



comhairle chontae na mí
meath county council



MEATH COUNTY COUNCIL

Climate Action Plan 2024 - 2029



THE GLOBAL GOALS

13 CLIMATE ACTION



This Climate Action Plan has been prepared by the Meath County Council's Climate Action Section, in partnership with the Eastern & Midlands CARO, Meath County Council's Climate Action, Environment and Emergency Services Strategic Policy Committee and the Elected Members of Meath County Council.

The Climate Action Plan was also prepared having regard to Local Authority Climate Action Plan Guidelines and Delivering Effective Climate Action 2030.



Strategic Environment Assessment (SEA) and Appropriate Assessment (AA):

The Climate Action Plan has been prepared in accordance with the requirements of the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations - as amended by the European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011 and Article 6 of the Habitats Directive 92/43/EEC.

The SEA and AA process, carried out in tandem with the preparation of the Climate Action Plan, has ensured integration and consideration of environmental issues throughout the Climate Action Plan preparation process.

The SEA Environmental Report and AA Screening and Natural Impact Report are available as separate documents, to be read in conjunction with this Climate Action Plan.

Foreword

I am delighted to present to you the Meath County Council Climate Action Plan for 2024 to 2029. This plan outlines our collective commitment to taking bold and transformative actions to address climate change and ensure a sustainable future for generations to come. We believe that by working together, we can achieve our ambitious targets and create a brighter, more resilient future for all.

Our plan involves engaging and inspiring our citizens, businesses, and partners to take an active role in climate action. We will provide innovative programmes and partnerships that empower our communities to lead the way in creating a more sustainable future.

As elected officials, we recognise our responsibility to review policies and budgets with climate in mind, ensuring that we create a secure and equitable future for everyone in our County. We know that addressing climate change is a shared responsibility, and we can all make a difference by changing the way we live, work and play.

Collaboration is critical as we face these challenges together. No one person or organisation can solve the climate crisis alone; it will take collective effort and unity. But let us not forget that climate action also brings opportunities for growth, innovation, and a better quality of life. By moving towards a low-carbon economy, we can unlock new doors for renewable energy, green technologies, and sustainable practices. This can lead us to a prosperous and just future that benefits us all.

I highly encourage you to take the time to review the Climate Action Plan and join us in this momentous effort to create a brighter, more sustainable future for County Meath. Together, let us embrace the challenges ahead with enthusiasm and determination. The journey may be difficult, but with the support of our community, we are committed to making it happen. Let us inspire, lead and act towards a future that we can all be proud of.



Cathaoirleach of County Meath
Cllr Tommy Reilly



The Climate Action Plan for 2024 to 2029 showcases Meath County Council's unwavering dedication to creating a better place to live, work and visit for everyone.

As an Organisation, we understand that leading by example is crucial, and we are prepared to meet the significant challenges that come with reducing our emissions by 51% and increasing our energy efficiency by 50% by 2030. But our commitment doesn't stop there. We are determined to create an environment that fosters behavioural change at a community level, through active travel infrastructure, social housing retrofitting and circular economy initiatives.

This plan isn't just about securing a better quality of life for the people of County Meath. Our focus is on taking action that will help us move towards a more sustainable future and pave the way towards achieving net-zero carbon emissions across the County by 2050. Our nine Decarbonising Zones provide a fair and equitable approach to reducing emissions, serving as test beds for various climate action initiatives. By sharing our experiences and applying climate-friendly practices throughout the County, we can create a more resilient, biodiverse, environmentally sustainable and climate-neutral economy that promotes healthier lifestyles and economic development.

Both businesses and individuals have a crucial role to play in mitigating the impacts of climate change. Businesses can reduce their environmental impact by implementing energy-efficient practices, investing in renewable energy, reducing waste and using sustainable materials. Individuals can also contribute by reducing energy and water consumption, using public transportation, reducing waste and recycling. By taking these actions, businesses and individuals can help create a more sustainable future. Moreover, the public can advocate for climate action by supporting the Council's policies and initiatives that promote sustainability and reduce emissions.

Together, we can make a positive impact and build a brighter, more sustainable future. The journey may be challenging, but with the support of the people of Meath, we are committed to making it happen.



Chief Executive, Meath County Council
Kieran Kehoe



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Acronyms

Acronyms	Full Form
BEI	Baseline Emissions Inventory
BER	Building Energy Rating
CAP	Climate Action Plan
CAROs	Climate Action Regional Offices
CCMA	County and City Management Association
CCRA	Climate Change Risk Assessment
CH ₄	Methane
CO ₂	Carbon dioxide
CO ₂ eq	Carbon dioxide equivalent
DZ	Decarbonisation Zone
EPA	Environmental Protection Agency
F-gases	Fluorinated gases
GAA	Gaelic Athletic Association
GHG	Greenhouse gases
IPCC	Intergovernmental Panel on Climate Change
kt	kilotonne
kWh	kilowatt hours
LA	Local Authority i.e., Meath County Council
LULUCF	Land Use, Land Use Change & Forestry
M&R	Monitoring & Reporting
MCC	Meath County Council
m ²	Square metre
N ₂ O	Nitrous oxide
PRTR	Pollutant Release and Transfer Register
RCP	Representative Concentration Pathways
SEAI	Sustainable Energy Authority of Ireland
t	tonne
UN SDGs	United Nations Sustainable Development Goals

1.0 Executive Summary

Our climate is changing in line with global trends, we are experiencing warmer temperatures with the past 8 years the hottest on record. As a result of higher average temperatures, we are also experiencing more intense weather events including droughts, heatwaves, windstorms and flooding resulting in higher vulnerability and risk to the impacts of climate change within the local authority area.

Meath County Council has prepared this Climate Action Plan 2024-2029, to create a low carbon and climate resilient County, by delivering and promoting best practice in climate action, at the local level.

This is aligned to the Government's overall National Climate Objective, which seeks to pursue and achieve, by no later than the end of 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy. The Climate Action and Low Carbon Development (Amendment) Act 2021 frames Ireland's legally binding climate ambition to deliver a reduction in greenhouse gas emissions of 51% by 2030. This will place the Country on a trajectory to achieving climate neutrality by the end of 2050, to be delivered through a series of National Climate Action Plans.

As part of the development of this Climate Action Plan, Meath County Council has undertaken a Climate Change Risk Assessment and prepared a Baseline Emissions Inventory for the County and each of the nine Decarbonising Zones.

The Climate Change Risk Assessment has identified the impacts which climate change is currently having on the County and is likely to have into the future.

The Baseline Emission Inventories provide an estimate on greenhouse gas emissions for the Council's own activities, County Meath and for each of the nine Decarbonising Zones. These assessments have provided an evidence base for the development of place-based climate actions.

The targets of the Meath County Council Climate Action Plan are as follows:

