play a leadership role in driving far-reaching climate action across its buildings, transport, waste, and energy usage, as well as wider society. This will include reducing emissions by 51% by 2030 and increasing the improvement in energy efficiency in the public sector from the 33% target in 2020 to 50% by 2030, as well as increasing climate literacy in the public sector, implementing green public procurement and retrofitting public sector buildings (School Sector Technical Climate Action Roadmap 2023 to 2030. Making the Transition to Net Zero in our Schools 2023).

DDLETB provides a wide range of education and training programmes, services and supports to children, young people, and adults across the DDLETB region, which includes the three county council areas of Fingal, South Dublin and Dún Laoghaire-Rathdown. According to the early data from Census 2022, the total population of our region is over 860,000 representing almost 17% of the national population of the Republic of Ireland (DDLETB Statement of Strategy 2020-2026 2020).



DDLETB's mission is to provide relevant, inclusive, high-quality education and training programmes, services and supports that respond to the diverse needs of our learners, communities and stakeholders. DDLETB schools, colleges, centres and services are located throughout our catchment area (DDLETB Statement of Strategy 2020-2026 2020).

DDLETB currently has responsibility for: 12 Primary and Special Schools, 31 Secondary Schools, 22 Further Education Centres and Training Centres, 10 sports halls, 8 Youthreach Centres and one Head Office.

