Imetb
Bord Oideachais agus Oiliúna Lú agus na Mí
Louth and Meath Education and Training Board

Climate Action Roadmap

Rialtas na hÉireann
Government of Ireland

SOLAS
learning works

seai SUSTAINABLE ENERGY AUTHORITY OF IRELAND

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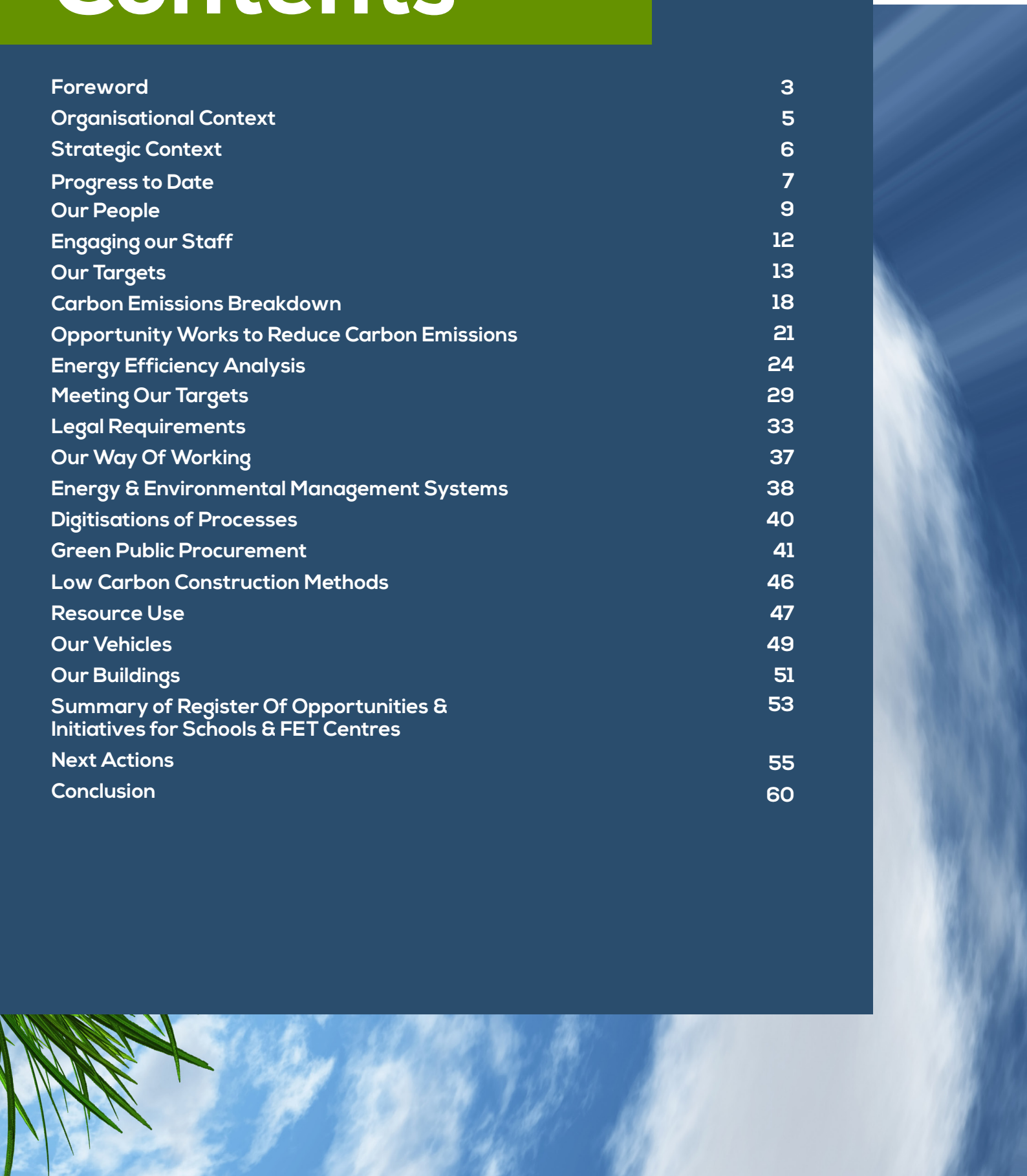
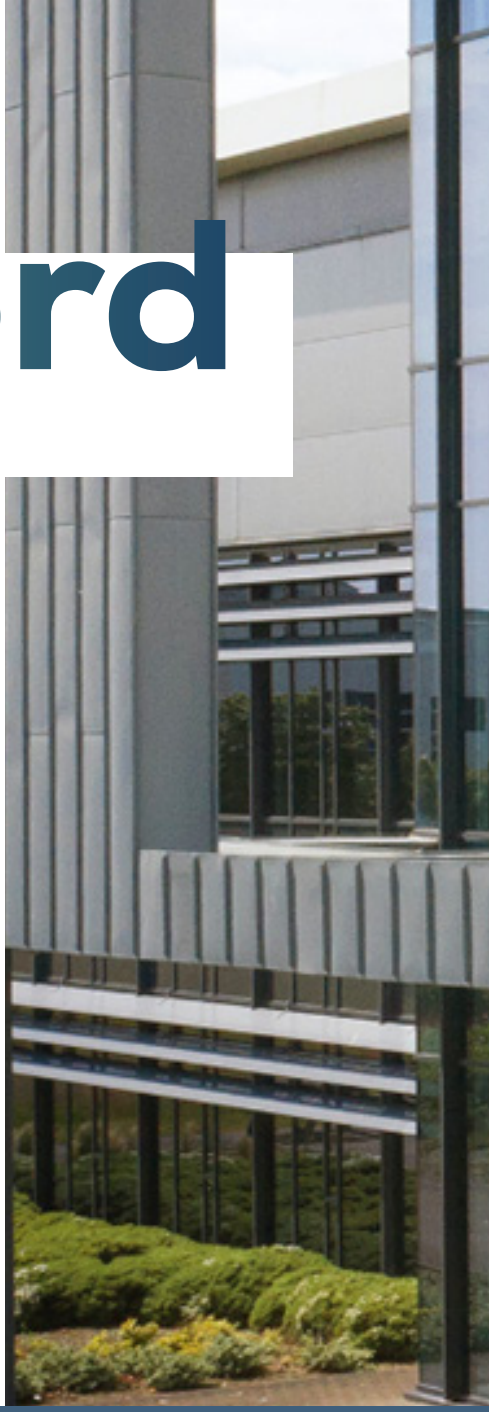


Foreword

MARTIN G. O'BRIEN
LMETB CHIEF EXECUTIVE



I am pleased to present LMETB's second Climate Action Roadmap. LMETB is committed to addressing the Public Sector Mandate and achieving our sustainability targets. We are investing in our buildings, developing our processes and procedures, training our staff and engaging with stakeholders to play our part in making a holistic transition to a low carbon future. This Roadmap describes that work in detail. It will be made available publicly and distributed to our staff. I hope that it will encourage staff, learners, parents/guardians, suppliers and other stakeholders to play their part in acting sustainably.

lmetb
Bord Oideachais agus Oiliúna Lú agus na Mí
Louth and Meath Education and Training Board

SINEAD MURPHY

DIRECTOR OF ORGANISATION, SUPPORT, AND DEVELOPMENT

CLIMATE AND SUSTAINABILITY CHAMPION

LMETB's Strategy Statement 2022-2026 contains five strategic goals. Goal 5 is to "act in a way that is consistent with a sustainable future and consistent with Ireland's Climate Action Plan." To this end LMETB has committed to a number of Strategic Actions under the Goal, as agreed by the Board. I wish to thank all involved in preparing the Roadmap. I am confident that, by working together, we can fulfil its ambition.

Organisational Context

Louth and Meath Education and Training Board (LMETB) is the largest education and training provider in Louth and Meath, providing a broad range of education and training services to over 39,000 students and learners annually. LMETB manages 19 post-primary schools and colleges, five Community National Schools, three Colleges, eight Youthreach Centres, nine FET/VTOS Centres, Drogheda College, Regional Skills Training Centre Dundalk, and the Advanced Manufacturing and Training Centre of Excellence. LMETB are responsible for an extensive range of Educational Services throughout both counties, including Adult Learning Services, Community Education, Back to Education Initiative and Adult Guidance.

Under the Climate Action Mandate 2024 as part of Climate Action Plan 2024 (CAP24), which applies to public sector organisations, LMETB must prepare a Climate Action Roadmap to report on progress towards achieving the decarbonisation and energy efficiency targets set out in CAP24. Overall, the public sector must achieve a 51% reduction in GHG emissions and a 50% improvement in energy efficiency by 2030. Each public sector organisation has been set an individual target by the SEAI for overall GHG emissions reduction from energy. This Roadmap is a live document, which will be updated annually or as required, to reflect LMETB's progress and to respond to requirements under the Climate Action Mandate.

Strategic Context

One of the five strategic goals under LMETB Strategy for 2022 to 2026 is to act sustainably, in a way that is consistent with a sustainable future and consistent with Ireland's Climat Action Plan.

This strategy is supported by six actions:

- To develop an LMETB sustainability policy consistent with UN targets and Ireland's Climate Action Plan, including the specific targets set under that plan for LMETB
- Engage with staff on implementation of LMETB's Sustainability Policy to enable them to contribute to LMETB's sustainability objectives
- Engage with learners on implementation of LMETB's Sustainability Policy to enable them to contribute to LMETB's sustainability objectives
- Develop partnerships, including with SEAI, which can contribute to LMETB's sustainability objectives
- Ensure that LMETB property is managed in a sustainable manner in line with LMETB's Sustainability Policy
- Reduce LMETB's environmental impact in line with LMETB's Sustainability Policy

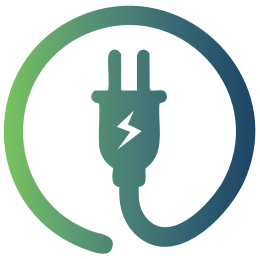
Progress to Date

Climate Performance 2023

Transport emissions mainly relate to Dunboyne College travel arrangements for students to be bussed between off-site facilities and the location of the current college. The new Dunboyne College of the Future (DCotF) project and the consolidation of buildings will result in significantly less transport emissions for LMETB.

DCotF will contribute to meeting Climate Action targets through the construction of a ZEB to replace 30 Units and 5 offsite leased centres with very poor BER ratings. The proposed site has excellent transport connections - train services, etc. and will allow for EV charging. The new building will be ZEB compliant, with the majority of energy used on the campus generated on-site, and will be A2 rated.

All figures are from SEAI's M&R and Gap-to-Target tools which are used to measure and report on LMETB's environmental, energy, and carbon goals and requirements.



ELECTRICITY EMISSIONS

19.7% LESS THAN 2022

THERMAL EMISSIONS

14.8% LESS THAN 2022

ENERGY-RELATED CO2

17.4% LESS THAN 2022

ENERGY EFFICIENCY

51.7% BELOW BASELINE

PRIMARY ENERGY CONSUMPTION

10.2% LESS THAN 2022

TRANSPORT EMISSIONS

455% GREATER THAN 2022

Our People

LEADERSHIP & GOVERNANCE

Senior Management Commitment

LMETB is committed to excellence and innovation in the education and training of young people and adults. Positive participation and embracing climate action is a key cross cutting theme in our teaching, learning and skills development as we promote a new way of living and working that protects our planet.

LMETB is fully committed to the targets and actions as set out in this Roadmap. Senior staff will strive to achieve them in collaboration with schools, centres and offices. Climate Action Leadership training has been organised for Senior Management. This training covers the following:

- Climate Fundamentals – Introduction to the Climate Crisis
- Climate Governance, Policy, and Evaluation
- The Climate Challenge and Leadership

The Roadmap is signed by LMETB's Chief Executive, Mr. Martin O'Brien, to affirm LMETB's commitment to decarbonisation of the public sector. LMETB is a member of the SEAI Energy Decarbonisation Partnership Programme.

Nominated Climate & Sustainability Champion (CSC)

Ms. Sinead Murphy, Director of Organisation, Support and Development, is LMETB's Climate and Sustainability Champion (CSC). As a member of the LMETB's senior management team, reporting directly to the LMETB Chief Executive, her key role in the area of sustainability is overseeing LMETB's Green Team and acting as their sponsor at senior management level. With the support of the Green Team, the CSC implements and reports on the Public Sector Climate Action Mandate, ensures the timeliness and quality of reporting on the Climate Action Roadmap, drives implementation of agreed projects and actions, and advocates for the inclusion of climate and energy considerations in LMETB's strategic goals and resource allocation.