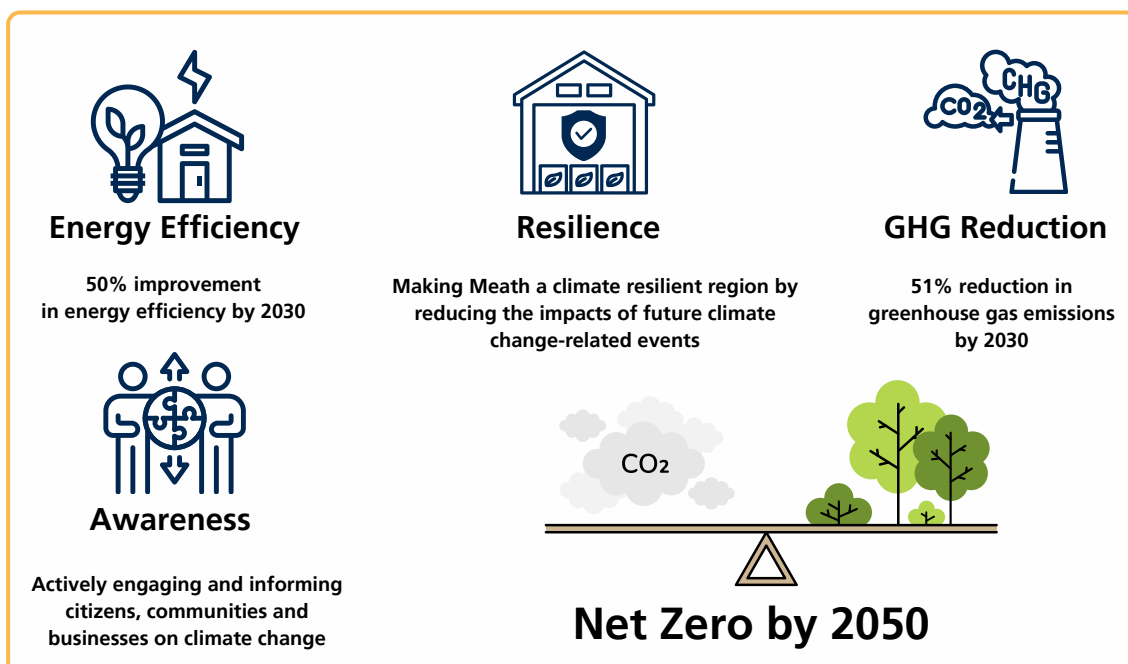


Figure 1: Meath County Council Climate Action Plan Targets

This Climate Action Plan includes a range of climate change mitigation actions aimed at reducing County-wide greenhouse gas emissions. It also includes climate adaptation actions aimed at improving the resilience of the County to the impacts of climate change. These actions include those for which the Council is fully accountable across its own buildings, operations, services, and functions; and actions for which the Council can influence, co-ordinate, facilitate and advocate for climate action.

Actions are divided across five thematic areas including:



Figure 2: Thematic areas

The actions have many additional benefits, including health and wellbeing, social, environmental, and economic benefits, which are identified throughout the Climate Action Plan.

Nine Decarbonising Zones have been identified to develop place-based and systems-thinking approaches to identify pathways that support the implementation of effective climate action measures and will act as test beds for a range of climate mitigation, adaptation, and biodiversity measures within specifically defined areas.

The Plan will be implemented across all Council Departments, co-ordinated by a dedicated Climate Action Section. The Council will also work collaboratively and in partnership with a range of key external stakeholders, citizens, and communities to support the delivery of this Climate Action Plan. The Climate Action Section will support and monitor the implementation of actions and coordinate the reporting and evaluation of this Climate Action Plan.

Reports will be provided to the Climate Action, Environment and Emergency Services Strategic Policy Committee as required and Annual Progress Reports will be communicated via the Council's website. The Plan will be fully updated every five years.

Vision

Meath aims to be a climate resilient, biodiverse rich, environmentally sustainable and climate neutral economy that supports healthy lifestyles and jobs growth.

Mission

Meath County Council is committed to lead in translating the National Climate Policy into local actions through inclusive engagement, capacity building and leadership for the people of County Meath.

2.0 Introduction

2.1 Purpose of the Climate Action Plan

Meath County Council has prepared this Climate Action Plan, to create a low carbon and climate resilient County, by delivering and promoting best practice in climate action, at the local level.

This Climate Action Plan is aligned to the Government's overall National Climate Objective, which seeks to pursue and achieve, by no later than the end of 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy. This is also set out in the Climate Action and Low Carbon Development (Amendment) Act 2021, which frames Ireland's legally binding climate ambition, to delivering a reduction in greenhouse gas emissions of 51% by 2030, placing the Country on a trajectory to achieving climate neutrality by the end of 2050. In preparing the Climate Action Plan, the Council has also taken account of other relevant climate legislation, Policies, and plans, a climate change risk assessment and a climate mitigation baseline assessment, at a County scale, which are included as part of this Climate Action Plan.

The Climate Action and Low Carbon Development (Amendment) Act 2021 specifically requires all local authorities in Ireland to prepare and make a Climate Action Plan, in consideration of wider national climate and energy targets, addressing both mitigation and adaptation measures.

- **Mitigation** relates to changing how we live, move, consume and manufacture, so as to reduce and/or eliminate the production of harmful greenhouse gases, it also includes how best we use our land;
- **Adaptation** refers to dealing with the impacts of climate change and involves taking practical actions to manage risks, protect communities and strengthen the resilience of the economy (e.g. from flooding, sea level rise etc).

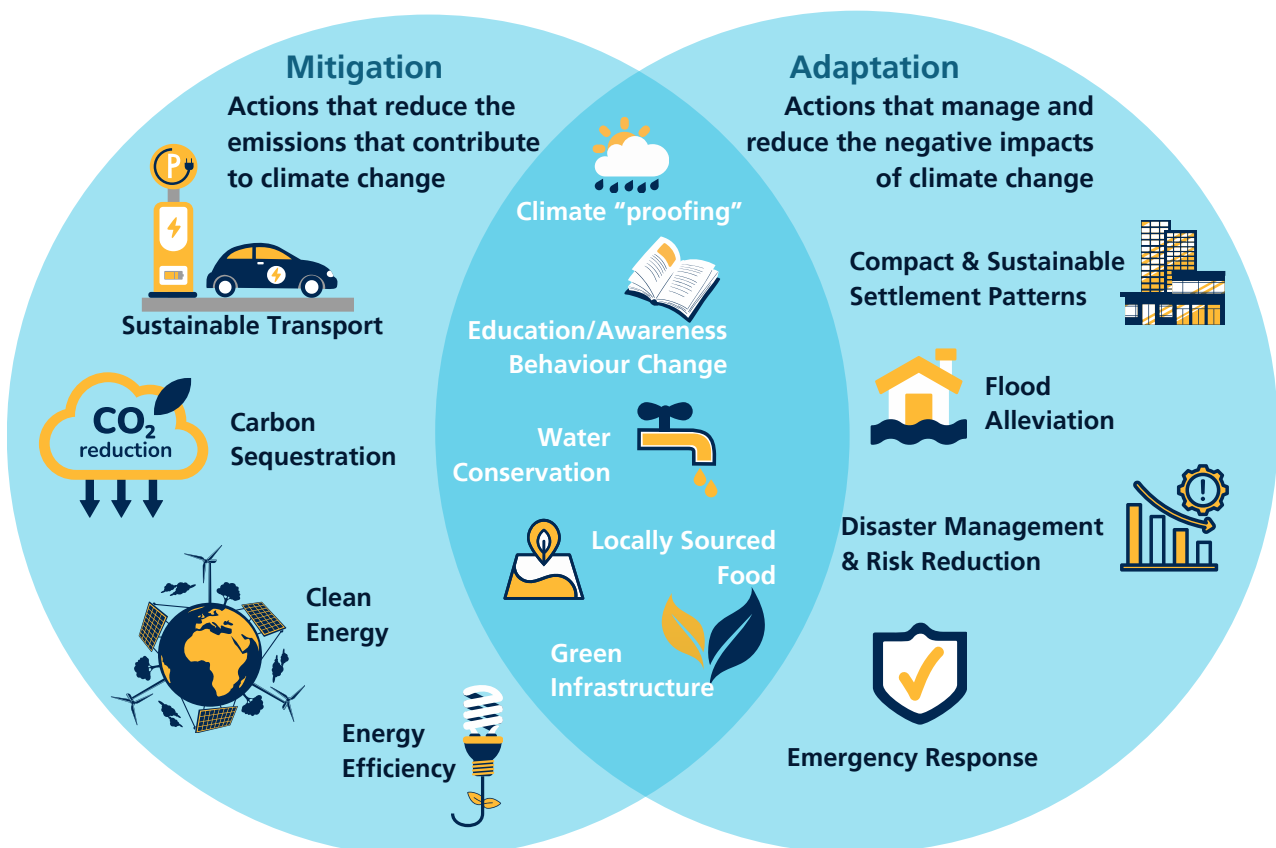


Figure 3: Climate Action Mitigation and Adaptation Measures.

This Climate Action Plan sets a clear pathway for County Meath to:

- actively translate National Climate Policy to local circumstances with the prioritisation and acceleration of evidence-based measures;
- assist in the delivery of the climate neutrality objective at a local and community level; and
- identify and deliver Decarbonising Zones (DZs) within County Meath's Administrative Area to act as test beds for a range of climate mitigation, adaptation and biodiversity measures in a specifically defined area, through the identification of projects and outcomes that will assist in the delivery of the National Climate Objective.