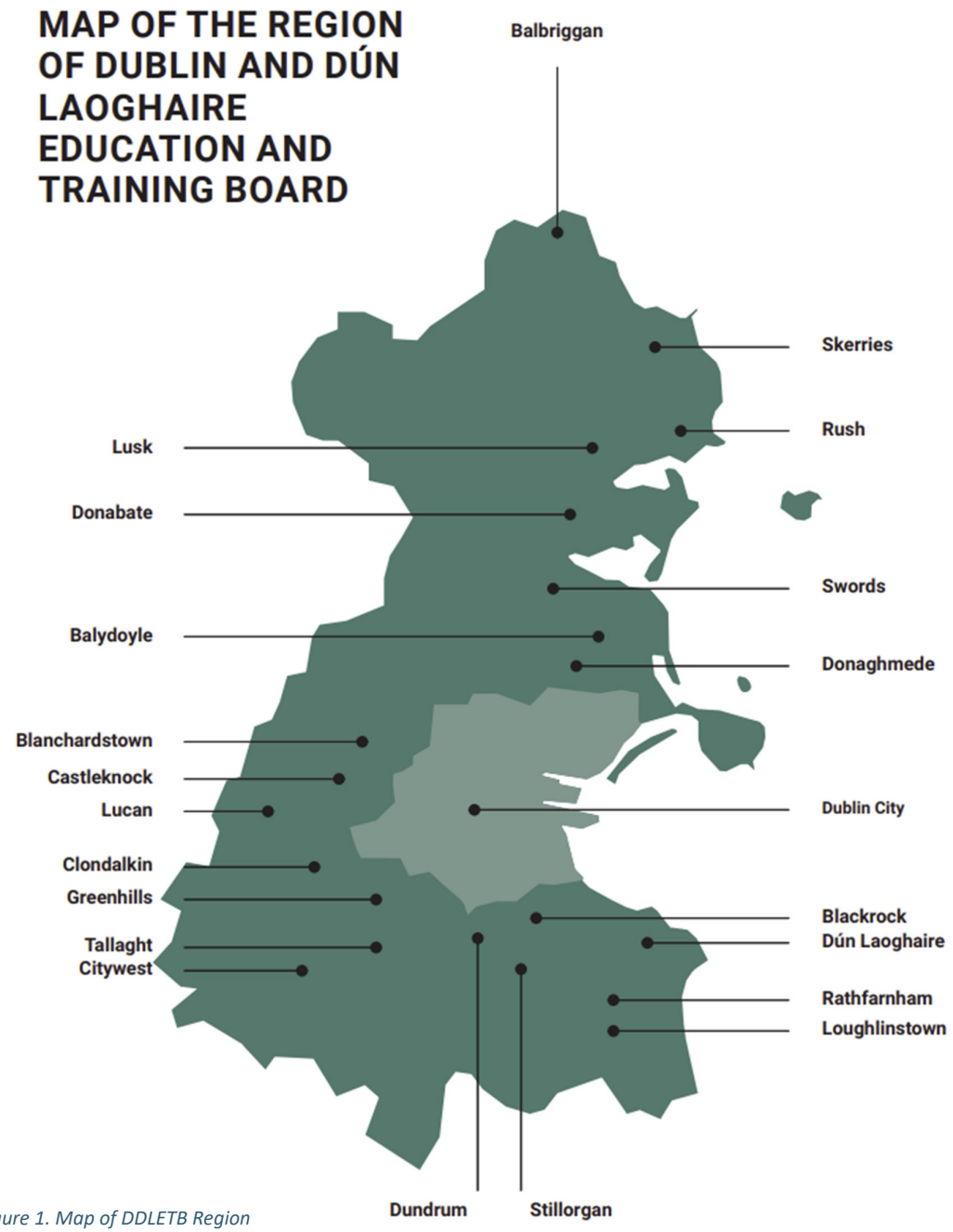


Figure 1. Map of DDLETB Region

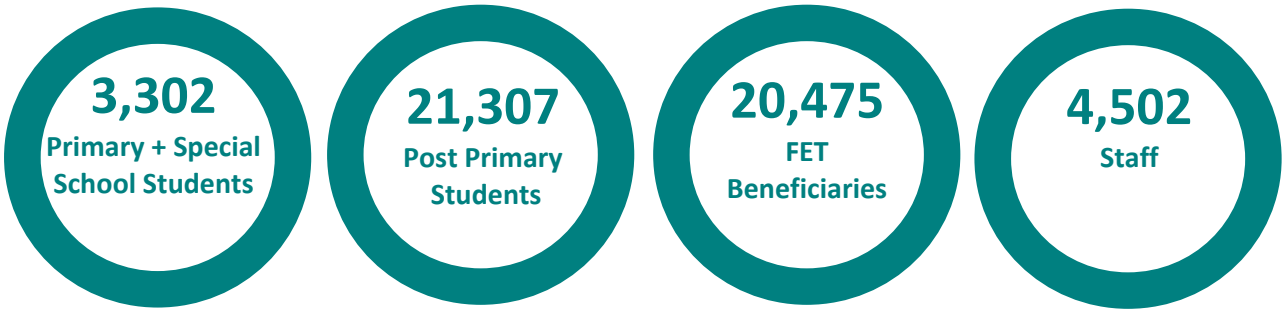


Figure 2. Our Numbers

Our People

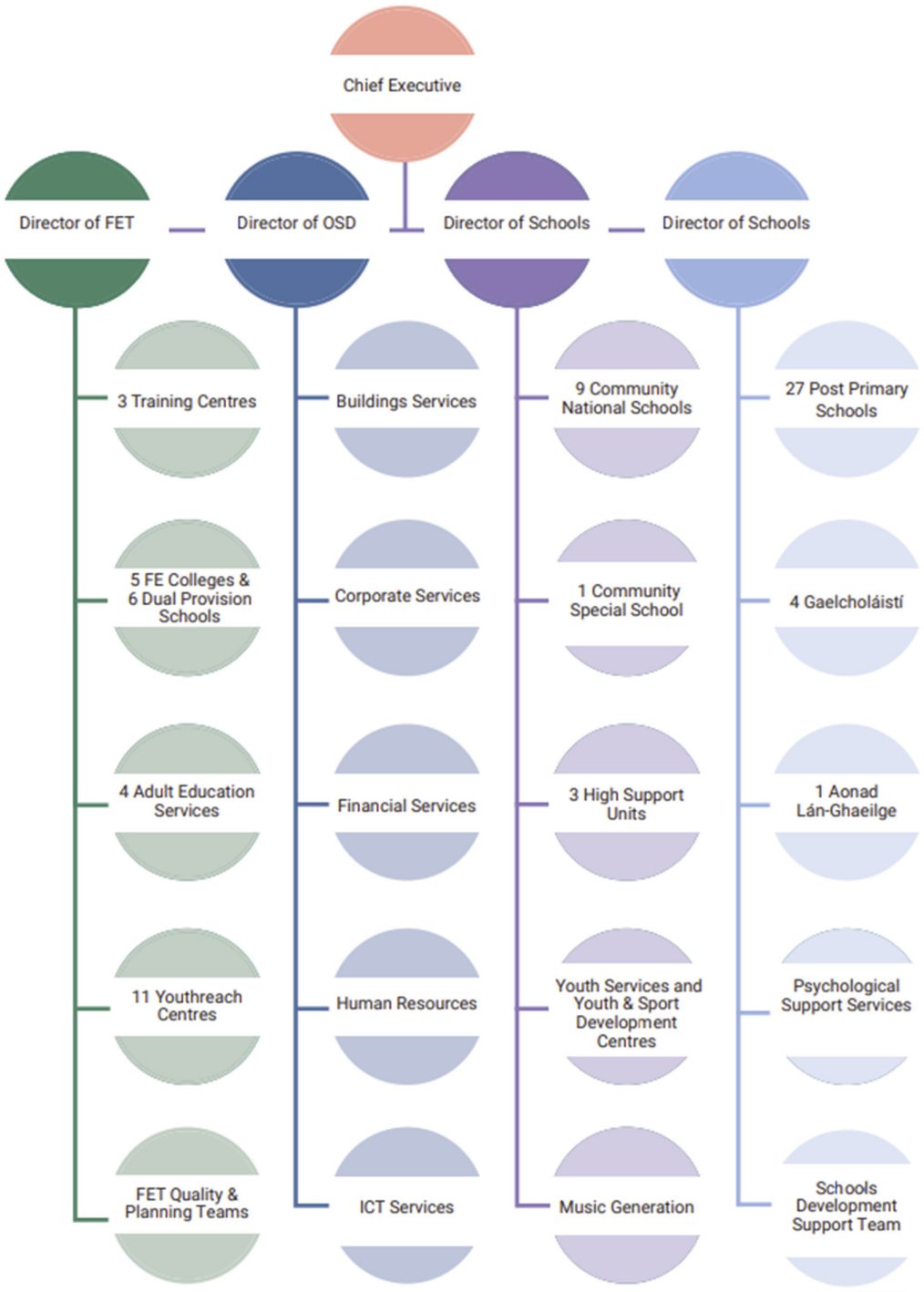


Figure 3. DDLETB Organisation Structure

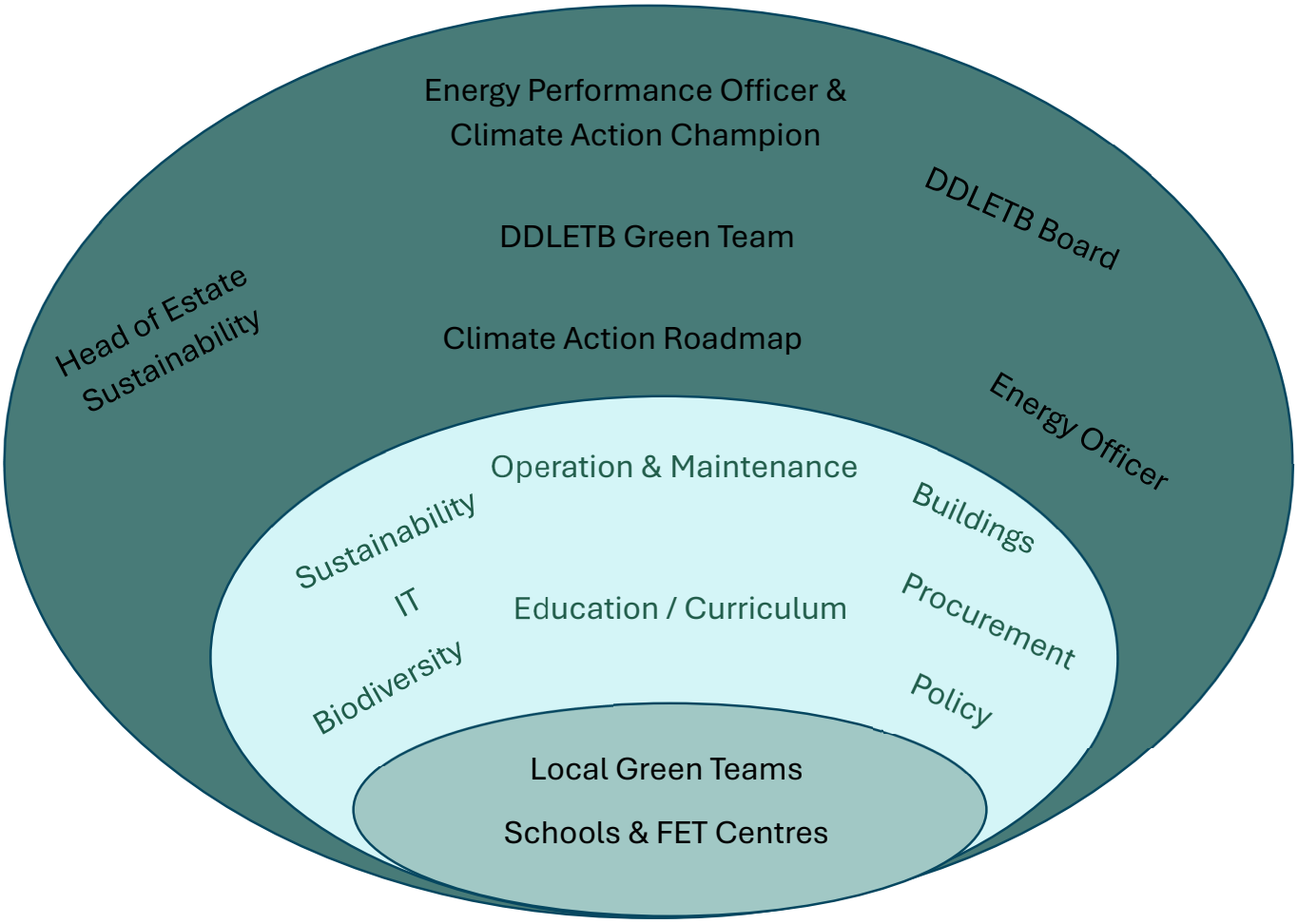


Figure 4. DDLETB Green Organisation Structure.

The outer circle identifies the appointed personnel responsible for overseeing sustainable practices and implementing strategies to reduce carbon and improve energy efficiency across DDLETB. At the centre of the structure are DDLETB's ways of working, focus areas and policies to assist in working towards a greener organisation. This structure is underpinned by our schools and centres and their contribution to climate action, supported by the Green Team.

Governance

The Climate Action Mandate requires the implementation of leadership and governance structures, the establishment of a Green Team, and that staff and students are supported to engage and contribute to Climate Action.

DDLETB Board

The DDLETB Board consists of ordinary members one of whom is appointed Chairperson. The Board comprises of representatives from the three local authority areas of Fingal, South Dublin and Dún Laoghaire-Rathdown together with a variety of community and education interests including a parent and staff representative.

DDLETB has committed to supporting and championing climate action and sustainability. Regular updates are presented to the DDLETB Board. Annual editions of the DDLETB Climate Action Roadmap are presented to the Board for approval.

DDLETB Climate Champion & Energy Performance Officer

DDLETB has nominated Paul Turner, Director of Organisation Support and Development, as DDLETB'S Climate Champion and Energy Performance Officer. The primary function of the role is to lead on the implementation of required actions implement and report on the Public Sector Climate Action Mandate, ensuring timely and accurate reporting on the M&R system, and to function as a sponsor at management board level for the organisation's Green Team. The Champion/ EPO must ensure commitment at leadership level to achieving the climate action targets for the organisation (Public Sector Climate Action Strategy 2023 - 2025 2023).

DDLETB Green Team

In late 2024, DDLETB established the DDLETB Green Team. To date 12 meetings have taken place.
The team consists of regular members, and guests are invited to discuss certain topics. The role of the Green Team is to drive sustainability initiatives by identifying opportunities, educate staff and students on climate action and sustainability, and implement a culture of sustainability in the organisation. The Green team aims to influence colleagues to commit to working and living sustainably, and influence decision making so that climate and the environment criteria are to the fore (Public Sector Climate Action Strategy 2023 - 2025 2023).
The Green Team have plans to expand the members to consist of personnel from all areas of the organisation who have an interest in climate and sustainability, and link in with the existing local Green Teams in schools and centres.

The Green Team reports to the DDLETB Board and SMT on a quarterly basis and provide updates on key targets and performance against the roadmap. The Green Team will monitor and report on priority areas such as the organisation's energy, water, waste, and biodiversity.

As per the Public Sector Climate Action Plan, DDLETB's Green Team key aspects include:

- A charter that defines the role of the Green Team and areas of focus.
- Senior management support and commitment, with a Champion that acts as the sponsor for the Green Team at Management Board level and reports regularly on progress. The Green

Team and Energy Champion will liaise closely on DDLETB's climate and sustainability goals and performance.

- Energy management must be a strong element of the Green Teams' remit. The Green Team will liaise with the SEAI personnel and guidance documents in relation to their requirements and remit.

Energy Committees/ Green Teams

The majority of DDLETB's Schools and FET Centres have green committees or designated staff in responsible for promoting climate action and sustainability among staff and learners. These committees will be supported by the DDLETB's Green Team, with some additional assistance from SEAI, and provided with the required resources to educate staff and learners, create initiatives and encourage positive engagement.