Nominated Energy Performance officer (EPO)

Under the OSD Directorate, LMETB have established a Green Team lead by the Energy Performance Officer (EPO) Mr. Frank Smith, Assistant Principal Officer, Estates, Climate Action, and Sustainability in the Land and Buildings Department. The role of the EPO is to implement LMETB's Climate Action Roadmap energy management practices, to identify opportunities right through to the delivery of capital projects, and the ongoing monitoring of these practices. The EPO leads the development of energy management systems, oversees the planning and implementation of robust education and engagement measures across LMETB, and oversees the works required to meet LMETB's climate targets.

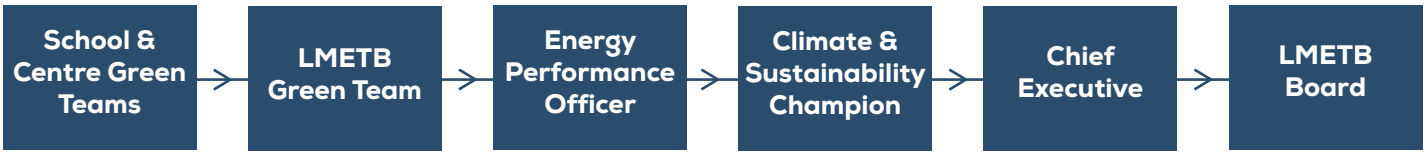
Governance Structure

The corporate governance framework for ETBs comprises elements of legislation, regulation, self-regulatory arrangements, codes, commitments and business practices that have evolved within the organisation. In accordance with ETB legislation, the functions of an ETB are defined as reserved (performed by the Board) and executive (performed by the Chief Executive, in accordance with the policies of the ETB, and who is accountable to the Board for the due performance of his/her functions). The organisational structure of ETBs includes a senior management tier below Chief Executive level in three directorate areas: Schools, Further Education and Training and Organisation Support and Development. This management structure provides support to the Chief Executive in the performance of his/her functions and contributes to the overall objective that ETB functions are managed effectively and in line with Code of Practice requirements.

The presence of the senior management tier allows for formal delegation of roles and tasks from the CE to the directorate with a view to effective management of the demands of the organisation along with promotion and implementation of good governance practices.

There are Green Teams in most of LMETB's schools and centres and, with ongoing support from the LMETB Green Team, it is the aim that all schools and centres would have Green Teams in place.

LMETB have recently procured and appointed an Energy Efficiency in Design consultant. LMETB will utilise this new professional expert in all areas of energy and to further advance the Climate Action Mandate for LMETB.



Supported by SEAI & EED

Green Teams

In line with recommendations from the Climate Action Mandate, LMETB has established an LMETB Green Team and Green Teams in our offices, schools and centres. LMETB's Green Team acts on an advisory and consultative basis to assist in the achievement of overall energy targets. It also provides support to school centre and office Green Teams.

The members of LMETB's Green Team are:

- Sinéad Murphy, Director of Organisation, Support and Development
- Frank Smith, Assistant Principal Officer, Estates, Climate Action and Sustainability
- Veronica Feeney, Assistant Principal Officer, Capital
- Sorcha Malone, Project Manager – Land & Buildings Department
- Representatives from Schools and FET Centres

Green Teams in schools and centres are encouraged to report on progress on school and centre-wide initiatives on a regular basis to LMETB's Head Office Green Team. These teams promote the collation of energy consumption data, monitor energy usage, implement energy management strategies to improve efficiency and reduce carbon, and engage with staff and students on initiatives on good energy and sustainability practices.

The Green Teams allow all staff and learners to buy-in to LMETB's climate and energy goals and offers a platform for stakeholders to suggest improvements in practices from their daily experience in these buildings.

Engaging our Staff

LMETB will continue to:

- Engage in training provided by SEAI through Energy Link on the public sector events calendar.
- Encourage relevant staff members to complete SEAI Energy Academy Courses.
- Promote participation in Energy in Education training workshops.
- Keep staff informed of the importance of acting sustainably through campaigns such as "Reduce Your Use"
- Organise annual staff workshops to create awareness and to engage on climate issues and sustainability.
- Use social media, emails and verbal interaction to increase awareness.
- Engage in Green Public Procurement training.

Training already undertaken by staff:

- SEAI Energy in Education Workshop
- ETB & SEAI Annual Climate Action Conference
- SEAI Energy Basics
- SEAI Carbon Basics
- SEAI Engaging People at Work Accelerator
- Energy Map Training
- Climate Action Certificate Training Program NZEB Fundamental Awareness
- NZEB Retrofit Programme
- Green Teams National Programme Energy Efficient Design Training
- SEAI Energy & You: Reduce Your Use
- SEAI Energy Academy
- Environmental Sustainability in the workplace
- Climate Action & Sustainability Awareness Webinars

Our Targets

Carbon Emission Analysis

Baseline and Current Emissions

LMETB must achieve a 51% reduction in GHG emissions and a 50% improvement in energy efficiency by 2030.

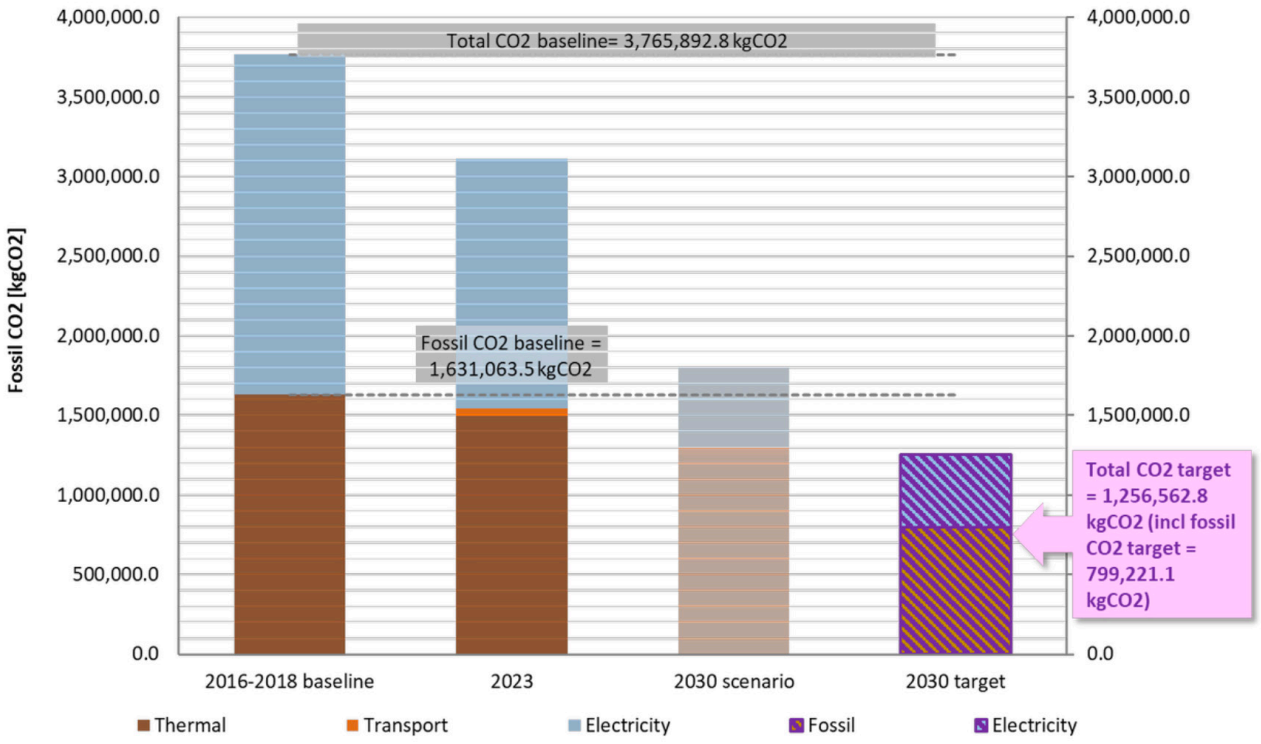


Figure 1: LMETB GHG Emissions from electricity and fossil fuels - Baseline figure, 2023 emissions, 2030 projected emissions, and 2030 target emission from the SEAI Gap-to-Target tool

Figure 1 compares the LMETB's combined carbon emissions across electricity, thermal energy, and transport fuel usage in the 2016-2018 baseline and 2023, alongside the projected 2030 emissions and the 2030 target emissions from the M&R data SEAI Gap to Target tool. The SEAI Gap to Target tool is updated annually in line with the climate action plan requirements to continuously measure LMETB's progress against our climate goals.

LMETB must reduce its carbon emissions by 57% or 2,509,330 kgCO2e to achieve its climate targets. The gap to target tool estimates a 79% reduction in grid electricity emissions 1,677,487.7 kgCO2e reduction in electricity emissions from the greening of the grid, the remaining 831,842.4 kgCO2e reductions must be achieved through eliminating fossil fuel energy users in LMETB buildings. LMETB are finalising building improvement plans to achieve our 2030 targets, this is discussed further in the "Gap to Target" and "Opportunity Works to Reduce Carbon Emissions" sections.

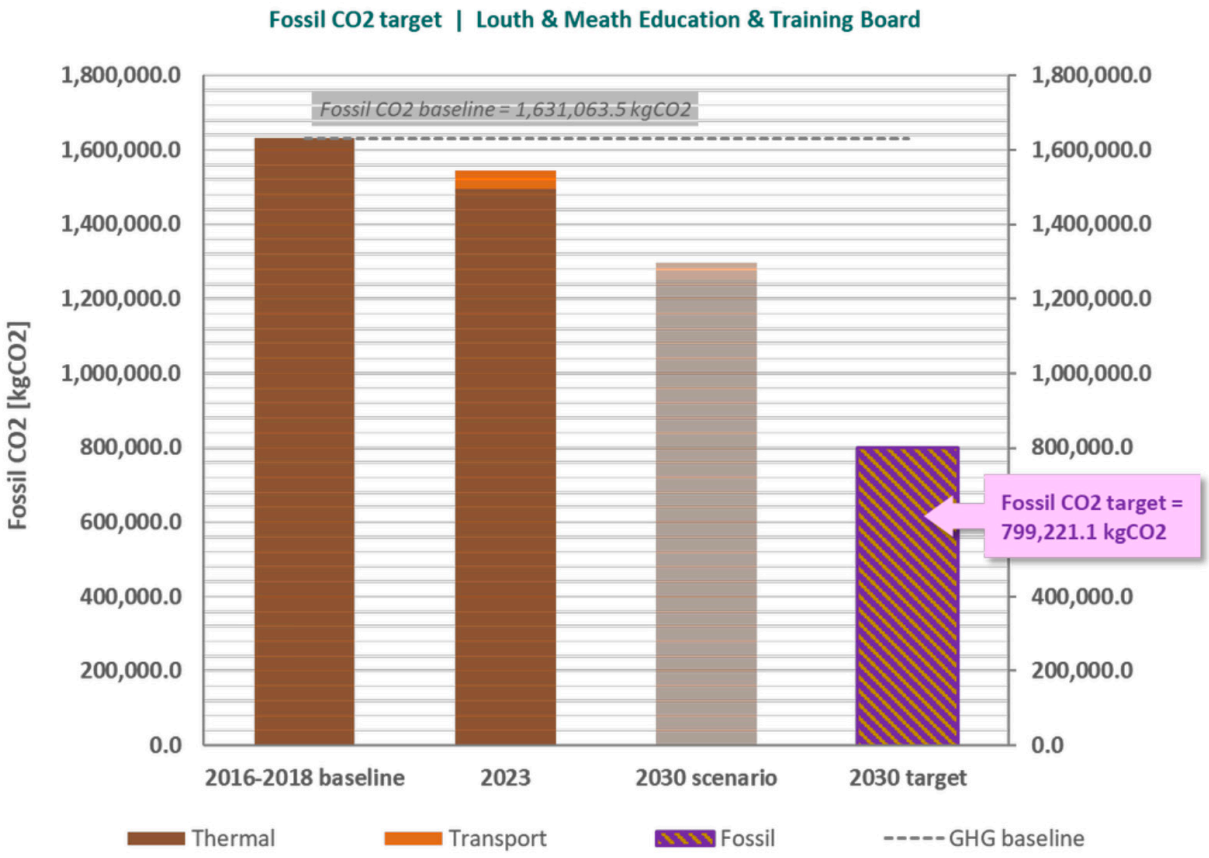


Figure 2: LMETB GHG Emissions from fossil fuels - Baseline figure, 2023 emissions, 2030 projected emissions, and 2030 target emission from the SEAI Gap-to-Target tool

Figure 2 compares the LMETB's combined carbon emissions exclusively across thermal energy and transport fuel usage in the 2016-2018 baseline and 2023, alongside the projected 2030 emissions and the 2030 target emissions from the M&R data SEAI Gap to Target tool. The SEAI Gap to Target tool is updated annually in line with the climate action plan requirements to continuously measure LMETB's progress against our climate goals.