Meath County Council maintains a strong commitment to mainstreaming climate action across the Council's own operations and functions, whilst also pursuing a leadership role on climate action, at the local level. The Climate Action Plan demonstrates a coherent approach to climate action across the administrative and political structure of the local authority. The Climate Action Plan is subject to approval by the Elected Members of Meath County Council, following public consultation and engagement.

The Climate Action Plan sets out how Meath County Council will be responsible for enhancing climate resilience, increasing energy efficiency, and reducing greenhouse gas emissions, across its own assets, services and infrastructure, to which it is fully accountable for, whilst also demonstrating a broader role of influencing, advocating and facilitating other sectors, to meet these climate targets and ambitions. This is necessary to ensure that the environmental, social, and economic benefits that come with climate action, can be fully realised. The Council will also continue its efforts in rolling out ambitious climate action projects, drawing down available sources of funding, pursuing citizen and stakeholder engagement, all supported by a progressive policy framework.

In a changing climate, the aim is to become more resilient to all future possibilities, allowing local communities to thrive and work towards real solutions that are meaningful, inclusive, fair and accessible for all. Meath County Council has launched the Climate Action Fund Strand 1 - Building Low Carbon Communities, this fund supports local groups to build low carbon communities.

A range of other plans, including the Council's Corporate Plan, the Meath County Development Plan 2021 – 2027 and Local Area Plans also support this Plan. In addition, the development of this plan has had due regard to existing climate policy within the County including the Climate Action Charter and the Climate Action Strategy 2019.

2.1.1 Structure of the Climate Action Plan

This Climate Action Plan has been prepared in accordance with the Local Authority Climate Action Plan Guidelines, published by the Department of the Environment, Climate and Communications in March 2023. In preparing this Climate Action Plan, Meath County Council has conducted a climate change risk assessment and compiled a baseline emissions inventory assessments at a County and Decarbonising Zone scale.

This Climate Action Plan provides a mechanism for bringing together both adaptation and mitigation actions to help drive positive climate action and outcomes across Meath County Council and the Administrative Area. The framework of climate actions set within the plan, configures the arrangement of climate actions within a defined structure that ensures alignment between on the ground actions and the high-level vision that the plan aspires to deliver.

The Climate Action Plan is set out in seven key sections:

1. Executive Summary
2. Introduction
3. Overview of Climate Change Legislation and Policy
4. Evidence Baseline
5. Decarbonising Zones (DZ)
6. Climate Action
7. Reporting

Accompany Information

This plan is informed and supported by a robust evidence base with the most up-to-date scientific information, data on emissions, grounded risk and vulnerability assessments and environmental assessments, to help shape and inform the actions. Accompanying this Climate Action Plan are three annexes providing distinct elements of the evidence base and environmental assessments that have informed the plan:

Annex 1 Climate Change Risk Assessment (CCRA)

Annex 2 Baseline Emissions Inventory (BEI)

Annex 3 Strategic Environmental Assessment (SEA) and Natura Impact Report (AA)



2.2 Opportunities of Climate Action

Implementation of the Climate Action Plan for County Meath will require new investments that provide multiple co-benefits, such as improved wellbeing and quality of life, and potentially new business and job opportunities.

Many of the proposed actions not only reduce greenhouse gas emissions and increase climate resiliency, they also synergistically support other Meath County Council objectives, such as improved economic development, service delivery and social inclusion. The Climate Action Plan also supports the efficient and effective use of available resources to provide a quality service, whilst ensuring value for money and the provision of clear, effective, democratic, and civic leadership.

Maximising the co-benefits and opportunities of climate action can be accomplished in tandem with the effective implementation of the Climate Action Plan. The first step to empowering communities is to understand the co-benefits and opportunities most important to them and use this information to directly influence the development and implementation of the Climate Action Plan. Each of the strategic goals contained within this plan set out co-benefits that can also be achieved in addition to a reduction in greenhouse gas emissions and increase climate resiliency.



Figure 4: Co-benefits of Climate Action

2.3 Meath County Council Climate Action Planning

This Climate Action Plan strengthens the links between local and National Climate Policy and the delivery of effective climate action at local and community levels, through place-based climate action. Over its preparation and implementation, this Plan offers an opportunity to bring together critical stakeholders across communities and businesses to build a vision for a climate neutral future.

Several cross-cutting considerations and guiding principles were incorporated into the development of objectives and actions that comprise the Climate Action Plan.

Ambitious	Main-streamed	Evidence-based	Action-focused
Reflect and realise the role of Meath County Council on climate action the delivery of the National Climate Objective.	Meath County Council decisions are climate proofed, and opportunities are identified to address climate change across the Council's operations and services.	Actions are informed by up-to-date scientific information, emissions and climate risk data, local knowledge, and empirical evidence to inform decision making process.	Actions achieve mitigation and adaptation objectives and reflect Meath County Council's responsibilities at organisational and community level.
Participative	Transparent	Supportive	Just
Inclusion, co-ordination, and collaboration throughout the climate action process that involves a diverse range of stakeholders.	Inclusive and collaborative engagement on the climate action process that supports monitoring and reporting.	Communities are communicated with, supported, and incentivised to engage in climate actions.	A "just transition" is at the heart of the climate action process and is inclusive of everyone.

Table 1: Cross-cutting considerations and guiding principles

As part of embedding effective climate action, Meath County Council are guided by the UN Sustainable Development Goals (SDGs) to inspire on a climate. All 17 Sustainable Development Goals of Agenda 2030 can be related to the impacts and opportunities of climate change, particularly relevant is SDG 13 (Climate Action).

The interdependencies between the SDGs and Climate Action Plan will deliver transformative and measurable change, enabling and inspiring actions on mitigation and adaptation. All actions proposed in Section 6.0 of this Plan are linked to these SDGs.



Achieve a just transition particularly for communities that may be economically disadvantaged by decarbonising projects.



Support agricultural productivity and sustainable food production systems initiatives.



Promote the co-benefits of climate action for improved health and well-being.



Increase knowledge and awareness of climate change related issues and responses.



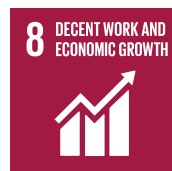
Ensure equality in the delivery of climate related awareness initiatives.



Support the achievement of universal and equitable access to safe drinking water for all.



Lead and enable the transition to Net Zero across County Meath.



Mobilise economic opportunities and support transition to an inclusive, net zero and circular economy.



Build resilient infrastructure, promote inclusive and sustainable economic activities and foster innovation.



Ensure equality in the delivery of climate action within MCC's areas of remit.



Support initiatives and services to make Meath an inclusive, safe, resilient and sustainable County.



Enable the transition to a green circular economy with sustainable consumption and production patterns.



Lead, enable and inspire a climate resilient, biodiverse rich, environmentally sustainable and carbon neutral economy for County Meath.



Support the sustainable management and protection of rivers, marine and coastal ecosystems to avoid significant impacts, including by strengthening their resilience.



Protect, restore and promote sustainable ecosystems and biodiversity.



Deliver on sustainable initiatives within MCC's areas of remit, while being accountable and inclusive at all levels.



Foster governance, leadership and partnerships for climate action through communication, engagement and participation.

Figure 5: Sustainable Development Goals linkage to Climate Action

2.4 Meath County Council Scope and Role on Climate Action

2.4.1 Meath County Council's Scope

Local authorities are key drivers in advancing climate policy at the local level. This Climate Action Plan will help to address, in an integrated way, the mitigation of greenhouse gas emissions, implement climate change adaptation measures, and strengthen the alignment between National Climate Policy and the delivery of effective local climate action.

Meath County Council will apply both an inward (organisational) and an outward (community) focus on building resilience to the negative impacts of climate change and in tackling the causes of climate change. Local authorities are responsible for approximately 1.1% of all public sector emissions. Meath County Council is accountable for and has authority over the management and reduction of its own emissions, in line with the 51% target prescribed to 2030 and the trajectory towards the goal of climate neutrality by 2050.

This Climate Action Plan also looks to the broader role of influencing and facilitating others to meet their targets. The figure below illustrates Meath County Council's sphere of influence with regards to climate action.