Head Office

DDLETB head office comprises of several departments including finance, treasury, corporate services, IT, procurement, buildings, and education departments which assist the organisation in providing services for the education provision delivered by DDLETB. Each of these departments has their own role to play in contributing to DDLETB's 2030 climate action targets. To achieve the required targets, in 2025 DDLETB has employed a Head of Estate and Sustainability and an Energy Officer. These roles are dedicated to assisting DDLETB in reaching our climate action targets, by collecting data on the estate, monitoring and reporting on progress, planning and implementing key projects and initiatives, and assisting staff and learners in reducing energy consumption and GHGs.

Education

DDLETB is committed to encouraging staff and learners to be motivated, well-informed citizens who are aware of their actions and contribute to a more sustainable future. Training and development are integral elements of the roadmap. Several climate and sustainability initiatives combined with education programmes are currently in place at primary, post- primary and further education levels. Schools and other educational settings have a leading role in their communities and what happens in classrooms reaches into homes right across the country (School Sector Technical Climate Action Roadmap 2023 to 2030. Making the Transition to Net Zero in our Schools 2023).

SEAI

DDLETB avails of SEAI's Public Sector Partnership Programme and liaises with the organisation's designated PSM. This is a key support, which assists DDLETB to improve the environment, meet national obligations by making significant reductions in the organisation's energy usage, to develop 2030 and 2050 project pipelines. This includes gap to target and pathway analysis and brings to bear pathfinder support to mobile, seed, and sustain project pipelines (Public Sector Climate Action Strategy 2023 - 2025 2023).

Engaging and Training

DDLETB is implementing plans to expand the integration of climate action and sustainability actions into learning. As set out in the Climate Action Mandate, DDLETB is committed to the following:

- Incorporate appropriate climate action and sustainability training (technical and behavioural) into learning and development strategies for staff.
- Organise staff workshops to engage on climate issues, including a focus on decreasing the organisation's carbon footprint.
- Include and champion sustainability as part of organisation, school and centre leadership.
- Promote initiatives such as the Green Flag Programme.
- Recognise young people as key contributors to our sustainable future, to ensure that they are meaningfully included in the design, delivery and monitoring of policies and programmes.
- At school level, ensure that there is full opportunity for inclusion of the student voice through student councils at both post-primary and primary schools.
- Engage via the Energy in Education Programme to access the opportunities for advice and mentoring developed by the Sustainable Energy Authority of Ireland (SEAI) and the Department of Education. This will help support appropriate climate action engagement on climate issues and potential to decrease the school's carbon footprint.

There are a number of training opportunities available to staff and students at present, and by the end of 2025 all members of the Senior Leadership Team will have completed sustainability training as per the Public Sector Climate Action Mandate. In November 2025, a sustainability workshop will be rolled out to all head office staff, principals and centre managers.

Members of the Green Team have attended several training programmes in order to improve knowledge and establish sustainability initiatives and are active members of the SEAI Energy Link platform, which is a resource used regularly.

Many DDLETB schools participate in the Green Flag Programme, which provides a very practical initiative in raising the climate action agenda.

DDLETB have signed up to SEAI's 2025 reduce your use campaign, and will have a centralised organisation hub with initiatives, tips and tricks and learning materials available to all staff and students. This will expand The Reduce your use Campaign to a larger number of schools and centres commencing Q4 2025. This campaign includes:

- Targeting reductions in the temperature and duration of heating systems.
- Reducing energy use from lighting.
- Reducing electricity use at peaks times whenever possible.
- Making more efficient use of buildings where occupancy is low, at certain times, due to remote working (CLIMATE ACTION PLAN 2023 2023).

All DDLETB schools and centres are encouraged to partake in the Energy in Education initiative, which is designed to help schools and centres improve their energy management practices, reduce operating costs and protect the environment. With resources from Energy in Education and the SEAI Map Training course, DDLETB has plans to roll a short version of this course out to all caretakers and building managers in our schools and centres, to equip them with the information required to read meters and bills. It is hoped that this information will assist in reducing energy consumption and high usage of energy out of teaching hours can be reduced.

DDLETB's Further Education and Training (FET) planning and development team have established a SOLAS accredited, eCollege course titled Energy & You: Reduce Your Use. This is a short online course is mandatory for all new learners. This has been expanded to include all current DDLETB staff and FET learners, and there are plans to expand the course to include 4th year post-primary students in the near future. This course outlines various steps to reducing energy consumption on a day-to-day basis.

The FET education team have set up a Green Skills Steering Group focusing on FET courses and initiatives. To date the group has started looking at additional green skills courses and legislation. This group is currently at research and development stage.

Several green courses currently exist at FET level, for example electric vehicle maintenance course provided in Baldoyle Training Centre. The FET development and planning team, along with the FET Green Skills Steering Group, are currently developing a suite of FET Green Skills Courses into the FET provision. These are at feasibility stage and include courses on the circular economy and upskilling NZEB construction courses to educate new learners and upskill existing workers in the area of green construction and retrofitting. There are also plans to educate existing instructors on green skills.

Our Targets

As part of DDLETB's commitment to Ireland's national climate objectives, our targets for 2025 are strategically aligned with the **Climate Action Mandate 2025**, **Climate Action Guidance 2025**, and the principles of **Public Sector Green Procurement**. These frameworks guide our efforts to reduce environmental impact, improve energy performance, and embed sustainability into every facet of our operations.

Figure 5. Climate Action Targets

Our primary targets include:

- Reducing greenhouse gas emissions by 51% by 2030, in line with national climate legislation.
- DDLETB is pursuing a structured transition to net zero by 2050 in line with statutory obligations.
- Improving energy efficiency by 50%, through proactive energy management and infrastructure upgrades.
- Implementing Green Public Procurement (GPP) across all purchasing activities, ensuring that environmental and social criteria are integrated into procurement decisions, as mandated by Circular 17/2025.
- Embedding climate action into governance and planning, with clear accountability structures and annual reporting mechanisms, as outlined in the climate action mandate 2025.

Monitoring and Reporting

The Public Sector Climate Action Strategy requires transparent, balanced reporting on the progress of decarbonisation and sustainability and bodies must report through the SEAI Monitoring and Reporting (M&R) system. DDLETB currently uses this system and will continue to upload data annually, reporting on GHG emissions, implementation of the mandate and report of sustainability activities. This data is

fundamental to tracking performance, and ensuring we are working towards achieving our climate action vision (Public Sector Climate Action Strategy 2023 - 2025 2023).

Progress to Date & Gap to Target

Working closely with our Parent departments, the Department of Education and Youth (DEY), the Department of Further and Higher Education and Skills (DFHERIS), and with SEAI, DDLETB have already started to make progress in working towards our 2030 climate action targets.

DDLETB has actively participated in the SEAI Monitoring & Reporting (M&R) system, contributing to Ireland's public sector climate goals. The latest data from the SEAI platform highlights DDLETB's progress in energy efficiency and carbon reduction.

DDLETB's Performance Highlights

Energy Efficiency Improvement:

DDLETB has achieved a 41.4% improvement in energy efficiency compared to its baseline year, contributing significantly to the national target of 50% by 2030.

Carbon Emissions Reduction:

DDLETB reported a 22.1% reduction in total CO_2 emissions with notable improvements in building energy use and reduced reliance on fossil fuels.

Annual Energy Statement:

The organisation's annual energy statement confirms consistent year-on-year improvements, with validated savings across electricity and building performance.

The gap-to-target graph below demonstrates that by implementing additional energy reduction initiatives such as the installation of biomass boilers and heat pumps, upgrading to energy-efficient LED lighting, and undertaking comprehensive retrofit projects, DDLETB can achieve greater energy savings and further reduce total fossil fuel related CO_2 emissions.