LMETB must reduce its fossil fuel-based carbon emissions by 51% or 831,842.4 kgCO2e to achieve its climate targets. LMETB are finalising building improvement plans to achieve our 2030 targets, this is discussed further in the "Gap to Target" and "Opportunity Works to Reduce Carbon Emissions" sections.

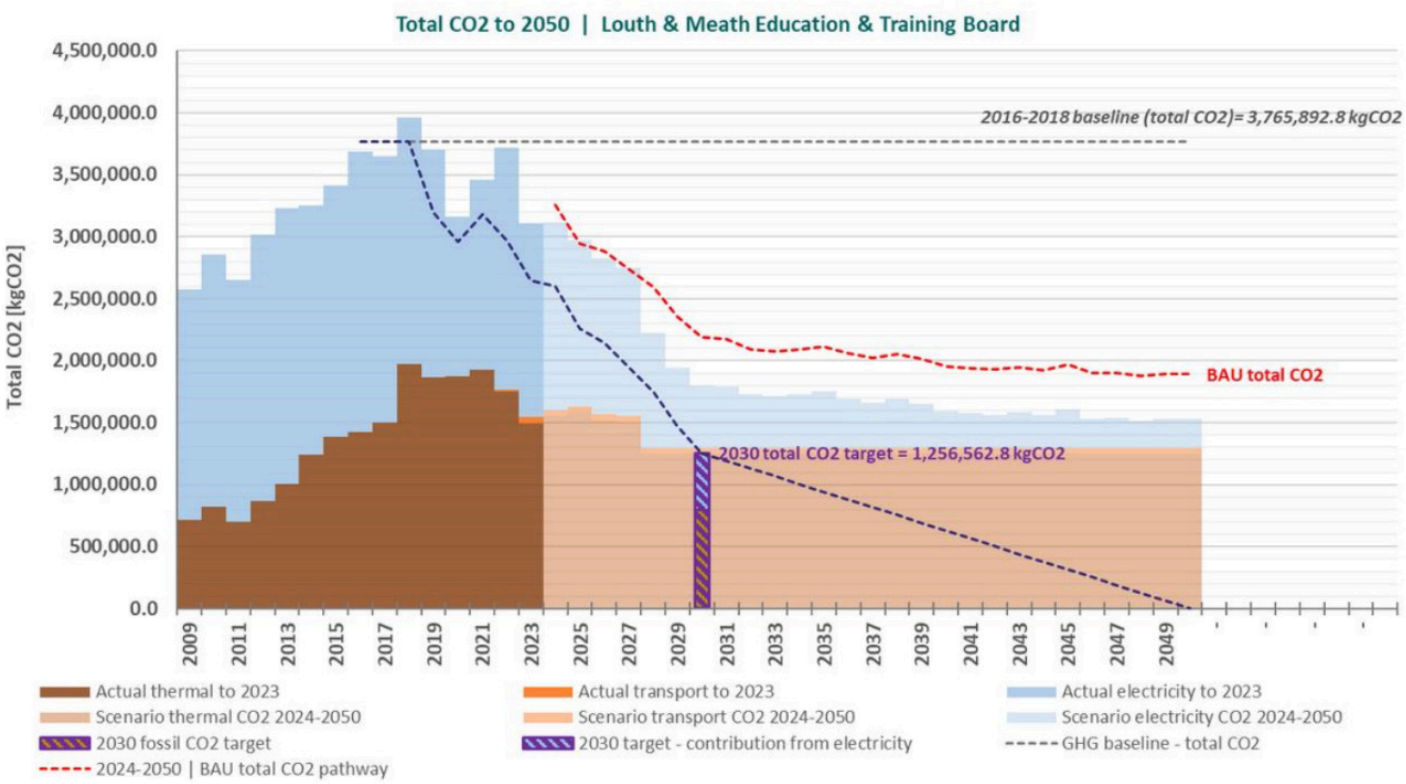


Figure 3: Projected carbon emissions for LMETB's portfolio from electricity and fossil fuels from the SEAI Gap-to-Target tool

Figure 3 plots LMETBs carbon emissions from electricity, thermal energy, and transport fuel usage (from 2023) from 2009 to present day, as well as future emissions to 2050. Additionally, it also models anticipated annual emissions based on retrofit and improvement works to reduce emissions, and increased energy usage from growth and new facilities for LMETB. This figure is from the SEAI Gap to Target tool, which is updated annually in line with the climate action plan requirements to continuously measure LMETB's progress against our climate goals.

LMETB are finalising building improvement plans to achieve our 2030 targets, this is discussed further in the "Gap to Target" and "Opportunity Works to Reduce Carbon Emissions" sections.

Carbon Emissions Breakdown

Building	Implementation Year	Energy Type	kWh
New LMETB Head Office, Drogheda	2027	Electricity (Grid)	127,980
O'Carolan College Nobber - New School	2025	Electricity (Grid)	643,545
Bush Post Primary School - Major Extension	2025	Kerosene	259,428
Coláiste Na hInse - Additional Accommodation	2028	Natural Gas	86,100
Coláiste Na Mí - Phase II Extension	2026	Natural Gas	105,510
Faughart NS - Temporary Accommodation	2028	Electricity (Grid)	16,470
St Oliver PP, Oldcastle - Additional Accommodation	2028	Electricity (Grid)	86,297
Beaufort College - Extension	2027	Natural Gas	102,402
Coláiste DeLacy, Ashbourne - Phase II Extension	2028	Electricity (Grid)	393,510
DIFE Drogheda - Multipurpose Tertiary Facility	2027	Electricity (Grid)	73,653
St. Oliver's Drogheda - Additional Accommodation	2029	Electricity (Grid)	73,000
Ard Rí Navan - New School	2028	Electricity (Grid)	144,144
Coláiste Ríoga Dunshaughlin - New School	2027	Electricity (Grid)	145,129
Dunboyne - New FET College	2030	Electricity (Grid)	146,500
Enfield - New School	2026	Electricity (Grid)	143,628
Dundalk - New Regional Skills and Training Centre	2032	Electricity (Grid)	225,600
Abbey Road Navan - SIUF Project	2028	Electricity (Grid)	108,000
Dunshaughlin CNS - New School	2027	Electricity (Grid)	145,000

Table 1 sets out anticipated increases in every consumption arising from new facilities, increased activity and expansion of services. It also sets out the planned year of implementation, energy type expected to increase and anticipated kWh energy consumption increase. Note that the fossil fuel increases from Bush Post Primary School, Coláiste Na hInse, Coláiste Na Mí, and Beaufort College arise from planned extensions of buildings with existing fossil fuel-based heating systems in line with current regulations and do not involve implementation of new fossil fuel systems.

2030 CO2 breakdown | modelled scenario

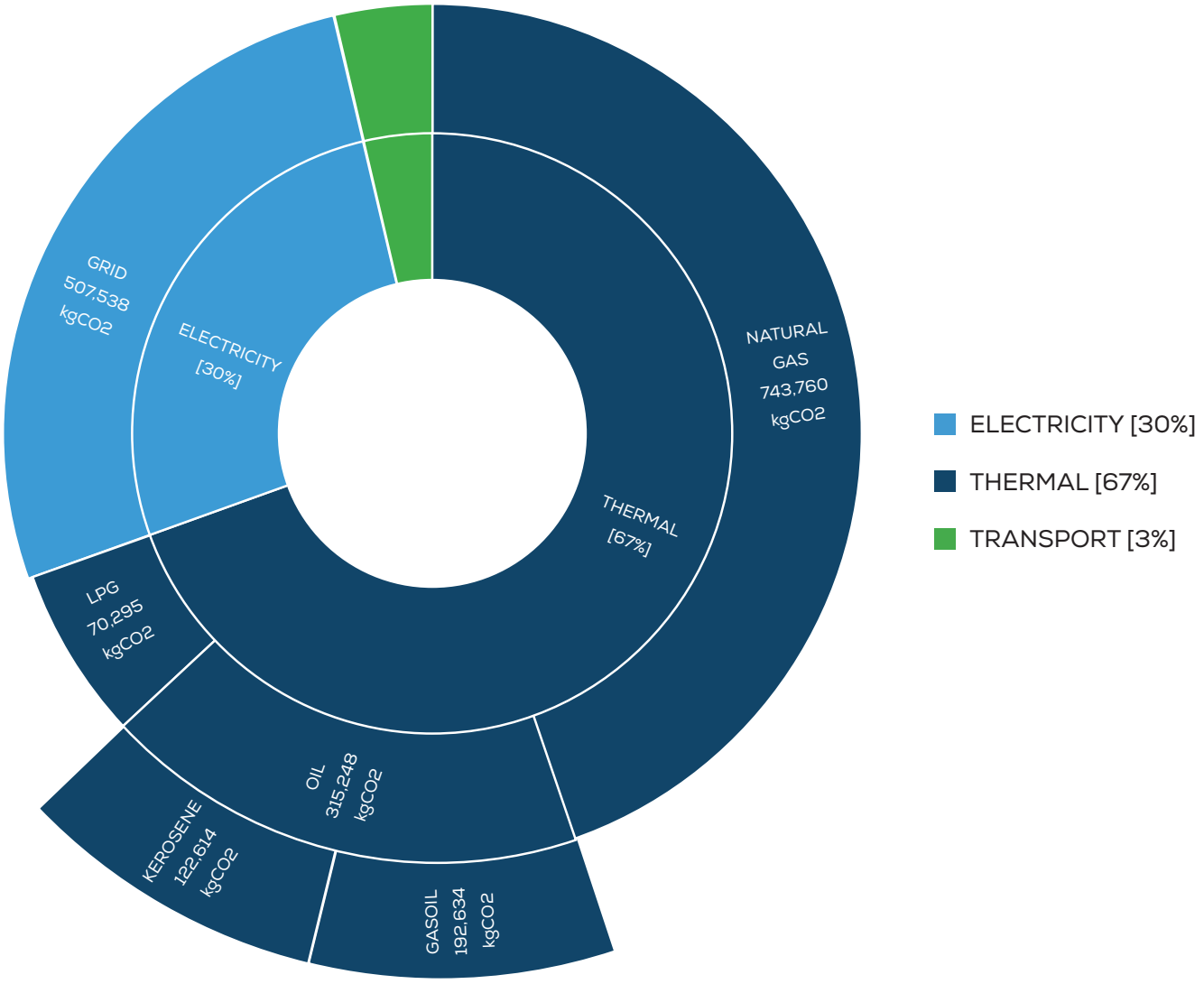


Figure 4: 2030 Carbon emission breakdowns by source in LMETB, from the SEAI Gap-to-Target tool

Figure 4 is a starburst chart breaking down the projected 2030 emissions in LMETB. Fossil fuels comprise 70% of the total emissions, with Kerosene, Gasoil, and LPG comprising 22% of fossil fuel emissions. This figure is from the SEAI Gap to Target tool, which is updated annually in line with the climate action plan requirements to continuously measure LMETB's progress against our climate goals.