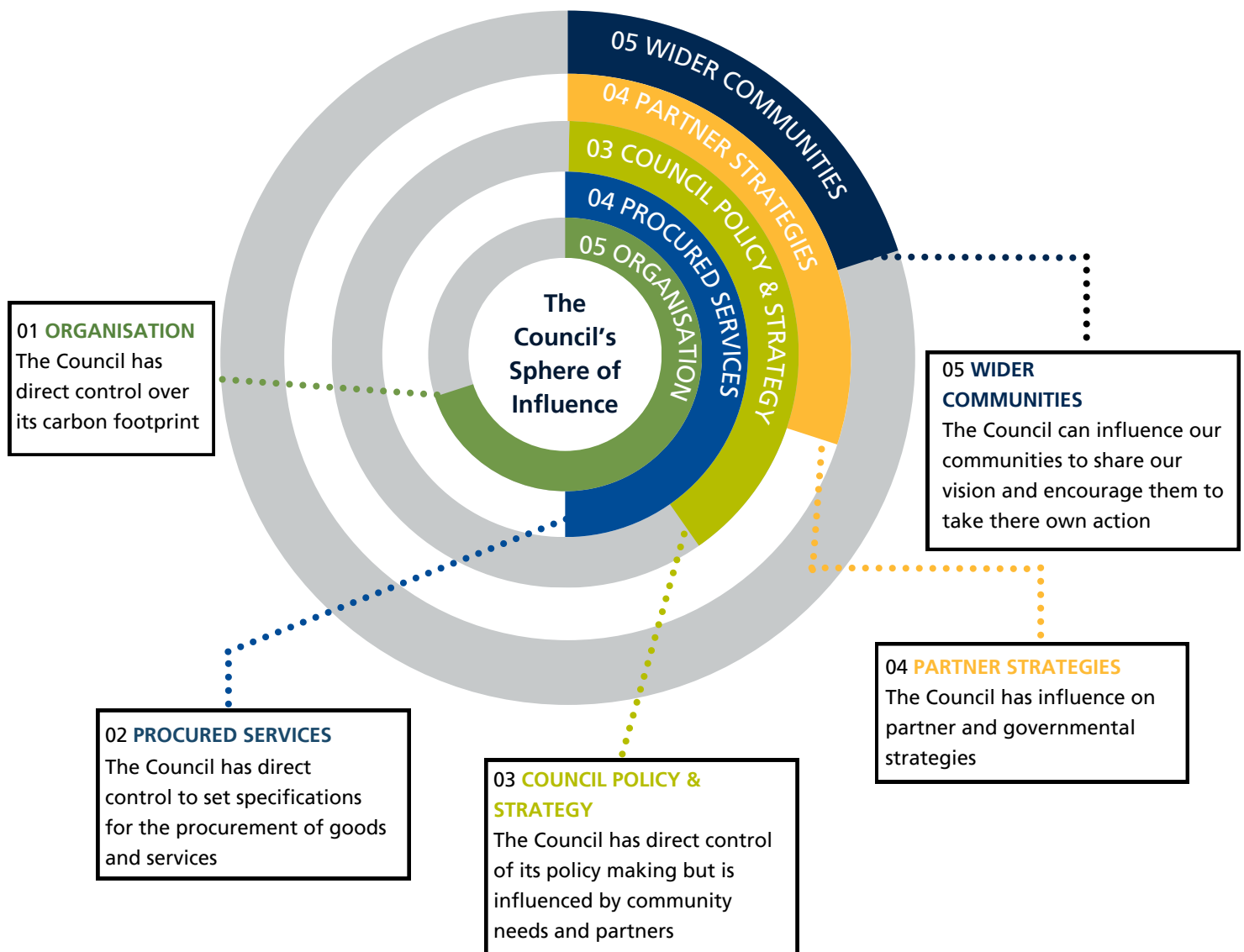


Figure 6: Meath County Council's sphere of influence with regards to climate action

2.4.2 Environmental Governance

Environmental governance plays a pivotal role in safeguarding our ecosystems and natural resources. Meath County Council will ensure that its policies, regulations, and decisions regarding the environment are made with sustainability in mind, balancing communities needs with the protection of the environment. Strategic Environmental Assessment (SEA) and Appropriate Assessment (AA) processes are important mechanisms to ensure that environmental protection and nature conservation management considerations are integrated into the development and implementation of the Climate Action Plan.

EU Strategic Environmental Assessment (SEA) Directive

The Local Authority Climate Action Plan is subject to compliance with the SEA Directive (Directive 2001/42/EC) on the assessment of the effects of certain plans and programmes on the environment. SEA is the process by which environmental considerations are required to be fully integrated into the preparation of plans and programmes developed by public authorities, prior to their adoption. SEA is the formal and systematic evaluation of the likely significant effects of implementing any plan or programme on the environment. The European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (S.I. No. 435 of 2004), as amended by S.I. No. 200 of 2011, gives effect to the transposition of the SEA Directive into Irish law.

For the purposes of compliance with the SEA Directive, each local authority as the 'competent authority' is required to carry out an environmental assessment of the likely significant effects on the environment of implementing the climate action plan in accordance with the provisions of the above-mentioned regulations.

The screening for the requirement for Appropriate Assessment (see below) has concluded that if unmitigated, the Plan has the potential for significant adverse effects on European sites and therefore a Stage 2 Appropriate Assessment (AA) is required. In accordance with Department Circular Letter SEA 1/08 & NPWS 1/08[1] where a plan screens in for the requirement for AA, a strategic environmental assessment (SEA) must also be carried out. Therefore, the Plan has been subject to SEA and to scoping with the prescribed Environmental Authorities.

An SEA Environmental Report accompanies this Climate Action Plan.

The finding of the SEA is that the Vision, Mission, Targets, Goals and Objectives of the Climate Action Plan 2024-2029 have overall positive effects on all aspects of the environment, most notably on human health, biodiversity, water, air quality and climate, as well as in terms of interaction between these environmental factors.

The Plan aligns with the Government's overall National Climate Objective, the Climate Action and Low Carbon Development (Amendment) Act 2021 and the Local Authority Climate Action Plan Guidelines, published by the Department of the Environment, Climate and Communications (March 2023). The Plan also takes account of other relevant climate legislation and policy, a climate change risk assessment and a climate mitigation baseline assessment at a County and decarbonising zone scale. Therefore, the Climate Action Plan is set within and addresses a broader context of International, EU, National and Sectoral Climate Policy.

The finding of the SEA is that, if unmitigated, a number of the specific actions of the Climate Action Plan 2024-2029 have potential – depending on the scope of the action – for uncertain or negative effects on aspects of the environment, most notably on biodiversity, water, climate, heritage and landscape. The SEA has identified measures for the mitigation and avoidance of any such potential uncertain or negative effects. The majority of these measures are achieved through the environmental protection policies and objectives of the Meath County Development Plan 2021-2027, as set out in the SEA Environmental Report.

Specific mitigation in relation to environmental impact assessment and appropriate assessment is also set out under the section on Project Level Environmental Governance below.

EU Habitats Directive-Appropriate Assessment

The Local Authority Climate Action Plan is subject to Appropriate Assessment under Article 6(3) of the EU Habitats Directive (Directive 92/43/EEC) to determine if its implementation is likely to have significant effects on any European sites which form the Natura 2000 Network. Local authorities, as the prescribed 'competent authorities', may only adopt the plan after having ascertained that it will not have a significant impact on the integrity of European sites on its own, or in combination with other plans or projects.

The Directive provides legal protection for habitats and species of European importance through the establishment of the Natura 2000 Network. The Natura 2000 Network includes sites designated as Special Areas of Conservation (SACs) under the Habitats Directive and Special Protection Areas (SPAs) designated under the EU Birds Directive (Directive 79/409/EEC, amended by Directive 2009/147/EC).

The Climate Action Plan 2024-2029 has been screened for Appropriate Assessment and it has been concluded that the plan:

- is not directly connected with or necessary to the management of any European site; and
- may, if unmitigated, have significant adverse effects on European sites.

Therefore, a Stage 2 AA is required for the plan and a Natura Impact Report (NIR) has been prepared and accompanies this Plan.