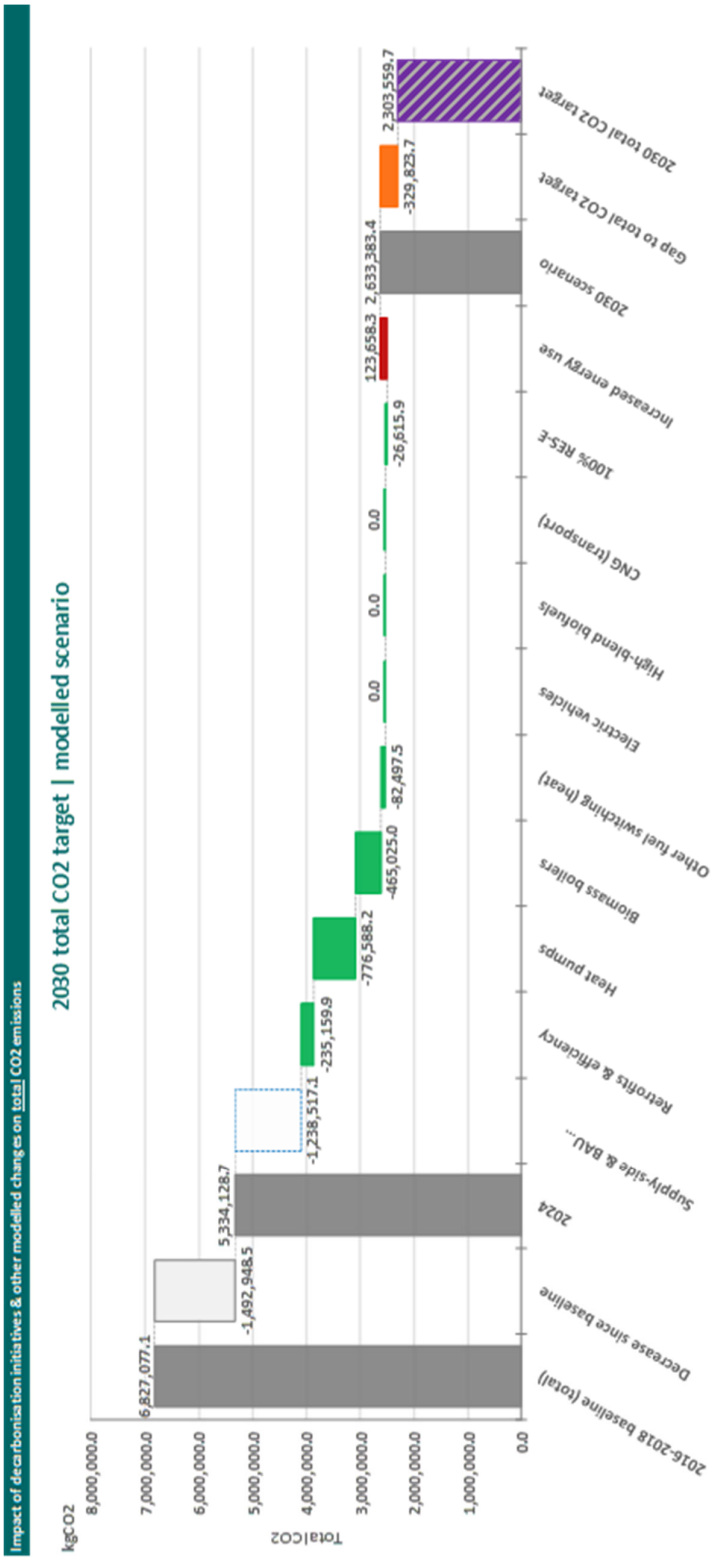


Figure 6. DDLETB 2024 data showing impact of projects and initiatives planned and resulting the gap to target

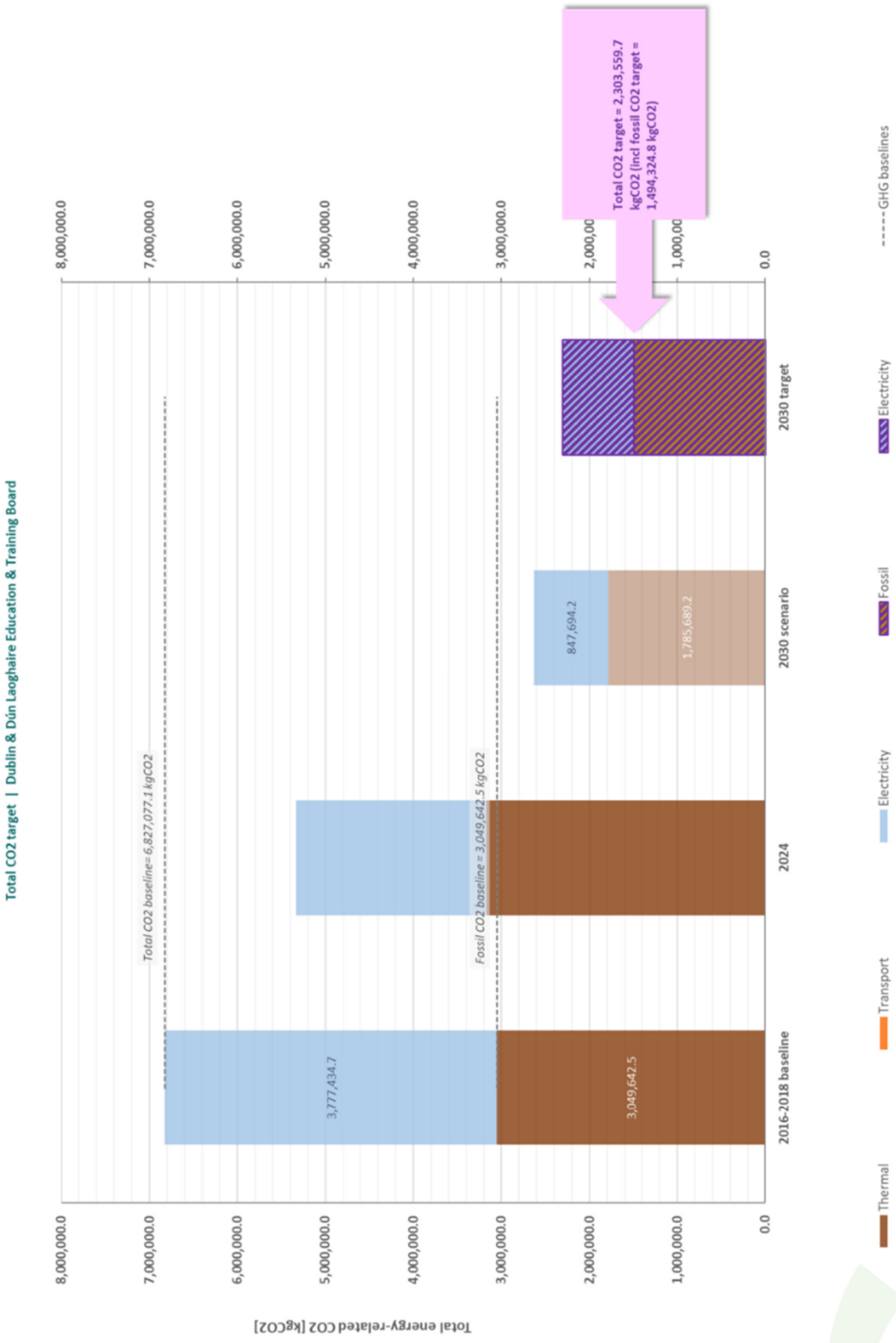


Figure 7. DDLETB 2024 Gap to 2030 Total CO2 target data chart.

DDLETB Climate Action Roadmap

The roadmap is the pathway by which DDLETB will implement the Climate Action Mandate. The purpose of the roadmap is to encourage collective vision, strategy, and planning within DDLETB (CLIMATE ACTION PLAN 2023 2023).

DDLETB has identified a range of areas where the organisation can take steps towards meeting our climate action target. Within each of these areas, DDLETB has selected a number of opportunities for improvement and action.

The main areas include:

- Leadership, Resources and Governance
- Training, Learning and Research
- Engagement and Strategies
- Estates and Operations
- Data Collection

Although, progress has been made to date, there are still areas for improvement and this roadmap is a guide on how to educate staff and learners, encourage engagement, analyse data and plan for the future to reduce emissions and GHG's.

This roadmap is iterative is amended and expanded on annually as required. DDLETB will monitor and report on the progress of the organisation and the implementation of the roadmap.

Figure 8. DDLETB Climate Action Roadmap overleaf

CLIMATE ACTION ROADMAP

KEY AREAS TO ACHIEVING CLIMATE ACTION TARGETS

Leadership, Governance and Resources

Create Climate Action Mandate.

Ensure governance and adequate resources are in place to support Climate Action and Sustainability Targets.

Appoint Climate and Sustainability Champion.

Establish Green Team and set up Sustainability Committees in schools and centres.

Gather views on sustainability and ensure buy in at all levels of the organisation.

Meet with leaders to establish targets.

Teaching, Learning and Research

Deliver climate action and sustainability training to all staff and students and raise awareness across the organisation.

Invest in environmental management training at leadership level.

Educate staff on SEAI Map Training and roll out to caretakers.

Upskill on measuring emissions using M&R data.

Establish biodiversity training.

Train staff to incorporate sustainability into curriculum.

Embed climate responsibility into staff development.

Engagement and Strategies

Implement strategies to reduce energy use. Reduce your use campaign. Green Flag initiative.

Implement green procurement policies for goods and services.

Ensure recycling signage is available in every building.

Establish campaign to reduce water consumption.

Update travel policy to reduce emissions from commuting and promote cycling and walking.

Implement biodiversity action plan on campuses to protect and enhance biodiversity.

Estates and Operations

Set up register of opportunities and establish key energy projects.

Incorporate Zero energy targets into all new buildings

Implement energy efficiency improvements such as lighting upgrades, smart meters and BMS system upgrades.

Ensure renewable energy sources in all new builds and establish plans for retrofitting existing estate to renewable sources of energy such as heat pumps.

Installation of PV panels where appropriate.

Plan for upgrades to building fabric retrofit strategy.

Data Collection

Measure current emissions and Gaps to Target.

Gather information on all buildings via Energy Audits.

Assess impact of potential upgrades.

Define emissions reduction target for each building.

Publish Targets.

Establish baseline and monitor and report on progress.

Update Building Stock Plan annually.