2030 CO2 target | modelled scenerio

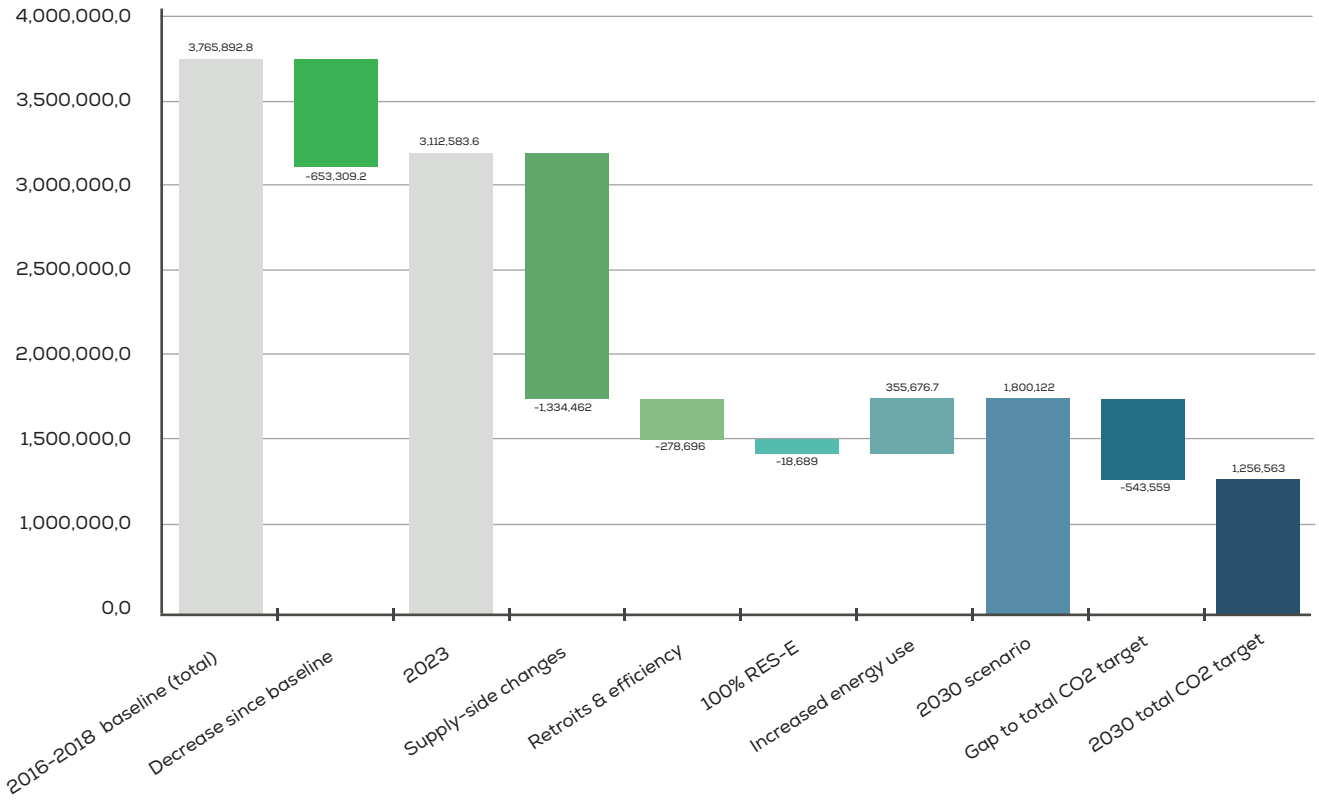


Figure 5 Progress to achieving 2030 carbon emission targets, from the SEAI Gap-to-Target tool

Figure 5 is a waterfall chart illustrating how LMETB is progressing against its 2030 fossil fuel targets. Emissions related to fossil fuels have decreased by 5.35% from the baseline as of 2023. As the Irish electricity grid becomes less carbon intensive, emissions associated with electricity will significantly decrease LMETB's carbon emissions. Retrofit works as guided by energy audits performed in line with SI426:2014 will further reduce carbon emissions and improve energy efficiency, and installation of solar panels across the portfolio will further reduce electricity emissions in schools however additional works are required to meet this goal.

Figure 5 is from the SEAI Gap to Target tool, which is updated annually in line with the climate action plan requirements to continuously measure LMETB's progress against our climate goals.

Opportunity Works to Reduce Carbon Emissions

LMETB understand that decarbonising and efficiency works are key to meeting climate goals. Energy audits were carried out for 85% of the energy use in the portfolio in line with SI426:2014 standard and a number of works have been recommended. The calculated energy reductions are estimated and are subject to more detailed reviews upon implementation. In addition to the recommended projects, building fabric reviews will be performed on the most energy intense buildings alongside additional energy audits to cover the remaining 15% of LMETB energy use. All initiatives tabulated below have been included in the Gap-to-Target model to identify how these works progress to our goals.

FET Centres

Table 2: LMETB FET Centre works that will decrease energy consumption and carbon emissions as included in the Gap-to-Target model for 2030

Decarbonisation & Energy Efficiency Initiatives - LMETB FET Centres	Energy type	Implementation Year	kWh Removed	% 2023 TFC	kgCO2e Removed
BACS Upgrades in line with EPBD 2021 Technical Guidance for Heating >70 kW system	Multiple	2028			
Building Upgrades	Natural Gas		6,947	0.1%	1,409
Controls	Electricity		70,964	1.3%	18,090
Controls	Oil		22,330	2.4%	5,895
Heating	Electricity		82,563	1.5%	21,034
Heating	Oil		11,165	1.2%	2,948
Hot Water	Electricity		5,046	0.1%	1,286
Hot water	Oil		63,289	6.8%	16,708
Hot Water	Natural Gas		49,565	0.9%	11,314
Lighting	Electricity		78,133	1.4%	19,908
Solar PV	Electricity		241,972	4.3%	61,688
Ventilation	Electricity		20,322	0.4%	5,177
Window Upgrades	Electricity		5,036	0.1%	1,283
Window Upgrades	Natural Gas		25,209	0.5%	5,115
Window Upgrades	Oil		106,445	11.5%	28,101
Building Fabric & Airtightness Testing	Multiple		TBC		
Total			**788,986 kWh**		**200.0 tonnes CO2e**

Schools

Table 3: LMETB School works that will decrease energy consumption and carbon emissions as included in the Gap-to-Target model for 2030

Decarbonisation & Energy Efficiency Initiatives - LMETB Schools	Energy type	Implementation Year	kWh Removed	% 2023 TFC	kgCO2e Removed
BACS Upgrades in line with EPBD 2021 Technical Guidance for Heating >290 kW system	Natural Gas	2025			
BACS Upgrades in line with EPBD 2021 Technical Guidance for Heating >70 kW system	Natural Gas	2028			
Building Upgrades	Electricity		31,101	0.5%	7,924
Building Upgrades	Natural Gas		173,516	3.2%	35,206
Controls	Electricity		106,610	1.9%	27,050
Controls	Natural Gas		291,704	5.4%	59,187
Heating	Natural Gas		12,231	0.2%	2,482
Hot water	Electricity		5,231	0.1%	1,102
Hot Water	Natural Gas		157,019	2.9%	33,068
Lighting	Electricity		163,187	2.9%	41,580
Solar PV	Electricity		172,374	3.0%	43,114
Window Upgrades	Electricity		559	0.0%	142
Window Upgrades	Natural Gas		256,729	4.7%	52,090
Building Fabric & Airtightness Testing	Multiple		TBC		
Total			**1,369,810 kWh**		**302.9 tonnes CO2e**

Offices

Table 4: LMETB Head Office works that will decrease energy consumption and carbon emissions as included in the Gap-to-Target model for 2030

Decarbonisation & Energy Efficiency Initiatives - LMETB Offices	Energy type	Implementation Year	kWh Removed	% 2023 TFC	kgCO2e Removed
Heating	Oil		112,803	12.2%	28,990
Lighting	Electricity		14,762	0.3%	3,761
Solar PV	Electricity		29,110	0.5%	7,416
Windows	Natural Gas		1,861	0.0%	378
Windows	Oil		8,249	0.9%	2,120
Building Fabric & Airtightness Testing	Multiple		TBC		
Total			**166,785 kWh**		**42.7 tonne CO2e**

Energy Efficiency Analysis

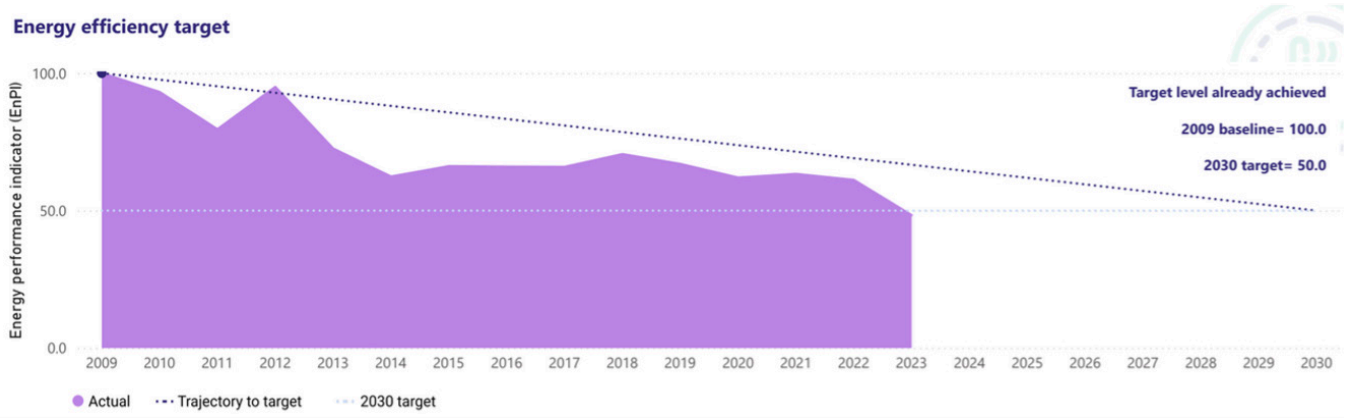


Figure 6: Graph charting LMETB Energy Efficiency reduction against 2009 baseline from 2009 to 2023, graph is from SEAI M&R tool

Figure 6 depicts LMETB's energy efficiency, based on Energy Performance Indicator (EnPI) of energy use per pupil per Department of Education guidance. LMETB has made significant improvements in energy efficiency since 2009 staying largely below the trajectory to target. As of 2023, LMETB has surpassed the target of a 50% reduction in EnPI, having achieved a 51.7% reduction from the baseline.

Analysis of Significant Energy Users

FET Centres

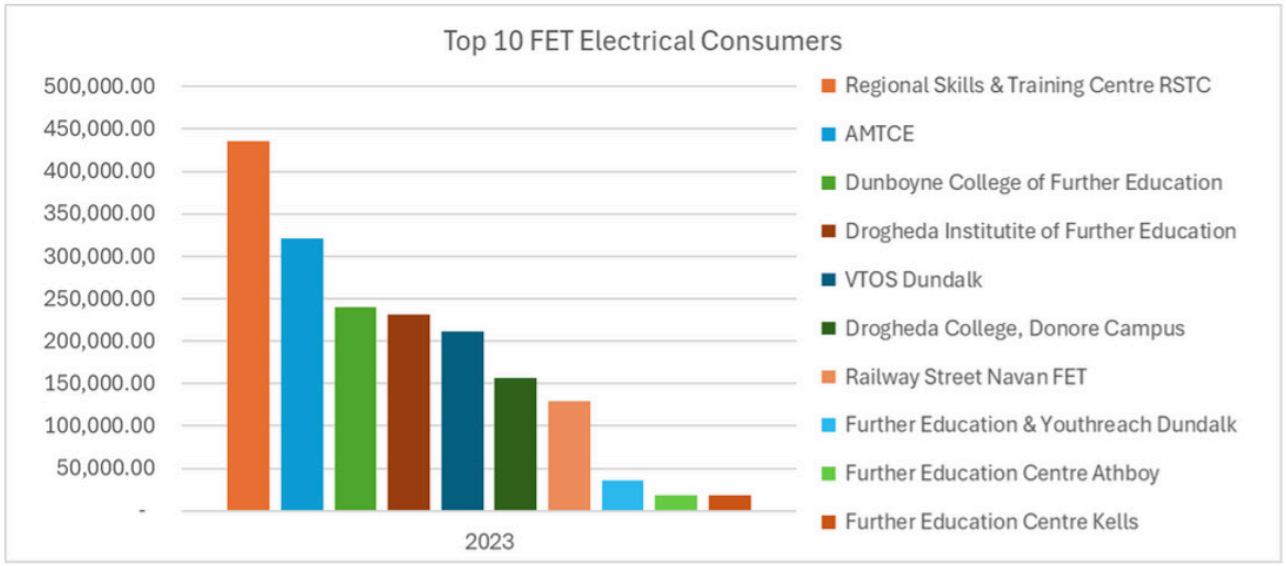


Figure 7: Top 10 FET Electricity Consumers in 2023 based on data reported to M&R

Figure 7 depicts the top 10 electricity users in LMETB FET Centres. Details in this graph are from the 2023 data submitted to SEAI's M&R tool and represents the total electricity used in each building.