The NIR has identified that, if unmitigated, a number of the specific actions of the Climate Action Plan 2024-2029 have potential – depending on the scope of the action – for negative effects on European sites, most notably via water. The NIR has identified measures for the avoidance of any such potential negative effects – primarily through the protective policies and objectives of the Meath County Development Plan 2021-2027 as well as set out under the section on Project Level Environmental Governance below.

Project Level Environmental Governance

Any projects arising from goals, objectives and / or actions in this plan will be subject to screening for the requirement for an Environmental Impact Assessment (EIA) in accordance with Directive 2011/42/EU, as amended by Directive 2014/52/EU on the assessment of the effects of certain public and private projects on the environment, and if required, will be subject to the preparation of an Environmental Impact Assessment Report (EIAR).

Likewise, any projects arising from goals, objectives and / or actions in this plan will be subject to screening for the requirement for an Appropriate Assessment (AA) in accordance with Article 6(3) of Council Directive 92/43/EEC, and where likely adverse effects on the integrity of the European site(s) cannot be excluded, the project shall be subject to Appropriate Assessment. The competent authority shall agree to the project only after having ascertained that it will not adversely affect the integrity of the site concerned, and after having obtained the opinion of the public.

2.4.3 Meath County Council Climate Role

This Climate Action Plan specifies actions that Meath County Council will implement to meet its public sector commitments and contribute towards the National Climate Objective.

The Climate Action Plan adopts a three-pronged approach, illustrated below, by adopting an inward (organisational) and an outward (community) focus on building resilience to the negative impacts of climate change and in tackling the causes of climate change.



Figure 7: Meath County Council's Climate Role

While the Climate Action Plan will be ambitious to reflect the leadership role of local government on climate action, the Plan will not include actions whereby their implementation and achievement fall outside the role, remit, and governance of Meath County Council.

Lead	Enable	Inspire
<ul style="list-style-type: none"> • Deliver on climate action within Meath County Council's remit: including LA own assets, services and infrastructure. • Build resilience to the negative impacts of climate change, within our County, through the range of services and functions provided. 	<ul style="list-style-type: none"> • Enable, facilitate and support sectors, business, communities and individuals, in the delivery of local climate actions. • Co-ordinate efforts with all stakeholders e.g. Decarbonising Zones, communities and businesses on local climate actions. • Co-ordinate efforts with all stakeholders to maximise effects and creating interactions. 	<ul style="list-style-type: none"> • Increase awareness, communication and engage in open dialogues on climate related issues and responses.

Table 2: Meath County Council's Climate Role

2.5 Funding

To lead by example and drive the transition to a climate neutral society, The Council will need access to adequate funding for climate action projects towards achieving its 2030 targets. Local authorities can access various types of funding such as government grants, European funds, private sector investment and community co-financing. It is recognised that while new climate action targeted funding calls may become available in the future, already established funding bodies will introduce or increase the level of funding streams to climate action focused categories. The Council will continue to actively pursue new and existing funding opportunities from both European and National bodies that are aligned with its climate action objectives. Partnerships may lead to funding opportunities for climate action projects and initiatives.

Community Climate Action Fund

The Council will empower communities with the knowledge and resources to enhance their resilience and ability to adapt to climate change.

On February 3rd, 2023, the Minister for the Environment, Climate and Communications, launched the Climate Action Fund Strand 1 - Building Low Carbon Communities. This is a national fund of €24 million for local authorities across the country, to support and build low carbon communities. A further €3 million is being provided to support cross-border and all-island community climate action initiatives. This funding is part of the Community Climate Action Programme, which supports projects and initiatives that facilitates communities to take direct climate action and build capacity.

Strand 1 required the appointment of dedicated Community Climate Action Officers (CCAO) to guide and support communities from the very start. Meath County Council has recruited a CCAO to facilitate the communication and administration of this fund.

Community projects eligible for this funding must address one or all of the following five themes:



Clean energy transition and security



Improved Mobility



Circular economy



Climate awareness and capacity building



Resilience and infrastructure

Figure 8: Community Climate Action Fund Themes

2.6 Collaboration

As noted throughout this Climate Action Plan, the sources of greenhouse gas emissions under the direct control of Meath County Council accounts to 7.7 ktCO₂eq, representing less than one percent of county-wide emissions. While the Council will take the actions required to reduce these emissions, there is a clear need for engagement, collaboration, and partnership with a broad range of stakeholders from Government to community level, to deliver on climate action.

Meath County Council will continue to work collaboratively and in partnership with a range of key stakeholders to support the delivery of this plan. These partnerships can provide opportunities for collaboration on projects, shared learnings, technical support and leveraging of funding opportunities during the plan’s implementation.

Stakeholders		
<p>Citizens</p> <p>The key stakeholders for Meath County Council will be its citizens. In 2022 Meath had a population of 220,826 people. This population is distributed amongst urban and rural locations, with differing experiences of extreme weather, varying views on the potential impact of climate issues and fundamentally different resources with which they could potentially mitigate or adapt to any impacts. In the case of citizens with less resources to potentially adapt to the pressures of climate change, Meath County Council will support a just transition.</p>	<p>Local Communities</p> <p>Within County Meath, there are a variety of local clubs, organisations, and communities that Meath County Council could potentially influence through the provision of suitable and understandable information. Accessing its citizens through community groups like sports organisations, men's sheds, theatre groups etc. could provide Meath a group of advocates to further the transition agenda and to deliver sustainable communities.</p>	<p>Government Organisations</p> <p>Government organisations will be key to supporting Meath County Council in delivering its climate action plan targets.</p>
<p>Meath County Council</p> <p>County Council management, employees and Councillors are key stakeholders in driving the agenda within Council services and operations.</p>	<p>Businesses</p> <p>Businesses will play a key role in reducing emissions within Meath County and are potential agents of change. It is key that businesses within County Meath have the support required to understand how to potentially transition their own supply chains to meet the current and growing customer’s needs.</p>	<p>Capital providers</p> <p>Ireland's transition to low carbon economy would require a huge degree of change in terms of how energy is generated within the country and how efficiently it’s used. The cost of this change will be one of the biggest drivers of the economy in the coming years. Businesses within County Meath will need support understanding the requirements of capital providers so that they can give them the information they need to be able to get relevant and required funding.</p>

Table 3: Key Stakeholders

3.0 Overview of Climate Change Legislation and Policy

Climate change is increasingly understood to be the most critical, long-term global challenge of our time, its impacts continue to be felt both worldwide and at home. The Intergovernmental Panel on Climate Change (IPCC's) Working Group I Sixth Assessment Report, confirms overwhelming evidence that the climate has changed since the pre-industrial era and that human activities, through greenhouse gas emissions, are the principal cause of that change. It states the unequivocal cause of global warming has been human activities, with global surface temperatures reaching 1.1°C above 1850-1900, in the 2011-2020 period.

Ireland's climate echoes that statement. Figure 9 compares the global temperature rise since 1900 to Irish temperatures. Ireland is in line with the global temperature increases, following 2022, being a year of record-breaking extremes, in both temperature and precipitation (rainfall). Met Éireann stated that 2022 was 'the warmest year on record'. This would see Ireland's temperature above the long-term average for the 12th consecutive year. Furthermore, 2022 saw record breaking temperatures observed in Ireland during the summer, recording the second highest temperature ever recorded in Ireland at 33°C.