Our Way of Working

Green Public Procurement

Green Public Procurement (GPP) is a process where public authorities seek to source goods, services or works with a reduced environmental impact. GPP is acknowledged as a vital policy lever in meeting environmental policy objectives (Environmental Protection Agency 2021). DDLETB will begin to Implement Green Public Procurement in accordance with the Green Public Procurement Implementation Mandate set out in Buying Greener: Green Public Procurement Strategy and Action Plan 2024-2027. (Climate Action Plan 2025 2025)

At present DDLETB implement green procurement criteria on a case-by-case basis, for each competition depending on the goods or services being procured. All IT goods and service tenders specify Green Procurement as minimum 10% of the evaluation criteria. Nationally, there is a push on more sustainable procurement in line with governments policies and plans, and DDLETB Staff will attend training and conferences to stay up to date and upskill to incorporate Green Procurement into the Procurement Policy. Tenders for design teams and consultants for major projects now have a sustainability criterion as part of the marking scheme and there are plans to include this criterion in smaller projects.

Energy and Environmental Management

The Climate Action Mandates requires large public bodies to achieve formal environmental accreditation for large public sector bodies such as ISO 50001 (Energy Management Standard) or ISO 14001 (Environmental Management System), with a view to going beyond ISO14001 to adopting EMAS (Eco Management and Audit Scheme). An Energy Management System (EnMS) is a process for continually improving energy performance. Suitable for all organisations, whatever the size or sector, it is particularly beneficial if you operate energy intensive processes.

Due to the scale of DDLETB's energy spend, the organisation is required to implement ISO 50001. ISO 50001 is the international standard that provides a framework to establish the systems and processes necessary to improve energy performance, efficiency and consumption. DDLETB is committed to establishing this system for responsible energy management and is currently in the preliminary stages of adopting ISO 50001. This is a large task and will take time to fully implement. DDLETB's energy officer is attending the SEAI accelerator programme and DDLETB are planning to start with the top significant energy users and will then work on expanding organisation wide.

ISO 50001 EnMS requires you to:

- Develop and implement an energy policy.
- Identify the organisations significant energy users.
- Set energy objectives and measurable targets.
- Implement and operate programmes to meet these objectives and targets.
- Check and take corrective action as required.
- Review your system continually and improve where possible.

(SEAI, SEAI Energy management systems and ISO 50001 2024-2025)

There are several benefits to DDLETB establishing an EnMS including:

- Reduced costs
- Energy management is embedded into day-to-day operations.
- Improved energy efficiency
- Reduced overall energy use.
- Ensures compliance.
- Improves reputation.
- Continuous improvement
- Standardises processes and improves performance and productivity.

Resource Use

Paper Volume

Through the Climate Action Roadmap, DDLETB is implementing initiatives to reduce unnecessary printing, encourage digital workflows, and increase the use of recycled materials where printing is required. Our objective is to significantly reduce print volumes over the coming years, thereby supporting our broader goal of achieving carbon neutrality and promoting sustainable practices across all operations. We recognize that every action, from individual print choices to organisational policy, contributes to a greener future, and we are committed to fostering a culture of sustainability within our staff, learners, and stakeholders.

The IT team introduced mono printing as the default setting in 2024, resulting in a substantial decline in colour printing and resource consumption in 2025. While mono print usage has steadily increased over the past four years, reaching 13,213,592 pages in 2025, colour print usage peaked in 2024 at 24,330,130 pages and decreased significantly to 4,201,126 pages in 2025. This has significantly

reduced costs and resource use. The Green Team is planning further initiatives to reduce overall consumption further.

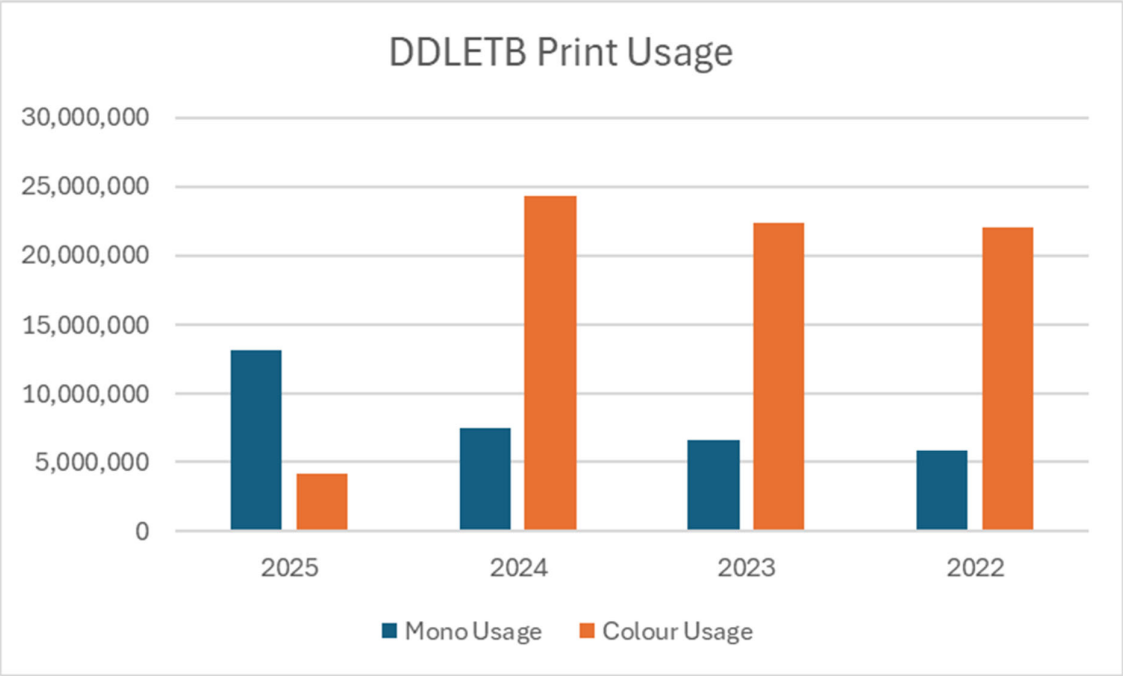


Figure 9. DDLETB's Print Volume

ICT Equipment

In line with DDLETB's sustainability objectives, the procurement of ICT equipment is carried out in compliance with the Buying Greener: Green Public Procurement Strategy and Action Plan 2024–2027. This ensures that ICT investments contribute to reducing environmental impacts, promoting energy efficiency, and advancing the organisation's climate action goals.

The IT team currently facilitate remote working and there are plans to update all workstations to a server-based system. This would allow all machines to be shut down at the end of the day, saving energy use.

Waste

DDLETB is committed to reducing waste generation and increasing recycling and reuse across all sites in alignment with Ireland's Waste Action Plan for a Circular Economy (2020–2025) and the Circular Economy Strategy (2022–2028). In 2024, DDLETB generated approximately 653 tonnes of waste, with an overall diversion rate of 40.7%, and 33.2% for municipal-type waste streams. The primary focus going forward is to reduce residual (landfill) waste and enhance recycling and organic waste capture.

A key achievement within DDLETB schools is the implementation of a "take your own waste" policy, ensuring that no food waste is generated or left on school premises. Similarly, all DDLETB training centres have eliminated single-use disposable cups, plates, and cutlery from their canteens, promoting the use of reusable alternatives. All new contract arrangements related to canteen or food services, including events and conferences, will include measures that are targeted at addressing food waste.

Further key actions include expanding the implementation of waste segregation systems, standardising bin infrastructure and signage, expanding food waste collections where relevant, promoting digitalisation to reduce paper use, and embedding circular procurement principles. A considerable number of DDLETB school and centres, including Head Office have implemented segregated waste systems and signage throughout their buildings. Through these initiatives, DDLETB will continue to reduce its environmental footprint, promote resource efficiency, and support Ireland's transition to a circular, low-carbon economy.

DDLETB is in the process of collecting waste data for the CSO Waste Generation Survey, this data will assist in identifying areas for improvement. DDLETB has ceased using disposable cups and cutlery in the majority of canteens and is eliminating single use items from events.

Water

DDLETB have plans to improve the monitoring of water consumption in the estate and have planned initiatives to reduce consumption using resources from these years Reduce Your Use campaign. Suitable refill stations for staff and students throughout DDLETB's buildings have helped to reduce single use plastics.

Buildings and Vehicles

Buildings

DDLETB has an estate of over 100 buildings, both owned and leased. The estate has new buildings that meet the current requirements for energy use and emissions, but much of the estate is comprised of dated stock. This is a major challenge for DDLETB as these buildings will require significant retrofits, and decarbonisation measures to improve their performance and decrease emissions. As part of the Climate Action Mandate, DDLETB has plans to audit all of the buildings in the estate and display an up-to-date Display Energy Certificate in every DDLETB building that is open to the public to clearly show energy use and assist in future planning.

Estate Data

As set out in the roadmap estate data collection is essential to understanding the current stock and identifying areas for future improvement.