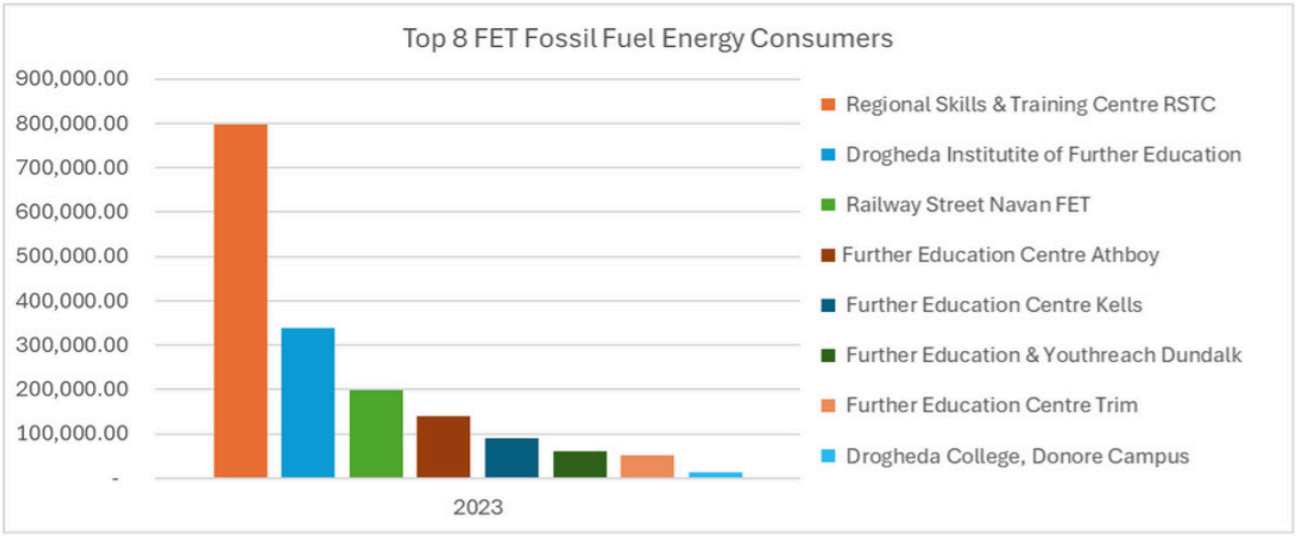


Figure 8: Top 8 FET Fossil Fuel Consumers in 2023 based on data reported to M&R

Figure 8 depicts the top 8 fossil fuel users in LMETB FET Centres. Details in this graph are from the 2023 data submitted to SEAI's M&R tool and represents the total fossil fuels used in each building consisting of Natural Gas, Gasoil, and Propane.

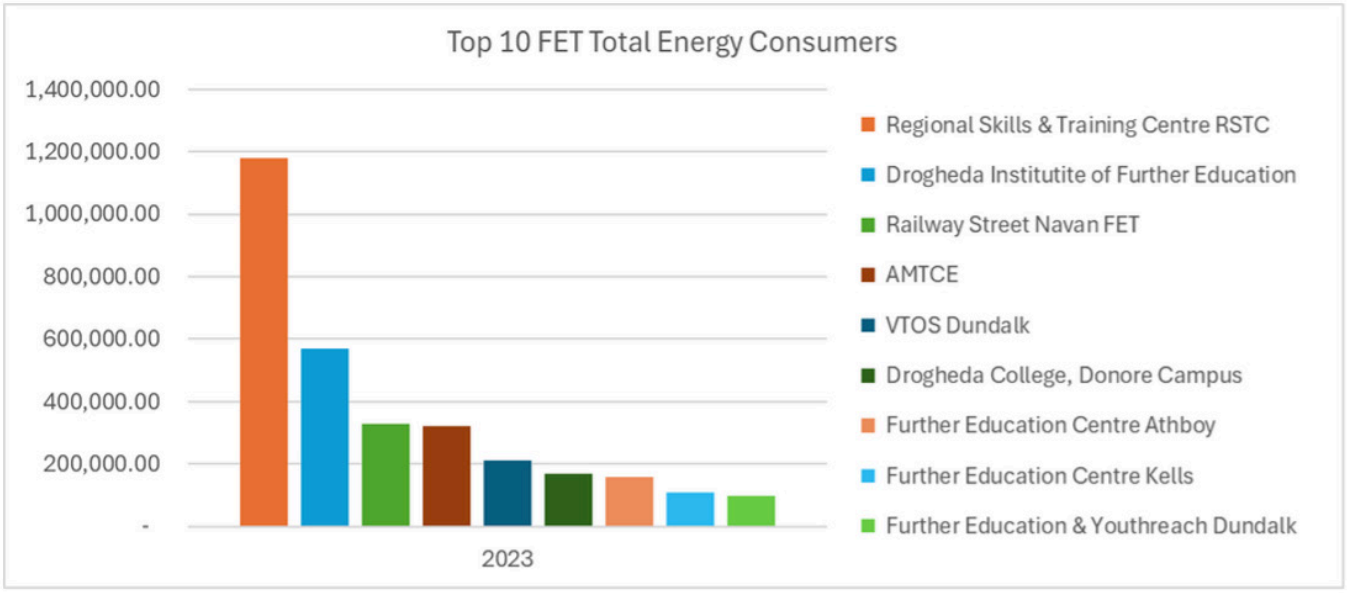


Figure 9: Top 10 FET Total Energy Consumers in 2023 based on data reported to M&R

Figure 9 depicts the top 10 energy users in LMETB FET Centres. Details in this graph are from the 2023 data submitted to SEAI's M&R tool and represents the total electricity and fossil fuels used in each building.

Schools

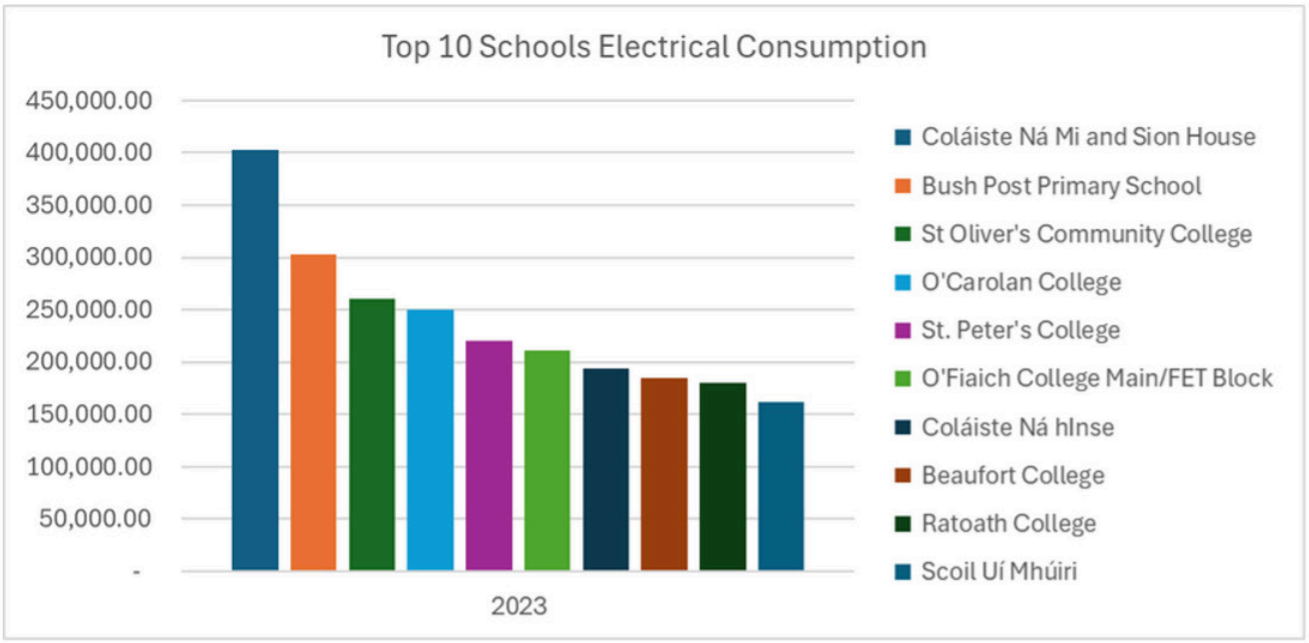


Figure 10: Top 10 School Electricity Consumers in 2023 based on data reported to M&R

Figure 10 depicts the top 10 electricity users in LMETB FET Centres. Details in this graph are from the 2023 data submitted to SEAI's M&R tool and represents the total electricity used in each building.

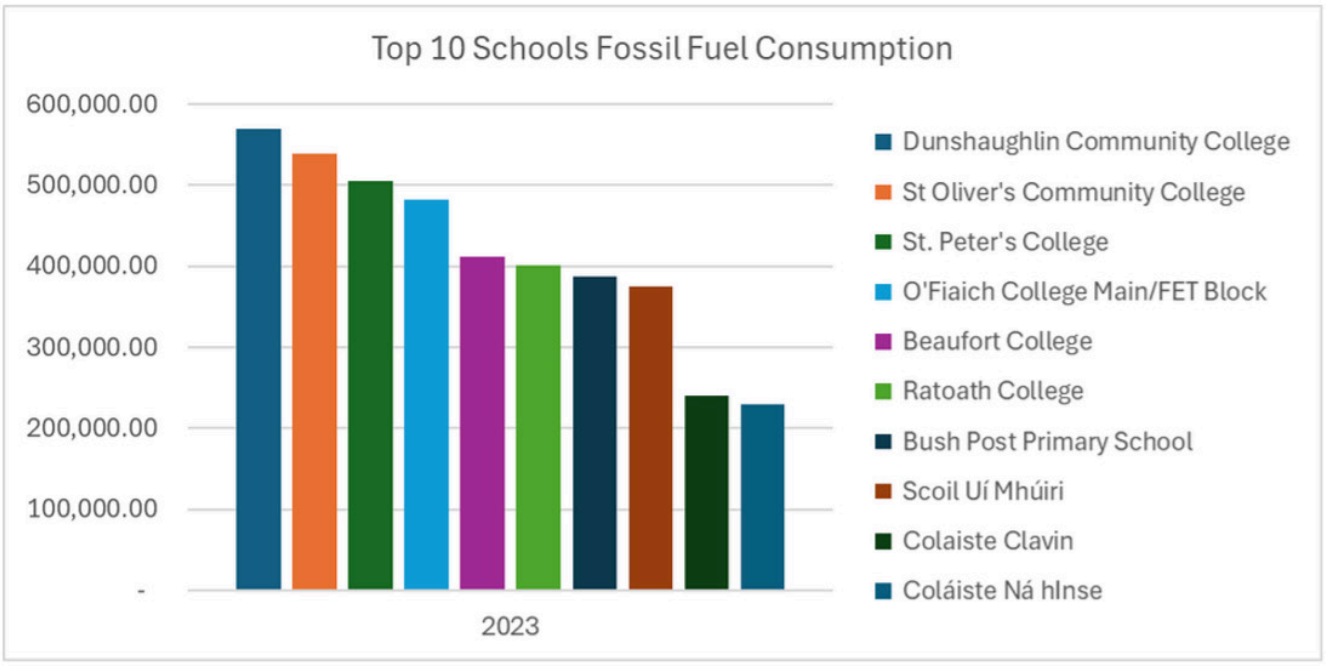


Figure 11: Top 10 School Fossil Fuel Consumers in 2023 based on data reported to M&R

Figure 11 depicts the top 8 fossil fuel users in LMETB FET Centres. Details in this graph are from the 2023 data submitted to SEAI's M&R tool and represents the total fossil fuels used in each building consisting of Natural Gas, Gasoil, and Propane.