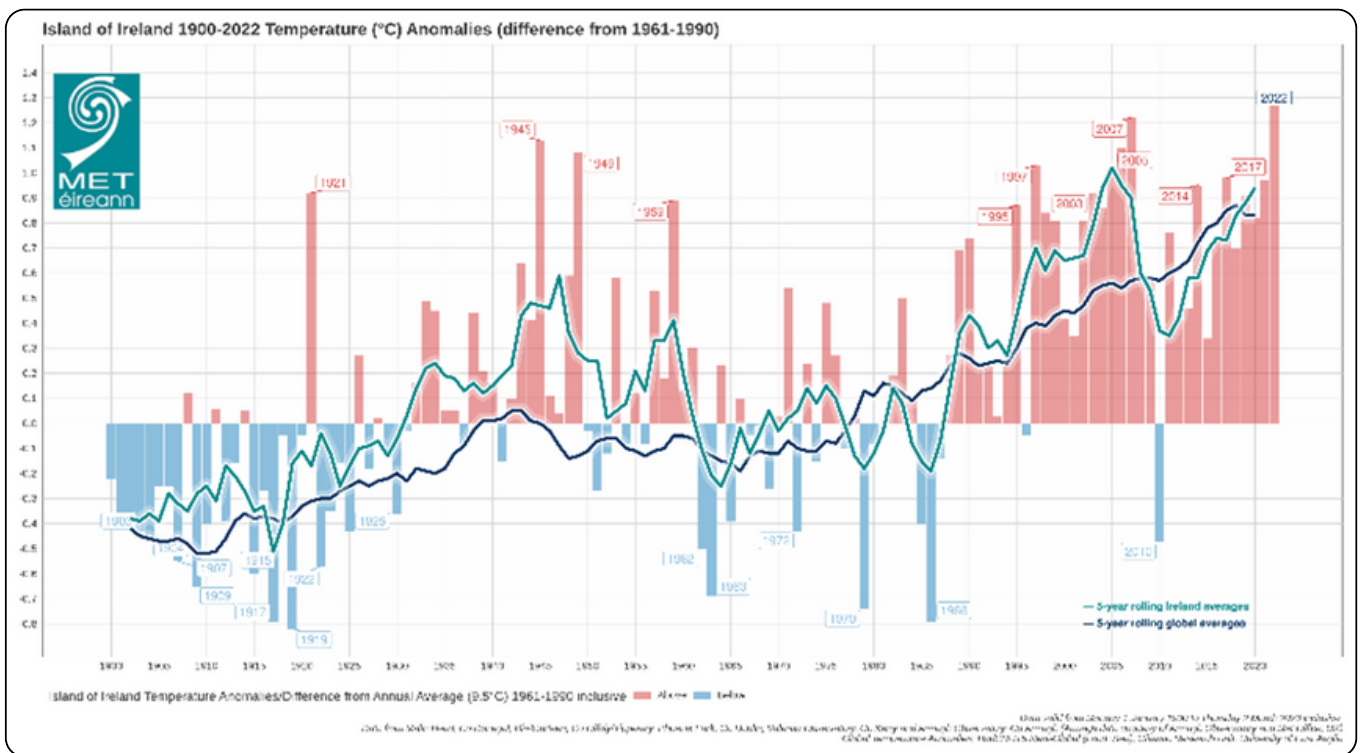


Figure 9: Island of Ireland 1900-2022 Temperature (°C) Anomalies (difference from 1961-1990) - (Source: Met Éireann)

This is reiterated in the precipitation observations from 2022, where rainfall was recorded at below the long-term average at most stations. There was variability in rainfall throughout 2022, with extremes being felt in each of the seasons, resulting in a drier Summer and Spring, and a wetter Autumn and Winter.

Global mean sea level increased by 20cm between 1901 and 2018. The trend in global mean sea level rise has been consistently rising since 1901. Ireland has so far seen a similar rise in sea level with an average of 2-3mm per year. A warming climate has caused a rise in sea level, through the loss of sea ice and thermal expansion (the increase in the volume of water due to heating) resulting from the warming ocean.

Ireland has suffered from adverse climate impacts already and recent extreme weather events have highlighted the vulnerability of individuals, businesses, communities, and infrastructure to climate change, emphasising the need for urgency on climate action across all of society.

For example, storms such as Arwen and Barra in 2021 most notably, left 59,000 homes and businesses without power (Climate Action Plan, 2023). The adverse impacts of climate change can often compound wider reaching social, environmental, and economic challenges. This can increase vulnerability and sensitivity to a changing climate and climate extremes.

Based on observed changes in climate and its impacts, Met Éireann, the Environmental Protection Agency (EPA) and other climate scientists, are able to make robust projections on future climate patterns in Ireland and globally. The EPA, Marine Institute and Met Éireann published The Status of Ireland's Climate Report in July 2021.

Future climate projections for Ireland may be summarised as follows:

- Climate projections indicate that the climate trends observed over the last century will continue and intensify over the coming decades;
- Temperatures are increasing and are expected to continue to increase and across all seasons;
- Significant reductions in levels of average precipitation (rainfall) are expected in Spring and Summer, whilst projections indicate the increased occurrence of extreme precipitation events, particularly during Winter;
- Projections show little change in average wind speed and direction. The frequency of extreme wind conditions is expected to increase, particularly during Winter;
- Based on current trends, Ireland will see an increase in sea level rise, similar to what has been experienced to date. Ireland is extremely vulnerable to sea level rise, due to its expansive coastline and the large number of the population that has settled on the coast;
- Increases in the frequency of fluvial (river) and pluvial (surface water) flooding;
- Increases in the frequency and intensity of coastal flooding and erosion;
- Increases in the frequency and intensity of summer heat waves, extreme temperatures and drought;
- Reductions in the frequency of frost and snowfall; and
- An increase in the duration of the growing season (phenological cycle).

The state of Ireland's climate today and how it may look in the future can be brought together in one simple conclusion. Ireland's climate has changed relative to the 1900's, it has undoubtedly warmed along with global temperatures, bringing about an array of impacts that are associated with a warmer climate and more extreme weather events.

3.1 Climate Legislation and Policy Context

Climate action is given impetus by the scientific evidence that supports the findings of human influence on climate change and the most recent legally binding international treaty on climate change, which sets the framework for ambitious and strengthened policy responses, the Paris Agreement 2015.

Consequently, this Climate Action Plan is set within a broader context of international, EU, national and sectoral climate policy. This is represented in Figure 10.

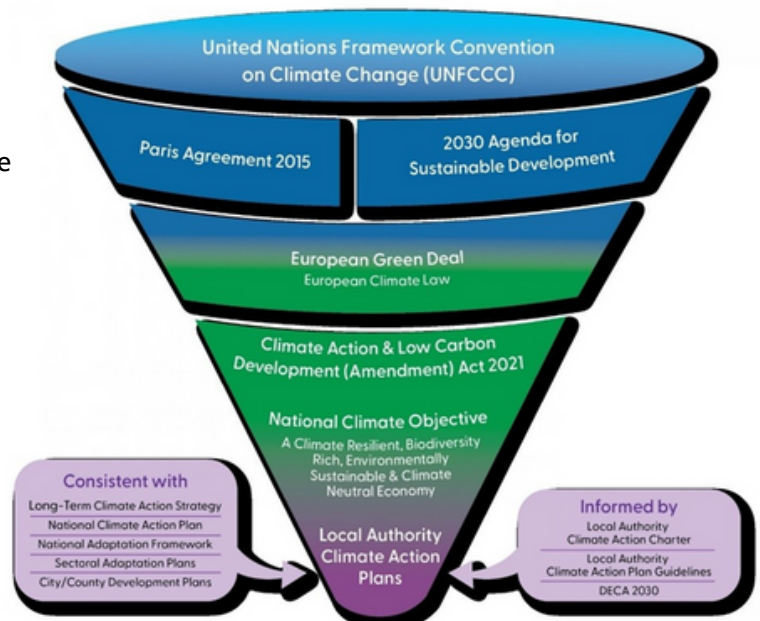


Figure 10: Legislation and Policy Context for the Climate Action Plan

3.1.1 International Climate Change Policy

Effective action on climate change requires international cooperation and ambition. The United Nations Framework Convention on Climate Change (UNFCCC), established in 1994, aims to foster global co-operation in addressing climate change and its consequences resulting from rising global temperatures.

A significant milestone in this global effort was the signing of the Paris Agreement in 2015 at the Conference of the Parties 21 (COP21). This legally binding treaty, endorsed by all 196 member countries, including Ireland, came into force on November 4th, 2016. The Paris Agreement sets two critical goals:

- limiting global temperature increases well below 2°C above pre-industrial levels and striving to limit the increase to 1.5°C, and
- enhancing adaptation capabilities to combat climate change impacts.

Another essential international commitment relating to climate change is the 2030 Agenda for Sustainable Development, adopted in September 2015, comprising 17 Sustainable Development Goals (SDGs) with 169 targets to be achieved by 2030. These goals aim to alleviate poverty, protect the environment, and improve global living conditions.