In 2024, DDLETB completed in depth data gathering on all buildings in the estate. All floor areas were updated and verified, and any new additions are added annually. Carrying out condition reports, measured surveys and reviewing handover files are all part of this process. This will take considerable time and resources, but this project is now well underway. By the end of 2025, the majority of DDLETB'S owned FET buildings will have a completed condition report, energy audit, BER and DEC, with key areas for upgrade and improvement prioritised and indicatively costed to assist short-, medium- and long-term planning.

Display Energy Certificate

DDLETB has initiated the display of Energy Certificates in all buildings exceeding 250 m^2, in line with national energy efficiency regulations. This measure reinforces DDLETB's commitment to transparency and continuous improvement in energy performance. By actively monitoring and displaying energy ratings, DDLETB promotes accountability, supports informed energy management decisions, and advances its broader sustainability and climate action goals.

New Buildings

DDLETB will appoint and energy consultants on all major building projects as part of the design team to ensure that buildings not only meet the minimum energy requirements but can potentially offer greater improvements in line with best practice. DDLETB will consider not only energy sources but also low carbon, modern methods of construction, climate and sustainability measures through the buildings lifecycle and embodied carbon associated with construction. All new builds and extensions will meet nZEB or ZEB standard.

All new buildings will also have the infrastructure for car charging facilities.

The design teams for all major projects are now assessed with an energy criterion as part of their evaluation and climate and sustainability measures have been discussed from the outset and will continue to be a main factor in the design process.

Leased Buildings

DDLETB have completed the first edition of the FET Estates Strategy. This sets out the ideal estate and the pathway to achieve this, including several leased FET buildings. The FET Estate Strategy sets out the energy requirements for new rented buildings and for retrofitting existing leased buildings. DDLETB will ensure, where possible, that all new leased buildings have the minimum energy requirements as set out in Climate Action Plan.

Vehicles & Transport

DDLETB has plans to create bicycle friendly buildings for employees and visitors in all new buildings, by putting secure and accessible bicycle parking in place and creating safe paths within its grounds, in conjunction with planning. Existing sites will be reviewed to plan for upgrade works to current bike infrastructure and parking facilities. DDLETB included several bike shelters as part of the Climate Action Summer Works (CASW) programme call. It is hoped that by providing safe and secure parking infrastructure, it will increase cycling and decrease car usage among staff and student. DDLETB will consider the Safe Routes to School Programme with the aim of supporting walking, scooting, and cycling to primary and post-primary schools, and creating safer walking and cycling routes within communities. Staff in DDLETB can avail of the bike to work scheme which aims to encourage staff to commute via bike.

Electrical Vehicles

Electrical vehicle charging policy is currently in development stage. This includes design guidance for setting out bays in all existing carparks that are owned by DDLETB and meet the criteria. All new buildings and any significant projects now include provision for car charging facilities. An expansion of the provision of EV chargers is planned for all DDLETB sites that can accommodate these facilities, subject to resources, and a number of schools have applied EV installation in the CASW call.

Smarter Travel Mark

DDLETB has commenced implementation of the first tier if the smarter travel mark scheme, and we are committed to supporting and active and sustainable travel for our students, staff and visitors. The DDLETB website has been updated to include information of sustainable travel to DDLETB Head Office, and the Green Team are working on further initiatives to achieve recognition. Car parking will be assessed as part of the Estate Strategy.

Projects

DDLETB has plans for key projects and initiatives that will assist with meeting our 2030 and 2050 targets. By using the roadmap to inform ways of meeting climate action targets, gathering data and creating a register of opportunities to implement smaller projects and actions, and by completing specific building projects, DDLETB will be able to progress towards reducing GHG and improve energy efficiency.

Planned projects focus on the DDLETB Estate's significant energy users and how these can reduce their emissions and improve efficiency as well as key retrofit projects in other schools and centres.

Challenges

There are several challenges to planning and implementing the projects that will have the greatest impact on meeting the targets including:

- Sufficient delivery of capital funding.
- Additional internal resources to assist in the delivery of the actions set out in this roadmap.
- Buy in at all levels of the organisation.
- Technical requirements of renewable heating an energy.
- Scale of estate and current condition of buildings.
- Operation and Maintenance Costs associated with equipment such as heat pumps and Mechanical Ventilation and Heat Recovery (MVHR).

Head Office

DDLETB Head Office is located in a leased, six-storey office building. DDLETB are currently working with the management company to reduce the energy use of the building by updating end of life systems with more energy efficient systems. Head Office should lead the way in implementing awareness campaigns to reduce energy use and promote best practice in water conservation and recycling.

DDLETB have carried out an energy audit on the Head Office building and have now have a DEC on display. A register of opportunities for the building has been compiled, which identified areas for improvement. A full upgrade of the lighting system has been implemented, and initiatives such as waste management and recycling are now in place with several more projects planned.

In 2025, replacement of the AC system works commenced. This will be fully complete by November 2025. This will improve energy efficiency, and user comfort, and enable temperature to be set at 19 degrees as per requirements.

Training Centres

DDLETB's Significant Energy Users are the three Training Centres which include, Tallaght Training Centre, Loughlinstown Training Centre and Baldoyle Training Centre. As the courses provided in these centres require specific equipment and special requirements, the buildings are vast and require significant energy usage. The DDLETB building team have identified a number of key projects for these centres which we believe will have a major impact on the emissions and energy efficiency of the centres.

SI426 Energy Audits have been carried out at all training centres, identifying key areas for upgrade and opportunities for improvement. These energy audits establish the current performance and usage of each building and provide recommendations to improve energy efficiency and reduce GHG emissions.

Tallaght Training Centre

DDLETB are currently liaising with Codema, Dublin's Energy Agency committed to leading Dublin's low-carbon transition towards 2030 and 2050, to investigate the potential for Tallaght Training Centre to be incorporated into Tallaght's District Heating Network. This connection is deemed viable, and it is hoped that Tallaght Training Centre could be included in the next District Heating Development Plan.

District heating is a system for distributing heat from a centralised location via an underground insulated pipe network to buildings to provide space and water heating. The usage is then metered at each building. Often the source of the heat is generated from a by-product of the waste generated by thermal energy production. Instead of this energy being wasted, it can be used to generate heat in the district heating system. For this reason, district heating can be seen as a sustainable heating system. For more information see SEAI website - https://www.seai.ie/.

Tallaght Training centre has commenced major upgrade works, with the project now at design stage. Key items to be upgraded include the lighting system and heating system, and roof covering with improved insulations, which will all have a positive impact on the energy performance of the building.

Loughlinstown Training Centre

There are plans to update the Building Management System (BMS) in Loughlinstown Training Centre (LTC), which will improve the monitoring and controlling of the buildings technical systems and services, such as air conditioning, ventilation and lighting.

Major internal retrofit works to upgrade and install six electrical apprenticeship workshops have been recently completed. As part of these works, the workshops now have internal insulation, new roof lights, upgraded led lighting, and AC ventilation upgrades. This has improved the environment in the workshops and the buildings energy performance. DDLETB hope to take this approach of improving the fabric and services when carrying out major works going forward whenever possible.

A large new project to install up to six plumbing workshops and a welding workshop in LTC has commenced and is at design stage. This project will introduce new uses into the central, expansive area of the building increasing usage of the building. Energy efficiency measure will be integral to the design including new insulation, new led lighting, a full heating system upgrade, and new insulated doors and windows.

Baldoyle Training Centre

As one of DDLETB's largest buildings, Baldoyle Training Centre has been shortlisted for consideration for the SEAI Pathfinder Programme. This programme partners with public bodies to achieve their retrofit goals and assist towards climate action targets by looking at key deep retrofit elements. It is hoped that Baldoyle TC will be selected for this programme and that major fabric and heating elements are upgraded.

A number of projects have recently been completed in Baldoyle Training Centre including a replacement boiler in 2024. A pump replacement and phase one of replacement windows have been completed in 2025. Phase two window replacements are planned for 2026.

Now the focus for this building is decarbonisation, and DDLETB has commenced plans to investigate and plan for these works in the short, medium and long term in collaboration with SOLAS and SEAI.

Energy Audits

In alignment with national energy efficiency obligations, DDLETB is progressing towards the completion of S.I. 426 energy audits, as well as BER and DEC assessments, across all owned and 3 leased FET centres by Q4 2025. Energy audits completed in previous years for the other FET centres have been integrated into ongoing decarbonisation planning. In parallel, the Department of

Education and Youth is developing the Schools Energy Inventory, with each school surveyed by an experienced construction professional using a dedicated tool to collect data on building areas, fabric types, lighting, heating, and domestic hot water systems. The information from these initiatives will provide a robust evidence base to identify energy efficiency opportunities, guide targeted interventions, ensure statutory compliance, and support DDLETB's efforts to reduce energy consumption, lower carbon emissions, and meet national climate action objectives.