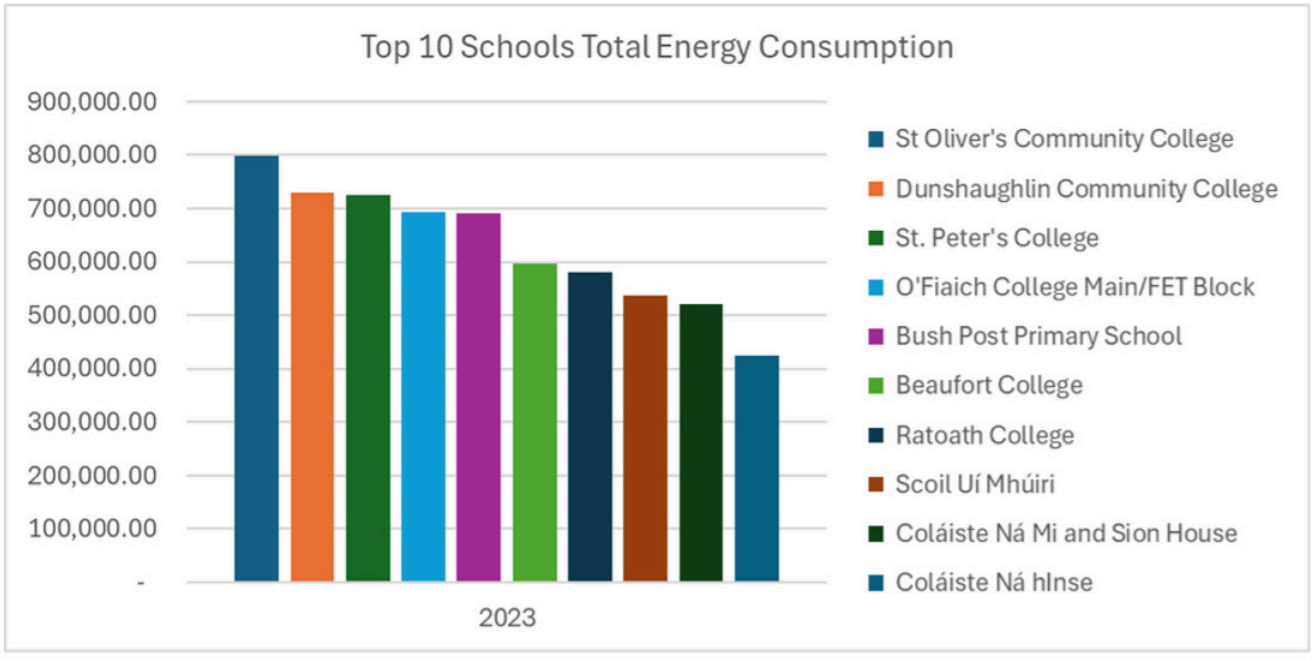


Figure 12: Top 10 School Energy Consumers in 2023 based on data reported to M&R

Figure 12 depicts the top 10 energy users in LMETB FET Centres. Details in this graph are from the 2023 data submitted to SEAI's M&R tool and represents the total electricity and fossil fuels used in each building.

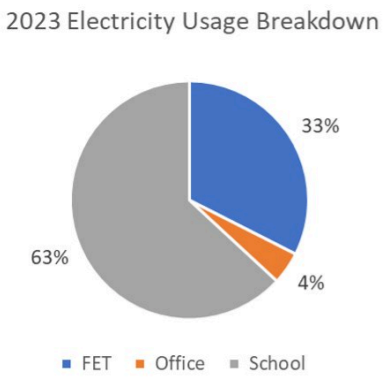


Figure 13: Electricity Usage Breakdown by building use, based on 2023 data as reported to M&R

Figure 13: Electricity Usage Breakdown by building use, based on 2023 data as reported to M&R

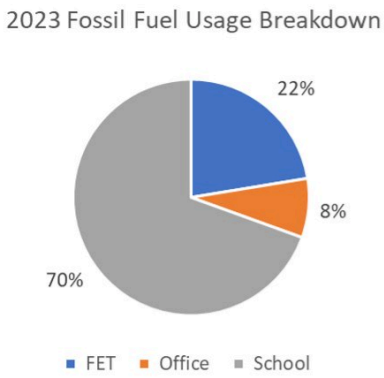


Figure 14 Fossil Fuel Usage Breakdown by building use, based on 2023 data as reported to M&R

Figure 14 Fossil Fuel Usage Breakdown by building use, based on 2023 data as reported to M&R

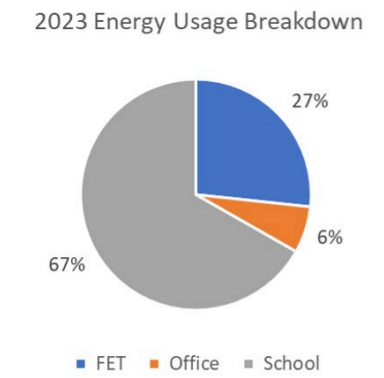


Figure 15 Total Energy Usage Breakdown by building use, based on 2023 data as reported to M&R

Figure 15 Total Energy Usage Breakdown by building use, based on 2023 data as reported to M&R

Figure 13 depicts the electricity usage of FET Centres, Schools, and Offices in LMETB's portfolio. Details in this graph are from the 2023 data submitted to SEAI's M&R tool.

Figure 14 depicts the fossil fuel usage of FET Centres, Schools, and Offices in LMETB's portfolio, including Natural Gas, Gasoil, and Propane. Details in this graph are from the 2023 data submitted to SEAI's M&R tool.

Figure 15 depicts the total energy usage of FET Centres, Schools, and Offices in LMETB's portfolio, including electricity and fossil fuels. Details in this graph are from the 2023 data submitted to SEAI's M&R tool.

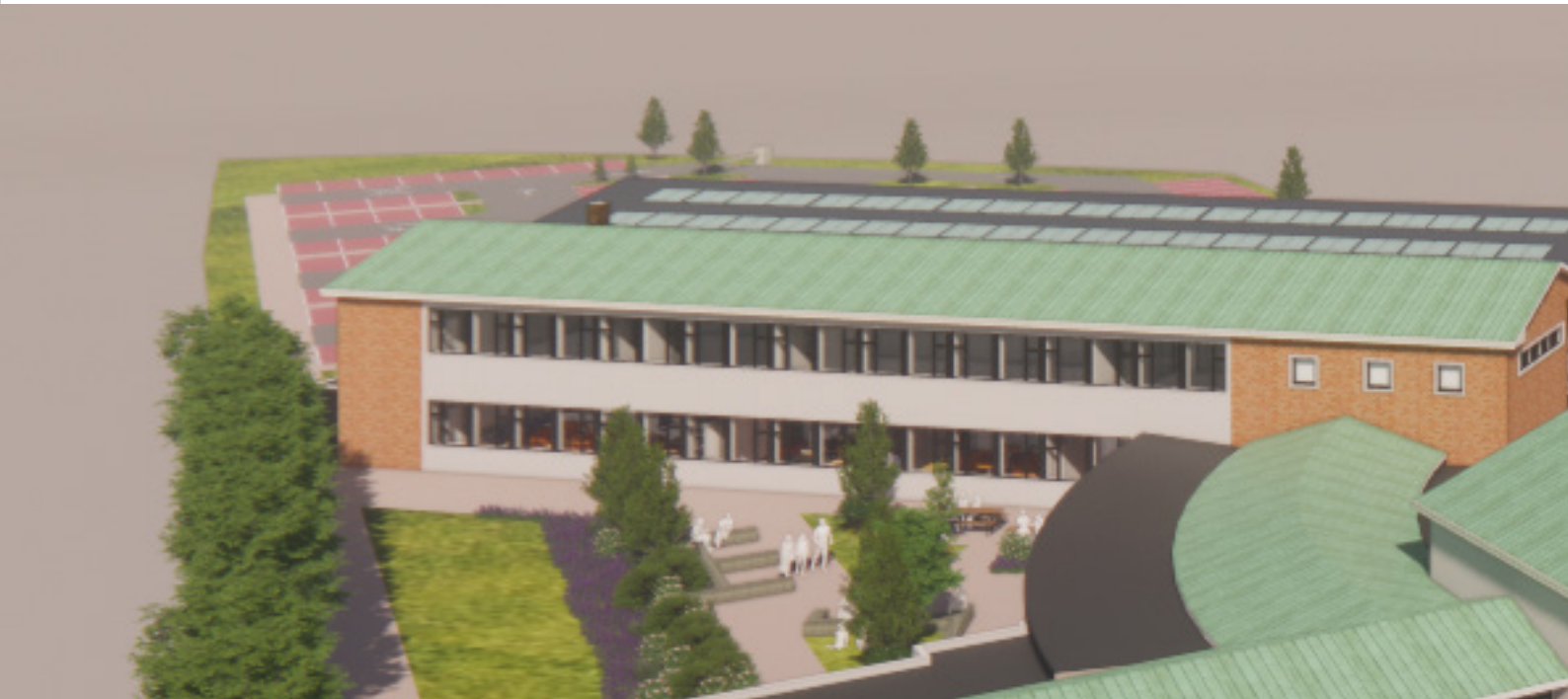
Meeting Our Targets

The targets set by government are absolute; this means that there is no ceiling provision allowed for future expansion of LMETB estate and all new school or further education accommodation required and added from 2018 onwards must be added to the target figure. This raises the bar and increases the size of the challenge for LMETB to meet the the targets set out by Government. LMETB must expand its estate and building footprints to meet growing population and increased enrollments in schools in Louth and Meath region.

For LMETB to achieve its targets, major funding is required for energy-specific projects and further resources to address existing buildings owned, leased or licensed that makeup LMETB Estate. LMETB are cognisant that this is where the real challenge lies. At a strategic level, LMETB intends to explore potential opportunities for collaborations with other public bodies, sectoral-focused supports and targeted pilot funding.

LMETB will continue to monitor funding opportunities and where they qualify will make applications to these government schemes/initiatives. Where possible LMETB will use own resources. Funding for capital projects including retrofits etc. is dependent on funding opportunities, supports and approvals from the Department of Education and from the Department of Further and Higher Education, Research, Innovation and Science for our Sector.

LMETB will apply for funding under The Department of Education Climate Action Summer Works Scheme (CASWS). It is hoped that the scheme will facilitate some of the works identified in this Roadmap as being necessary in schools.



LMETB's Dunboyne College is one of a number of major building projects progressing via the newly launched Capital Investment programmes by DFHERIS for the further and higher education sectors. These building projects will further impact LMETB Estate and building footprint and are necessary to replace unsuitable rented business units with fit for purpose education spaces and to allow LMETB deliver services required to meet the education and training needs of the Further Education sector in the Louth and Meath region.

New school buildings and extensions approved under the Department of Education School Building Programme have secured funding in principle as they advance the CWMF project stages. School building projects approved under the various Building Schemes currently advancing the design stages will comply with the Department of Education TGDs and in doing so will maximise decarbonisation and renewables while maintaining programme delivery to meet the urgent need of accommodation deficits. New builds under the new Capital Investment Programmes by DFHERIS are expected to comprise best-in-class ZEB-rated buildings and anticipated to be finished to the highest possible BER rating with energy-in-use targets to the fore. LMETB projects already approved under these schemes, funding in principle is secured and costs will be modified as they advance the CWMF project stages.

Following a consultation process between SOLAS and the DFHERIS Capital units, the Green Devolved Capital Grant (Green DCG) for the FET sector was developed to support the implementation of energy and emissions reduction measures and to achieve a reduction in the carbon footprint in compliance with the Public Sector Climate Action Mandate. This funding allocation is intended to support LMETB's efforts to improve energy performance and reduce emissions in our owned Further Education and Training buildings. The fund will enable LMETB to take targeted measures to close the gap-to-target and to make progress in the achievement of Climate Action Plan targets. LMETB have identified works in line with the requirements of the Green Devolved Capital Grant through SEAI and SOLAS. Grants are intended to support energy demand reduction through a number of measures such as retro- commissioning, improved energy management, operational energy efficiency measures and more.

SI426 audits were recently completed across LMETB schools, FET centres and offices covering 85% of the LMETB's energy performance. 22 of LMETB's 65 occupied buildings (owned or leased) have been identified comprising this percentage of energy use and each building will be audited in line with SI426 requirements covering all energy-consuming assets including building infrastructure, heating systems, lighting, and electrical appliances. A summary SI426 compliance report has been issued and a table of recommendations has been collated to inform the building stock plan to achieve our 2030 and 2050 targets.

The recommendations from these audits are being added to our program of works to reduce our carbon emissions and improve energy efficiency and additional audits have been commissioned to cover the remaining 15% of energy usage in the portfolio.

Legal Requirements

The Climate Action Roadmap focuses on meeting or going beyond the requirements of the Climate Action Mandate 2024. However, public bodies need to be aware of the legal requirements relating to energy and climate action and acknowledge these in their roadmaps. These requirements include:

- Climate Action and Low Carbon Development (Amendment) Act 2021, which requires all public bodies to perform their functions in a manner consistent with Ireland's climate ambition.
- SI394/2021 Energy Performance of buildings, which requires installation of Building Automation and Control by 2025, for buildings with HVAC rated output over 290kW; requires installation of electric vehicle charging points in carparks for new or refurbished buildings with more than 10 car parking spaces.
- SI381/2021 Clean Vehicles Directive, which sets targets for the procurement of clean light and heavy-duty vehicles, with the first target falling in 2025 and the second in 2030. The definition of clean vehicle changes to zero emission vehicles in 2025.
- SI4/2017 Energy Performance of Buildings, which requires all new public sector buildings built since 2018 to be "nearly zero emissions".
- SI646/2016, which requires that public bodies procure only energy using products and vehicles that are on the Triple E register.
- SI426/2014, which requires the public sector to demonstrate exemplary energy management and requires public bodies to undertake energy audits every four years.