To meet emissions reduction targets outlined in the Paris Agreement, the European Commission introduced the European Green Deal in December 2019. This initiative aims to make Europe the first climate-neutral continent by 2050 by decoupling economic growth from resource use. The European Climate Law legally enforces these objectives, including a reduction of net greenhouse gas emissions by at least 55% by 2030.

3.1.2 Ireland's Climate Change Policy

Ireland aligns its climate change policy with EU ambitions and international agreements. The Climate (Amendment) Act 2021 promotes a sustainable economy where greenhouse gas emissions are balanced by emissions removal. Through carbon budgets, sectoral limits, and various strategies, Ireland seeks to scale up efforts in both adaptation and mitigation to achieve transformative climate action by 2030 and beyond to 2050.

The Climate Action Plan 2023 aims to half emissions by 2030 and achieve net-zero emissions by 2050, in line with the Programme for Government.

In 2018, Ireland published its first National Adaptation Framework (NAF) to assess climate risks and incorporate adaptation measures into National, Regional, and Local Policy making.

The Long-term Strategy on Greenhouse Gas Emissions Reductions sets a roadmap for achieving carbon neutrality by 2050, building upon carbon budgets, sectoral limits, and the National Climate Action Objective and the European Climate Law.

Sectoral Climate Adaptation Plans have been published across Government Departments, in response to the National Adaptation Framework. Each Plan identifies the key risks faced across the sector and the approach being taken to address these risks and build climate resilience for the future. The Plans address the following sectors: Agriculture, Forestry and Seafood, Biodiversity, Built and Archaeological Heritage, Transport infrastructure, Electricity and Gas Networks, Communications Networks, Flood Risk Management, Water Quality and Water Services Infrastructure and Health.

The Local Authority Climate Action Charter commits local authorities, including Meath County Council (October 2019), to lead climate action efforts at the local and National levels. It involves reducing emissions from Council operations and collaborating with various stakeholders on climate initiatives.

Delivering Effective Climate Action 2030 (DECA 2030) is a local government strategy, published in April 2021, ensuring a coordinated approach to climate action across all 31 local authorities, emphasising a strong leadership role in climate action. This overarching sectoral commitment and coherent approach is set out across the 6 goals outlined below:



Goal 1

Develop appropriate structures and processes for directing and managing effective climate action.



Goal 2:

Achieve local government carbon emission and energy efficiency targets for 2030



Goal 3:

Protect and enhance Meath's natural environment by supporting biodiversity and increasing climate resilience.



Goal 4:

Mobilise Climate Action in Local Communities, whilst achieving a just transition.



Goal 5:

Create a culture of sustainability, promoting a circular economy throughout the County.



Goal 6:

Achieve a 'just transition' particularly for communities that may be economically disadvantaged by decarbonising projects.

Within the development process of this Climate Action Plan, Meath County Council undertook a Policy Context Review. As this is an evolving process, the Policy Context Review will be updated annually to ensure alignment to this Climate Action Plan.

4.0 Evidence Baseline

Meath County Council has established an evidence-based approach that supports a collaborative bottom-up understanding of the impacts and risks of climate change, key sectoral sources of emissions, across the administrative area and an examination of emission sources from within each of the nine Decarbonising Zones.

The following sections provide summaries of more detailed analysis undertaken and are available in the following documents / sections:

4.1 A summary of the **Climate Change Risk Assessment (CCRA)** findings for County Meath which has been established using details of past climate events and contemporary data sources as evidence, coupled with a determination of the potential future climate risks predicted for the County as a result of a changing climate; and

4.2 A summary of the **Baseline Emissions Inventory (BEI) for County Meath and Decarbonising Zones** which establishes the current greenhouse gas emissions from all sources (transport, residential, commercial, agriculture, municipal, social housing, wastewater and waste) for the set baseline year (2018).

4.1 Climate Change Risk Assessment (CCRA)

The purpose of this climate change risk assessment (CCRA) is to better understand the current risks that County Meath faces and provide a view on the potential frequency and impact of future climate events. The CCRA was carried out under guidance from the Climate Action Plan Guidelines from Technical Annex B: Climate Change Risk Assessment.

Extreme Weather Events in County Meath

Climate hazards include extreme weather events and periods of climate variability. Figure 11 provides an illustration of extreme weather events in County Meath (1986 – 2022).

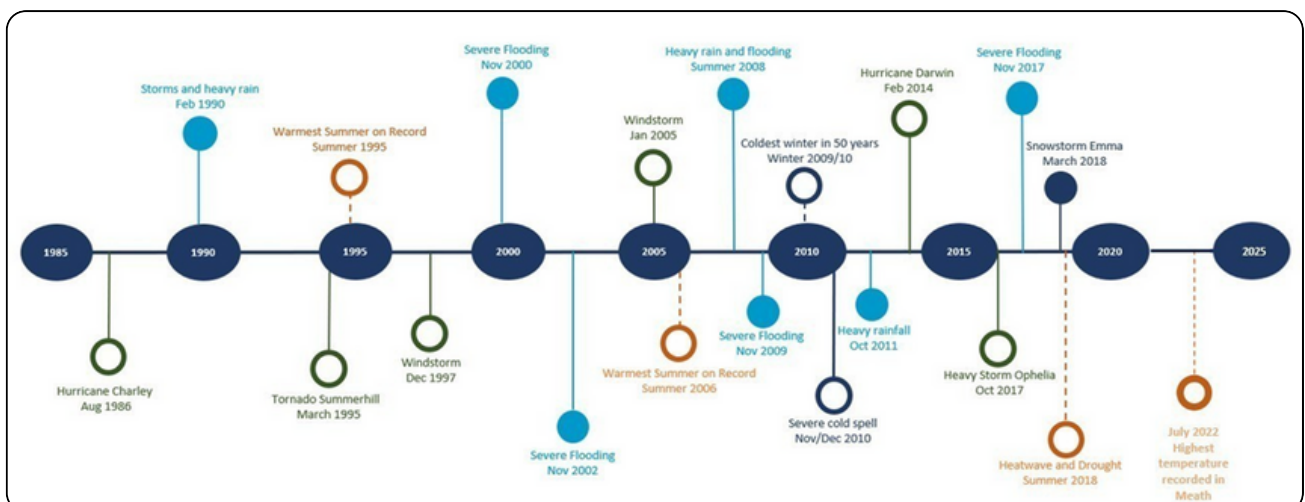


Figure 11: Illustration of extreme weather events in County Meath (1986 – 2022)

Impacts of Climate Change on County Meath

The assessment identified windstorms as posing the highest level of climate change risk for County Meath. Key impacts from windstorms include damage to buildings and infrastructure such as roads, powerlines, and communications systems. Coastal locations like Laytown and Bettystown will be more exposed to wind as there are no land barriers to slow the wind as there are no land barriers.

Flooding has been identified as posing a relatively high risk for County Meath with impacts experienced on a localised scale including damage to assets and infrastructure and potential for isolation of communities and reduced business activities. Inland locations through which rivers run are exposed to fluvial flooding. There are many small rivers intertwining throughout County Meath, such as the Inny, Delvin, and Broadmeadow. One of the principal rivers in Meath is the Boyne which flows through a number of large urban centres.

Laytown Bettystown will also be exposed to sea level rise in a high warming scenario. Coastal flooding in Laytown and Bettystown is considered to be a potential risk in a four-degree temperature increase scenario to 2050.

The impact of heavy snowfall and cold spells on County Meath will likely decrease due to the decrease in intensity and duration of these events.

The whole of County Meath will be exposed to drought as the frequency and duration of drought events are projected to increase. Agriculture will be particularly vulnerable to drought and water stress for the growth of crops including grass, this in turn will potentially impact livestock.

This Climate Change Risk Assessment is linked with the ongoing planning for Meath County Council in terms of adaptation to the changing climate and continued support services to citizens and businesses.

This Climate Change Risk Assessment will be repeated when new more granular scientific data on climate becomes available.

Meath County Council's response to climate change will evolve over time as will the impact of future weather events, this residual risk should continue to be modelled alongside the inherent risk.