Retrofits

Although targeting the three largest energy use buildings and implementing decarbonisation and energy projects is currently in the pipeline will make a substantial impact on our gap to targets, DDLETB will still need to address an additional number of high energy use buildings. Large post-primary schools constructed in the 1980's are currently preforming poorly. By addressing the thermal performance of a number of these schools through retrofit projects and the displacement of fossil fuel use, DDLETB will be able to meet the required 2030 climate action targets.

All energy works must future proof for accommodating renewable resources to avoid duplicate or abortive work. This will need cooperation from sponsoring agencies, SOLAS, DHFHERIS and the DEY. Where major capital investment is not available for major retrofit of a building, DDLETB plans to implement a fabric first approach to buildings. This will allow us to phase energy improvement and to future-proof major upgrades when capital and resources are available. The main areas of consideration include glazing, roof upgrades and external wall insulation. Improving the fabric of the building will have a major impact on the thermal performance and improve energy efficiency and make future services upgrades more successful.

Some projects completed this year which have improved the building performance include heating system upgrades in Lucan, AC upgrades in Head Office and window upgrade works Dundrum Sydenham Road AES. DDLETB will continue to roll out energy projects with plans to progress items identified on the register of opportunities in the first tranche of energy audits completed this year.

Decarbonisation Projects

SOLAS, in collaboration with the Sustainable Energy Authority of Ireland (SEAI), is developing a strategic framework to advance the decarbonisation of the Baldoyle Training Centre, one of DDLETB's largest and most energy-intensive facilities. This initiative forms part of DDLETB's commitment under the Public Sector Decarbonisation Pathway and the Climate Action Plan 2025. The project will adopt

a phased deep retrofit approach extending to 2030, addressing key areas such as building fabric upgrades, renewable energy integration, and energy management systems. As a lead initiative, it will contribute significantly to achieving national targets for a 51% reduction in greenhouse gas emissions by 2030 and show DDLETB's leadership in sustainable education and training infrastructure. This project will serve as a test case in assessing and planning works in a significant energy user and lessons learned will be beneficial to rolling out a framework for decarbonisation projects across the estate.

In addition, DDLETB are planning on deep retrofit and decarbonisation projects at Clondalkin AES, Rush Youthreach and Dundrum Sydenham Road Adult Education Service Centre, and these are at the early planning stages in collaboration with SOLAS. These projects will further contribute to achieving DDLETB's climate action and sustainability targets.

Building Automation Controls

A feasibility study is currently being undertaken across 10 DDLETB centres identified as high energy consumers to assess the potential for the installation of Building Automation and Control Systems (BACS). This process is being advanced to ensure compliance with the obligations set out under S.I. No. 393/2021 – European Union (Energy Performance of Buildings) Regulations 2021, which require large non-residential buildings with significant energy demand to be equipped with advanced monitoring and control systems. The integration of BACS will provide DDLETB with the capacity to continuously monitor, analyse, and optimise building energy performance, thereby reducing consumption, lowering operational costs, and improving occupant comfort. Strategically, this initiative will also strengthen DDLETB's capacity to manage energy data, support evidence-based decision-making, and accelerate progress towards organisational decarbonisation and national climate action targets.

Renewable Energy

As per the Climate Action Mandate, DDLETB is committed to reducing non-renewable resources. The learner population of DDLETB is increasing and our building stock is increasing with new builds, modular units, and extensions. All new builds, extensions and major retrofits will incorporate renewable energy sources only. These will be mostly in the form of heat pumps. Feasibility studies will be carried out on alternatives such as biomass, district heating and geothermal where appropriate. DDLETB will not install heating systems that use fossil fuels after 2024, unless at least one of the following exceptions applies:

- The fossil-fuel use is only through the use of electricity from the grid.
- There is no technically viable non-fossil alternative.
- The installation of a renewable space heating system would increase final CO2 emissions.
- The fossil-fuel use is provided for backup, peaking, or operational purposes (and makes up less than 10% of annual heating energy)

Where the direct replacement of existing fossil fuel heating is required for an emergency maintenance purpose (CLIMATE ACTION PLAN 2023 2023).

Biomass

Three of DDLETB's highest energy-consuming post-primary schools have been included in the Department of Education and Youth's Decarbonisation Programme. As part of this initiative, these schools are scheduled for transition to biomass heating systems, which will replace existing fossil fuel infrastructure. This investment directly addresses a significant proportion of the ETB's overall energy demand, while aligning with national policy commitments on renewable energy adoption and greenhouse gas reduction. Participation in the programme represents a critical step in advancing DDLETB's climate action objectives and demonstrates a systematic approach to decarbonising the organisation's estate.

Solar PV

32 DDLETB schools have been included in the Department of Education and Youth's Solar PV Programme. This initiative will see the installation of photovoltaic panels across the school estate, enabling on-site generation of renewable electricity and reducing reliance on grid-supplied energy. The programme directly supports DDLETB's transition to low-carbon operations by lowering electricity costs, improving energy resilience, and cutting greenhouse gas emissions. Participation in this national initiative represents a significant milestone in the systematic decarbonisation of the organisation's school portfolio and aligns with both sectoral and national climate action targets.

Smart Meters

DDLETB has commenced a comprehensive smart metering programme with the initial phase of implementation focusing on the Further Education and Training (FET) sector, with procurement and installation scheduled for early 2026.

By the completion of the smart meter roll-out, DDLETB will have established a comprehensive, real-time energy monitoring infrastructure across its FET estate. This will enable:

- Accurate, timely, and centralised tracking of energy consumption across all FET facilities.
- Data-driven decision-making to inform energy efficiency projects and sustainability initiatives.
- Enhanced capacity to identify inefficiencies, optimise energy usage, and reduce operational costs.
- Alignment with national and organisational climate action objectives, supporting long-term environmental sustainability.

CASWS

DDLETB has participated with 31 schools under the DEY's Climate Action Summer Works Scheme 2025/2026. This initiative supports the enhancement of building fabric and the improvement of external environments, with works scheduled for delivery during the summer period to minimise disruption to school operations. DDLETB has prioritised projects demonstrating a strong climate action focus, including the installation of energy-efficient LED lighting, electric vehicle charging infrastructure, and roof upgrades aimed at improving overall energy performance and sustainability outcomes.

Further Education and Training Green Devolved Fund

In 2024, DDLETB received green devolved funding from SOLAS to enable us to carry out green projects to help achieve DDLETB's energy efficiency and decarbonisation goals in the FET Estate. This fund is a vital, rolling 3-year fund, and has enabled DDLETB to implement our roadmap by carrying out data collection projects and energy audits which allows DDLETB and plan and realise climate action projects. Numerous energy efficiency and decarbonisation projects will be completed over the next 3 years with this funding.

College of the Future

DDLETB is developing Preliminary Business Case for a new Further Education and Training College in Fingal. This proposal for the new college of FET focuses on Swords, which has experienced significant population growth but lacks sufficient capital investment in FET infrastructure, leading to a significant deficit in provision. To address this, DDLETB proposes building a College of FET in Swords, which will facilitate an additional 7,000 beneficiaries per annum when complete. The business case emphasizes commitment to innovation, quality, and adaptability, envisioning a Zero Emissions Building (ZEB) aligned with environmental standards. DDLETB asserts that the proposed College of FET strategically aligns with organisational goals, the national FET strategy, and relevant plans for sustainable development and economic growth. The College of FET in Swords is also strongly positioned to become an important community resource, offering societal and cultural facilities, increasing footfall in local businesses, and reducing the need for city commutes. The proposed College of FET seeks to consolidate provision in Swords, integrate existing services, and expand offerings to support individual and regional competitiveness in collaboration with business and industry enterprises. The priority will be to expand FET provision in a new, fit-for-purpose, energy efficient, flagship College of FET in Swords in a highly visible and central location that will raise the standing of FET.

Ireland is now on a legally binding path to net-Zero emissions no later than 2050 and to a 51% reduction in emissions by the end of this decade. The construction of the College of FET in Swords will be a carefully planned and designed green campus which meets the environmental standards for new buildings as outlined in the Climate Action Plan. The new building will meet 2050 climate action targets and will need to be a zero emissions building. All emissions will be reported under the Monitoring and Reporting System in line with DDLETB's Climate Action Mandate

Through ambitious design, the College of FET in Swords can be a prosumer rather than a consumer of energy. Photo-voltaic panels and heat pump technology are a few concepts which would allow for the building to operate renewable energy and possibly allow for an energy contribution to the national grid. DDLETB have commenced engagement with Energy Consultants to incorporate energy and sustainability from the outset.

Modern Methods of Construction would allow for the construction of the College of FET in Swords to be carried out more quickly, more sustainably and to a higher standard of design, fabrication, testing and certification, by making use of methods such as off-site manufacturing and modular construction. These methods result in a reduction in the embodied carbon involved in the construction of the building due to a reduction in emissions during transportation of scaffolding etc.,

the extraction and manufacturing of materials, as well as the site preparation and any demolition required.