In CAP24, the public sector has a clear mandate to lead on climate action. The Government has set ambitious targets for public sector organisations:

- A 51% reduction in the total tonnage compared to a 2016-2018 (average) baseline by 2030.
- Scope 1 Emissions - Direct energy-related GHG emissions (i.e., thermal and transport),
- Scope 2 Emissions - Projected supply-side reductions in indirect energy-related emissions (i.e., electricity),
- A 50% improvement in energy efficiency by 2030, compared to a 2009 baseline. Net-zero emissions no later than 2050.
- Regularly update SEAI's M&R System to report GHG Emissions and sustainability activities to meet 2030 and 2050 goals.
- Select projects for retrofit programmes to decarbonise our building stock and retrofit the portfolio to high energy standards.

All public bodies with an energy spend greater than €2 million per annum must achieve ISO50001 certification by the end of 2024 as stipulated in the Public Sector Bodies Climate Action Roadmaps Guidance (See Our Way of Working – Energy and Environmental Management Systems for more details).

LMETB understand from the revised 2023 Energy Efficiency Directive (EED) the Public Sector overall must achieve a 1.9% reduction in energy consumption per annum until 2030 based on a 2021 baseline, and at least 3% of total floor area of heated and/or cooled buildings owned by public bodied must be renovated each year to NZEB. For buildings leased by public bodies, they shall negotiate with the owner when reaching a trigger point such as a renewal of rental, change of use, significant repair, or maintenance works, to upgrade the building to NZEB or ZEB standards.

From the revised 2023 EED, an inventory of all heated or cooled buildings owned or occupied by Public Bodies with a floor area greater than 250m2 must be published by October 2025 and updated every two years. Additionally, the BER and DECs for all of these buildings must be accessible to the public. Under Article 11 of the EED, Businesses that consume more than 10 TJ of energy must be subject to energy audits, and businesses exceeding 85 TJ must implement an Energy Management System by 11th October 2027.

Under the revised Energy Performance of Buildings Directive (EPBD) issued in March 2024, Ireland must transpose the directive into Irish Law within two years of issue. While Irish Legislation is still being drafted, key requirements include a Maximum Energy Performance Standard for an upper limit of building energy usage expressed in kWh m2/year. It is expected these mandates will include requirements to improve G, F, E, and some lower D-rated BER buildings by 2030.

Under the revised EPBD, renovations costing more than 25% of the value of the asset or renovating over 25% of the area of the building envelope must be carried out to Zero Emissions Building standards from 1 January 2028.

Under the revised EPBD, new mandates for solar energy generation include:

- New public buildings with a floor area exceeding 250m² from 31 December 2026
- Existing public buildings with a floor area exceeding 2000m² by 31 December 2027
- Existing public buildings with a floor area exceeding 750m² by 31 December 2028
- Existing public buildings with a floor area exceeding 250m² by 31 December 2030
- Where the building undergoes major renovation, all non-domestic buildings with useful floor area exceeding 500m² by 31 December 2027

The revised EPBD also includes requirements for Technical Building Systems that automate and control building functions to improve energy efficiency with deadlines for implementation of the technical systems based on HVAC energy output:

- By 31st December 2025 buildings with HVAC output greater than 290 kW must install building automation and control systems that monitor energy use and improve controls of building systems to reduce energy use along with automated lighting controls (such as presence detection and light zoning).
- By 31st December 2029 buildings with HVAC output greater than 70 kW must install building automation and control systems that monitor energy use and improve controls of building systems to reduce energy use along with automated lighting controls (such as presence detection and light zoning).
- From the revised EPBD, building automation and control systems should be capable of monitoring indoor environmental quality by 29 May 2026

Our Way of Working

Energy & Environmental Management Systems

LMETB are following exemplar energy management practices assessed yearly through SEAI partnership.

Energy management programmes are being implemented in offices, schools and FET buildings, to reduce energy consumption and achieve Energy Efficiency targets. Energy in Education courses were offered to school and FET staff to support green teams in schools and FET centres to support good energy management, minimise energy costs, and meet legal requirements.

To further inform energy management practices, LMETB has completed audits to cover 85% of energy use across the portfolio as per the requirements of SI426:2014. LMETB is also pursuing energy audits for the remaining buildings. The information from these reports is used to highlight strengths in energy practices, identify weaknesses in energy systems, address threats to climate and energy goals, and optimise opportunities to improve buildings and practices.

LMETB will roll out Energy in Education Environmental management assessments in all schools and FET centres, supported by the green teams in schools and FET Centres and the Energy in Education Training offered to staff.

LMETB is committed to establishing an Energy Management System in line with ISO50001:2018

Digitisation of Processes

LMETB has implemented a policy as of May 2024 that 100% of paper procured and used in LMETB must be 100% Recycled. Staff were notified of this policy at its rollout and have been offered online training through the Office of Government Procurement information sessions on the "Supply of Multi-Purpose Office Paper for Printing and Photocopying Information Session.

This training promotes sustainability and benefit to users on the use of recycled paper and paper usage.

LMETB also promotes the usage of digital signatures whenever possible as well as issuing soft copies to reduce our paper consumption.

LMETB will continue to review digitising our processes to reduce paper usage across the organisation.

Green Public Procurement

While public procurement plays a vital role in ensuring public services can be delivered, LMETB procurement officers consider along with other members of the evaluation team how to avoid unnecessary purchases, how demand can be met in a way that requires few or better value goods to be bought, reusing furniture/equipment or sharing materials for events/meetings. LMETB strives to ensure that goods and services purchased are fit for purpose and build flexibility in contracts and frameworks so that the nature and volume of supply reflects changing needs.

LMETB Procurement Department are committed in supporting and developing Green Public Procurement as this is a vital role in Ireland's move to a greener economy. The LMETB

Procurement departments GPP measures include:

- GPP Procurement Staff Training
- Monitor waste management contracts in terms of current regulations.
- Propose to incorporate GPP procedures/guidelines within our Procurement Procedures document. This document is currently being reviewed nationally and we envisage implementation of same by Q4 2024.
- Where operationally feasible the Procurement Department will procure vehicles that meet CAP23 target for purchase of zero emission vehicles, as well as the minimum targets set out by SI381/2021 Clean Vehicles Directive.
- Consider relevant GPP actions at each stage of the tender process
- Public sector procurement contracts for delivery and haulage should specify zero emissions vehicles where possible.

LMETB are currently designing a process to measure environmental and climate benefits of green procurement for future reporting in Climate Action Roadmaps. While public procurement plays a vital role in ensuring public services can be delivered, LMETB procurement officers consider along with other members of the evaluation team how to avoid unnecessary purchases, how demand can be met in a way that requires few or better value goods to be bought, reusing furniture/equipment or sharing materials for events/meetings. LMETB strives to ensure that goods and services purchased are fit for purpose and build flexibility in contracts and frameworks so that the nature and volume of supply reflects changing needs.

LMETB has implemented green public procurement policies in line with the EPA Green Public Procurement guidance and criteria.

LMETB utilises the Office of Government Procurement's (OGP) online Green Public Procurement Criteria Search tool for centrally established contracts for goods and services. These competitions administered by OGP are run in line with the EPA Green Public Procurement Guidance. LMETB procurement competitions comply fully with all relevant Government policies and circulars in respect of embedding green requirements in their public procurement competitions in line with the EPA Green Public Procurement Guidance.

LMETB's Procurement Department work to promote a sustainable approach to procurement activities in terms of environmental concerns. The Procurement Department currently incorporate environmental sustainability in Procurement competitions using the following methods:

- Most Economically Advantageous Tender – incorporate award criteria with regards to GPP. The appropriate scope and weighting for this criterion will vary depending on the nature of the tender and consideration is given to determine the appropriate weighting.
- Selection Criteria – tenderers must confirm the operation of an appropriate environmental management system.
- Specifications – include requirements within the specification that will reduce environmental impact.

All procurement for goods and services undertaken by LMETB include a green criteria award criterion.

Tenderers must clearly and comprehensively demonstrate how they will ensure sustainability in the provision of services. This may include but not limited to the following:

- Demonstrate the energy efficiency measures and energy savings your organisation proposes to implement over the duration of the contract.
- Demonstrate how the organization proposes to manage recycling, packaging, transportation, waste and end of life products. Include details such as, membership of REPAK or equivalent and WEEE (Waste Electrical and Electronic Equipment) or equivalent, to reduce environmental impact.
- Specifying low carbon construction methods and low carbon cement material as far as practicable for directly procured or supported construction projects from 2023.
- Specifying where delivery or haulage is required zero emissions vehicles should be used where possible

Tenderers are required to meet minimum score for this criterion and marks are awarded based on response received.

LMETB have and will continue to reference the GPP search engine which assists with GPP criteria covering the following ten priority sectors:

LMETB's Procurement Policy currently includes requirements such as:

- Energy Supply contracts should be from providers that offer guarantees of origin for renewable energy, ideally 100% renewable energy sources
- Minimum performance requirements for purchasing of energy using products such as lighting, electric ovens, air conditioning units, refrigeration appliances, dishwashers, washing machines, washer dryers, televisions, IT appliances, etc.

LMETB are currently reviewing its procurement approach to include scoring weight for contracts that not only identify specifications that will reduce environmental impact, but can calculate the environmental or climate benefits achieved, including but not limited to:

- Reduced emissions
- Local sourcing
- Reuse of materials

Low Carbon Construction Methods

LMETB requires low-carbon construction methods and low-carbon cement material for directly procured or supported construction projects and have established guidance for these methods and evaluating feasibility of new low-carbon construction methods.

Requirements include sustainable materials and technologies such as:

- EPA criteria for construction related materials: National by-product criteria for site-won asphalt and National end-of-waste criteria for recycled aggregates
- Sourcing legal timber, with a preference for local and/or FSC timber
- Installation and commissioning of Building Energy Systems in all new projects
- Environmental Product Declaration requirements in selection of fit outs and finishes
- Minimum Energy Performance Certificate requirements in fit-out appliances

To further reduce environmental impact, LMETB is establishing guidelines for the prevention and management of construction and demolition wastes and resources from the design stage and through to construction and deconstruction with the support of our EED consultant. Additional construction waste is prevented by prioritising the use of secondary materials where feasible in the construction process by utilising the circular economy regulatory mechanisms for by products and end-of-waste.

LMETB are investigating training opportunities for design teams, procurement teams, and other relevant staff in construction projects to ensure future construction projects include thoughtful design, products specification, and project carbon, which will inform policies and best practice guidance to minimise embodied carbon in the LMETB portfolio.

Resource Use

Food Waste Management

- LMETB will require new and renewing food and canteen contracts to measure food waste, which must be reported to the corresponding school, FET centre, or office. Measurement and reporting guidelines are currently in development for these contracts and food waste will be included in reporting by December 2025.
- All new and renewing food and canteen service providers are required to sign up to the Food Waste Charter as part of the procurement process to facilitate the reduction of food waste
- Support National Stop Food Waste day on 1st March to reduce waste and our carbon footprint
- Share Stop Food Waste resources with relevant staff

Paper

- From May 2024, LMETB exclusively procures recycled office paper and photocopying per the Public Sector Climate Action Mandate and the Green Public Procurement Strategy and Action Plan for 2024 2027.
- LMETB will track paper consumption and volume of confidential shredding to monitor the success of paper diversion practices in LMETB processes.

Water

- LMETB will monitor water consumption across FET Centres, schools, and offices.
- LMETB are establishing a roadmap to install at least one water refill point that includes measurements for diverted bottle waste.

Single-Use Items

- LMETB have ceased using disposable cups, plates, and cutlery as of December 2022
- LMETB are currently evaluating their processes and procurement to identify any other single-use items and create guidelines on what should be procure instead with this review to be completed in Q1 2025.

Waste Reduction

- LMETB implemented a waste management system initiative to ensure that all LMETB offices, schools, and FET centres have a waste management procedure in place.
- LMETB will establish a plan to track waste generation. This will include regular review of waste tonnages at each site, 100% landfill diversion, and identification of opportunities to improve recycling percentages.
- All LMETB facilities will implement guidelines for the removal of ERP waste.

Our Vehicles

Transport is the largest source of energy consumption in Ireland. LMETB is an education and training provider therefore have very few owned vehicles. LMETB are committed to only procure zero emissions vehicles in line with Climate Action Plan requirements where feasible.

LMETB report on annual data on business travel that occurs for the years 2021 onwards. SEAI use this data to calculate the greenhouse gas (GHG) emissions arising from business travel. Emissions associated with business travel comprised 1.5% of our 2023 emissions. LMETB did incur business travel in 2024 and will endeavour to offset these emissions in line with Circular 1/2020 by February 28th 2025.

LMETB is committed to promoting car alternatives to reduce our scope 3 emissions through our support of Shared Mobility, Bicycles, and Electric Vehicle Infrastructure.

We are committed to active and sustainable travel for our workforce, students, and visitors and are pursuing the Smarter Travel Mark certification. LMETB is currently evaluating the system and will set a target for achieving the certification.

LMETB are currently developing a program for installing bike shelters where appropriate across the portfolio. LMETB continues to promote the uptake of the Bike to Work Scheme and Annual Tax Saver Scheme to promote low or no carbon modes of transportation.

LMETB are developing a program for installing EV Chargers where appropriate across the folder. For any new construction or significant refurbishment projects with more than ten parking spaces, EV chargers will be installed.

Our Buildings

LMETB will:

- Use less energy derived from fossil fuels and we have updated our policies on procurement and design with requirements for no new fossil fuel heating after 2023 in new builds or major renovation projects
- Achieve the buildings and retrofitting targets laid out in the Climate Action Mandate.
- Continue to avail of the expertise of our appointed SEAI PSM (Partnership Support Manager) to identify areas that are most beneficial in LMETB's progression to environmental sustainability.
- Progress recommended improvements from SI426:2014 audits as funding allows
- Procure Display Energy Certificates (DECs) for every building greater than 250 m2 to ensure all certificates are up to date and in good standing
- From 1st January 2028, all new buildings constructed by LMETB will be Zero Emission Buildings in line with regulations

LMETB has a portfolio of properties owned, leased and licensed collated in a property register which has been uploaded to the SEAI Building Register. These property registers are being used to update our Building Stock Plan.

LMETB is currently reviewing its program to address our carbon emissions and energy efficiency gap to target. These projects and the associated reductions in emission and energy intensity are quantified in the Monitoring and Reporting tool, and additional reviews are underway to address the remaining gap to target. The projects take place across a various portfolio of locations and project readiness and therefore delivery will be on a phased basis. There are projects in the pipeline where energy savings have not yet been quantified. These projects will be added to the decarbonisation model once the necessary data has been generated. As energy efficiency is a key lever for decarbonisation, the decarbonisation model also includes emissions reductions from energy efficiency projects, such as LED lighting retrofits.

Summary of Register of Opportunities & Initiatives for Schools and FET Centres

A sample of opportunities to impact our energy efficiency and reduce fossil fuel usage identified on foot of SI426 Energy Audits is set out below:

- 30 no. smart metering and submetering installations for all major energy using equipment such as boilers, hot water immersion, undersink water heaters, specialty classrooms and classrooms. This level of monitoring will be used to identify services running out of hours to reduce energy waste.
- 11 no. building fabric upgrade works to improve thermal retention and reduce heat loss. The works include upgrading wall and ceiling insulation and remedying draughty doors.
- 30 no. upgrades to building control systems across the portfolio to allow for improved controls on building systems, with an emphasis on automation for lighting and providing remote controls for buildings without centralised services, eg undersink water heaters instead of central DHW through a boiler, or storage heaters instead of a centralized LPHW radiator system with a time clock.
- 22 no. Airtightness test and thermal imaging to identify opportunities to improve building fabric

- Replacement of electric storage heaters with VRF type systems to decarbonize heating systems and improve energy efficiency in fully electric buildings that cannot support heat pumps without significant building works
- 12 no. Heat pump replacements for natural gas or inefficient electric hot water solutions to reduce fossil fuel consumption
- 19 no. lighting upgrade works to move from defunct fluorescent lighting to energy-efficient LEDs, complete with presence detection to ensure lights are not left on out of hours
- 22 no. Solar PV installations to reduce grid electricity demand
- 1 no. ventilation system upgrade to reduce energy waste
- 17 no. window upgrades to improve single-glazed or older, less efficient double-glazed windows to improve thermal performance

Current Projects which will impact our energy and fossil fuel consumption include:

- New Dunboyne College of the Future
- New Administrative Head Office, Drogheda
- Five New Schools
- Six Major Devolved Permanent School Extension Projects
- Eleven Additional Accommodation Schemes and Special Needs Units
- Three Emergency Works Projects
- Three Summer Works Projects
- Two SOLAS Strategic Infrastructure Upgrade Fund Projects
- New Training Centre & Electrical Vehicle Satellite Centre
- Coláiste Pobail Ráth Chairn - REPowerEU Thermal Upgrade


AMT
CE
Ionad Oiliúna
Barr Feabhais
Ard-Déantúsaíochta
Advanced
Manufacturing Training
Centre of Excellence

Next Actions

Staff Training Plans

Activity	Objectives	Targeted Roles	Resources & Inputs
Energy Link Online Training	Climate Action & Sustainability training	All Staff	Free
Green Public Procurement Training	Provide learning and development strategies on GPP for staff in line with Climate Action Plan Guidance	Procurement Staff	Sustainable Enterprise Skillnet
Water Stewardship Training	Empower Staff to support strong water stewardship practices in schools	All Staff	Uisce Éireann
Sustainable Resource Use	Education on curbing resource use to minimise environmental impact	Green Teams	Sustainable Enterprise Skillnet & Energy Link
Low Carbon Construction Methods Training	Learn about thoughtful design, product specification, and project carbon to reduce embodied carbon in construction and renovation projects	Capital Department	
Green Awareness	Promote Green Awareness through information campaigns	All Staff	Various
Energy Management Training	Promote energy management practices to monitor and reduce usage	Available to all school and centre staff	SEAI
Energy in Education Environmental Management Training	Educate school and FET Centre Green Teams on completing the Energy in Education Energy Management Assessment	Green Teams	SEAI
Energy MAP Training	Understand how to perform an Energy MAP diagnostic and develop and Energy Management System	LMETB Green Team	SEAI
Climate Action Leadership Training Course	Understand climate fundamentals, the climate challenge and leadership and public sector responsibilities	All LMETB Senior Management Personnel (PO level or equivalent and above)	IPA

Energy & Efficiency Improvement Works

FET Training Centres Year 1	Status	Energy type	Implementation Year
Complete SI426 Audits on Remaining FET Centres	Complete energy audits in buildings with a total useful floor area of more than 500m2.	All Staff	2025
Owned FET Centres – Update floor plans of buildings where required and review utilised space to ensure energy is not wasted in unused space	Engage an energy monitoring service provider to support identification of energy blackspots and development of data-driven emissions reduction plans.	Multiple	2025
Owned FET Centres – Upgrade fixed pumps to variable speed pumps as required	Replace any inefficient low pressure hot water (LPHW) pumps. - New pumps to be variable speed with differential pressure sensor	Multiple	2025
Owned FET Centres – Upgrade all internal T8, T5, and CFL lamps to energy efficient LEDs, include absence detection in classrooms and presence detection in circulation areas.	Upgrade internal and external lighting to LED type throughout with presence/ absence and daylight controls.	Electricity	2025
Owned FET Centres – Add time-switch controls to all water heaters	Time-switch control on water heaters and Burco boilers.	Multiple	2025
Railway St. Navan – Install time and temperature zone control for space heating	Install Building Management Systems (BMS)/Building Automation and Control Systems (BACS).	Oil	2025
Youthreach Trim – Sub-metering	Engage an energy monitoring service provider to support identification of energy blackspots and development of data-driven emissions reduction plans.	Electricity	2025
Energy in Education Environmental Management Training	Educate school and FET Centre Green Teams on completing the Energy in Education Energy Management Assessment.	Green Teams	2025
Railway St. Navan – Install electrical and gas sub metering for Significant energy users	Engage an energy monitoring service provider to support identification of energy blackspots and development of data-driven emissions reduction plans.	Multiple	2025
DIFE – Check meters installation for the 3 Boiler Rooms	Engage an energy monitoring service provider to support identification of energy blackspots and development of data-driven emissions reduction plans.	Multiple	2025
FET King St – Install electrical and gas sub metering for Significant energy users, i.e. Boiler Rooms, ICT, connecting to an upgraded BMS.	Engage an energy monitoring service provider to support identification of energy blackspots and development of data-driven emissions reduction plans.	Multiple	2025
FET King St – Installation of smart metering & BMS data loggers for in-depth monitoring of energy consumption in the centre	Engage an energy monitoring service provider to support identification of energy blackspots and development of data-driven emissions reduction plans.	Multiple	2025
RSTC Dundalk – Upgrade of roller shutter doors	Roller shutter door replacement in workshops facilities to improve airtightness and thermal performance.	Multiple	2025
RSTC Dundalk – Install electrical and gas sub-metering for Significant energy users	Engage an energy monitoring service provider to support identification of energy blackspots and development of data-driven emissions reduction plans.	Other	2025

Energy & Efficiency Improvement Works

FET Training Centres Year 1 (continued)	Status	Energy type	Implementation Year
AMTCE – Increase submetering in building and link existing and new submeters to the BMS	Engage an energy monitoring service provider to support identification of energy blackspots and development of data-driven emissions reduction plans.	Electricity	2025
Youthreach Trim – Install a kill switch in the computer room to eliminate standby losses	Standby consumption on computers is a huge consumer on energy. By installing kill switches on all computer rooms will eliminate standy losses in periods of downtime/holidays.	Electricity	2025
Youthreach Trim – Install Check meter on ESB Main Incomer	Engage an energy monitoring service provider to support identification of energy blackspots and development of data-driven emissions reduction plans.	Electricity	2025
VTOS Dundalk – Install Check meters	Engage an energy monitoring service provider to support identification of energy blackspots and development of data-driven emissions reduction plans.	Electricity	2025
Youthreach Trim – Install a kill switch in the computer room to eliminate standby losses	Standby consumption on computers is a huge consumer on energy. By installing kill switches on all computer rooms will eliminate standy losses in periods of downtime/holidays.	Electricity	2025
Head Office Dundalk – Replace boiler with Air to Air Heat Pump	Replace end-of-life fossil fuel heating systems with a bivalent heating system (air source heat pump with LPG boiler for peaking).	Electricity	2025

Energy & Efficiency Improvement Works - Schools Year 1	Status	Energy type	Implementation Year
Complete SI426 Audits and DEC's on remaining schools	Complete energy audits in buildings with a total useful floor area of more than 500m2.	Multiple	2025
Update floor plans of buildings where required and review utilised space to ensure energy is not wasted in unused space	Update floor plans of buildings where required and review utilised space to ensure energy is not wasted in unused space	Multiple	2025
Upgrade all internal T8, T5, and CFL lamps to energy efficient LEDs, include absence detection in classrooms and presence detection in circulation areas.	Upgrade internal and external lighting to LED type throughout with presence/ absence and daylight controls.	Multiple	2025
Add time-switch controls to all water heaters	Time-switch control on water heaters and Burco boilers.	Multiple	2025
BMS data loggers for in-depth monitoring of energy consumption in the school	Standby consumption on computers is a huge consumer on energy. By installing kill switches on all computer rooms will eliminate standy losses in periods of downtime/holidays.	Multiple	2025
Installation of Solar PV at 22 no. schools - 6 KWp array installation	Installation of a 6KWp PV solar array on the roof. Funding available under the Schools Photovoltaic Programme.	Electrical	2025
Coláiste Pobail, Rathcairn REPower EU Pathfinder Programme	Thermal upgrade to school	Electrical	2025

The above actions are proposed for Year 1 of this Roadmap. They have been selected following consideration of recommendations from SI426 Energy Audits. Funding for Green Devolved Capital Grant works is confirmed for three years. This will facilitate the completion of further works. Completion of SI426 Energy Audits in the remaining building in LMETB's portfolio will assist in the selection of future projects.

Conclusion

This Climate Action Roadmap sets out how LMETB plans to achieve its sustainability targets. These plans incorporate investment in LMETB's premises, staff training, development of processes and procedures and engaging with funders and other stakeholders.

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Bord Oideachais agus Oiliúna Lú agus na Mí
Louth and Meath Education and Training Board

Climate Action Roadmap