The College of FET in Swords will play a key role in raising awareness in Fingal of the issues leading to climate change and encourage learners to take any actions possible to improve their ecological footprint. The focus will be on Green Skills for life, for the community and for the future world of work. The building will be designed to serve as a learning tool for zero energy buildings and green skills courses. Some ideas include exposing and colour coding services to show how they are installed and used in a building, creating viewing areas into plant rooms, and showcasing renewable energy on campus.

Conclusion

The DDLETB Climate Action Roadmap outlines the plans to increase energy efficiency, reduce GHG emissions and implement sustainable solutions to combat climate change throughout the organisation. DDLETB is committed to educating staff and learners on our climate action responsibilities and providing leadership and guidance on how to achieve the required 2030 and 2050 targets. By following this Roadmap, it is hoped that DDLETB will be able to meet these targets.

Appendix A. DDLETB CLIMATE ACTION MANDATE

Our Targets

- Reduce GHG emissions by 51% in 2030.
- Increase the improvement in energy efficiency in the public sector from the 33% target in 2020 to 50% by 2030.
- Update the Climate Action Roadmap annually within 6 months of the publication of the Climate Action Plan.

Our People, Schools, and Centres

- Establish and resource Green Teams, reporting to senior management, to become integrated drivers of sustainability in DDLETB.
- Nominate a member of the Management Board as the Climate and Sustainability Champion with responsibility for implementing and reporting on the Mandate.
- Incorporate appropriate climate action and sustainability training (technical and behavioural), including green public procurement, into learning and development strategies for staff.
- Ensure all senior management, complete a climate action leadership training course.
- Organise staff workshops (at least annually) to engage on climate issues, including a focus on decreasing the organisation's carbon footprint.
- Include and champion where possible sustainability as part of organisation, school and centre leadership.
- Promote initiatives such as the Green Flag Programme.
- Recognise young people as key contributors to our sustainable future, to ensure that they are meaningfully included in the design, delivery and monitoring of policies and programmes.
- Provide under the ESD 2030 Action 4.1.a opportunities via student engagement processes for student voice, including the national umbrella body for second-level student councils in Ireland the Irish Second Level Students' Union (ISSU). At school level, ensure that there is full opportunity for inclusion of the student voice through student councils at both post-primary and primary schools.
- Engage via the Energy in Education Programme to access the opportunities for advice and mentoring developed by the Sustainable Energy Authority of Ireland (SEAI) and the Department

of Education. This will help support appropriate climate action engagement on climate issues and potential to decrease the school's carbon footprint.

Our Way of Working

- Report GHG emissions and sustainability activities in the annual report.
- Review any paper-based processes and evaluate the possibilities for digitisation so it becomes the default approach.
- Achieve formal environmental accreditation for large public sector bodies, such as ISO 50001 (Energy Management Standard) or ISO 14001 (Environmental Management System), with a view to going beyond ISO14001 to adopting EMAS (Eco Management and Audit Scheme).
- Implement and comply with Public Sector Climate Action Mandate in relation to:

  -Green Public Procurement

  -Construction

  -Organic Food

  -Food Waste

  -ICT Equipement

  -Paper

  -Water

  -Single use

  -Other Materials

Our Buildings and Vehicles

- Create bicycle friendly buildings for employees and visitors, by putting bicycle parking in place– which is secure, accessible, and simple for cyclists to recognise and use.
- Display an up-to-date Display Energy Certificate in every DDLETB building that is open to the public to clearly show energy use.
- Update DDLETB Building Stock Plan regularly.
- DDLETB will not install heating systems that use fossil fuels after 2023, unless at least one of the following exceptions applies:

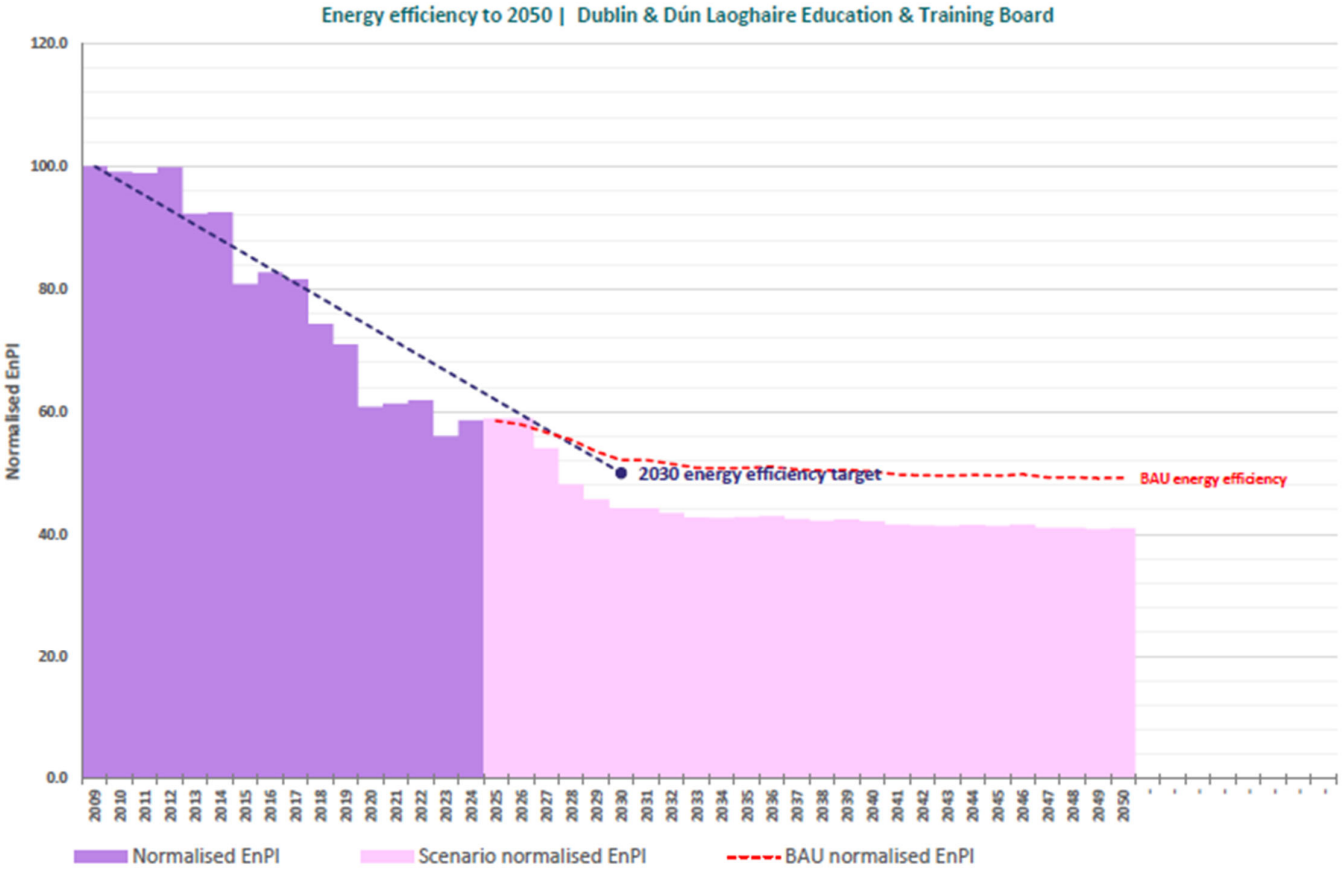
– the fossil-fuel use is only through the use of electricity from the grid.

- there is no technically viable non-fossil alternative (generally only related to applications for a purpose other than space heating).
- the installation of a renewable space heating system would increase final CO2 emissions.
- the fossil-fuel use is provided for backup, peaking, or operational purposes (and makes up less than 10% of annual heating energy)
- where the direct replacement of existing fossil fuel heating is required for an emergency maintenance purpose.

- DDLETB will continue to promote and facilitate Education for Sustainable Development teaching and learning as appropriate by:
- Raising awareness and promote sustainable development and the Sustainable Development Goals (SDG) including Goal 13 - Climate Action themes through the range of curricular subjects.
- Participating in Education for Sustainable Development programmes and activities, for example, ECO UNESCO, World Wise Global Schools, Take 1 programme etc.
- Considering where feasible how elements of the 17 SDG can be integrated into school life, for example, food waste, biodiversity, water consumption, recycling, reusing, walking and cycling etc.
- Continuing to engage in available programmes such as the Green Schools which provides a very practical initiative in raising the climate action agenda.
- Subscribe to the ESD Newsletter: https://www.gov.ie/en/collection/a1d6e-educationfor-sustainable-development-newsletter
- Complete the annual energy Monitoring and Reporting legislated requirement to the SEAI for all schools and centres.

- Adopt a Sustainability Policy Statement.
- Implement Green Public Procurement.
- Consider the Safe Routes to School Programme with the aim of supporting walking, scooting and cycling to primary and post-primary schools, and creating safer walking and cycling routes within communities https://www.nationaltransport.ie/safe-routes-to-school-srts-programme/.

Appendix B. Energy Efficiency to 2050 Gap to Target Projection



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