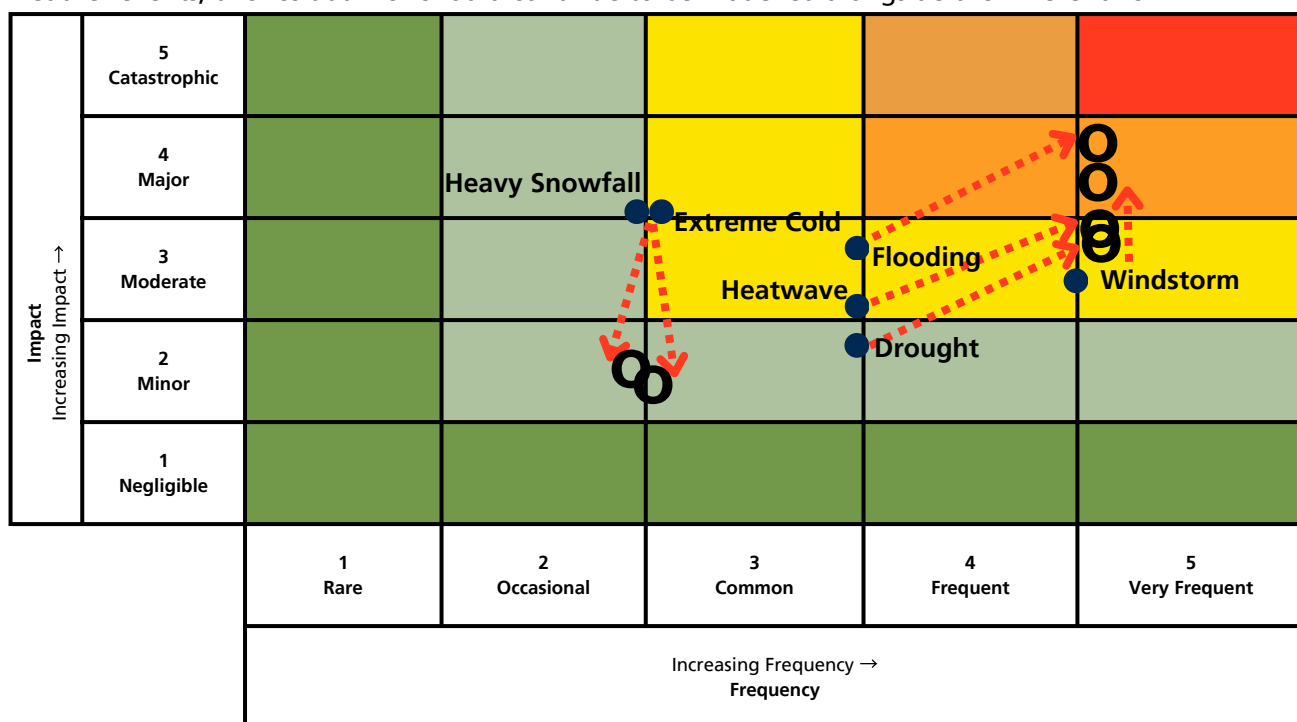





Chart 1: Risk Matrix showing the future changes in risk for the identified hazards within County Meath

Assessing the major recent climate events in County Meath shows the impacts and risks associated with climate change. It has become clear that the frequency and intensity of weather events are having a more profound impact on not only the County of Meath, but also Meath County Council's services and operations. This analysis helps Meath County Council better understand the potential climate risk to County Meath, its citizens, and how the County operates. This process aids the development of mitigation and adaptation initiatives that will be undertaken across the County.

The overall short-term future impacts out to 2030 for Meath County Council and its own operations are not be too dissimilar to the current situation. The demand for Meath County Council's services will however increase as weather patterns continue to evolve, notably with the increasing severity and frequency of climate-related incidents.

Climate Hazard	Change Projections	Summary	Future Frequency
Droughts Heatwaves Flooding	The climate risks associated with droughts, heatwaves and floods are expected to increase significantly for County Meath as a result of projected increases in the frequency of hazard events and also due to an increase in the areas, assets and populations exposed to these hazards. The risk is exacerbated by not only projected changes in the frequency occurrence of drought and heatwaves but also as a result of projected increases in population and the proportion of population considered vulnerable (those aged 65 years and over). Meath County Council's services are likely to be impacted by these changes with increased pressure on services before, during and after extreme weather events. There will likely be a significant financial impact to Meath County Council due to the likely need to allocate more financial resources towards climate related mitigation and adaptation measures.	These are emerging and increasing risks	
Windstorms	The impact of severe windstorms will likely increase marginally in County Meath. There will be an increase in the intensity of storms but not necessarily the frequency. There will be an increase in the cost of the actions that Meath County Council takes before, during, and after an event e.g., removal of fallen trees, repair of public infrastructure.	This is an increasing risk	
Extreme Cold Heavy Snowfall	The impact of heavy snowfall and cold spells on County Meath will likely decrease due to the decreased intensity and duration of these events., The overall risk of these hazards is projected to reduce in the future, resulting in less risk. These are decreasing risks.	These are decreasing risks	

Summary Table 4 describes the future projected changes to climate hazard risk for County Meath.

4.2 Baseline Emissions Inventory (BEI)

The purpose of the Baseline Emissions Inventory (BEI) is to establish the main sources of emissions within County Meath and determine where efforts should be focused. The BEI was carried out under guidance from the Local Authority Climate Action Plan Guidelines from Technical Annex C – Climate Mitigation Assessment. The Guidelines require that all local authorities develop an emissions inventory for the 2018 baseline year as standard.

The BEI is broken into three categories, namely:

4.2.1 Meath County Council's emissions (direct emissions) related to all assets directly owned, operated or within full control of the local authority.

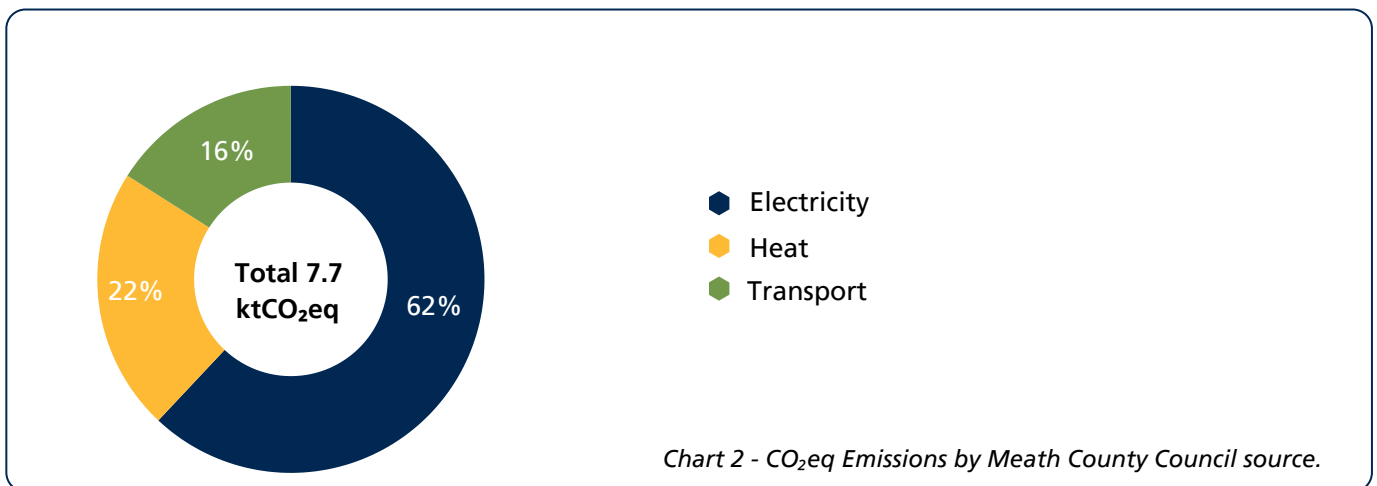
4.2.2 County Meath emissions across a range of pre-defined sectors as is defined by the administrative area of Meath County Council.

4.2.3 Decarbonising Zones (DZ) emissions across a range of pre-defined sectors - *Ashbourne, Duleek, Dunboyne, Dunshaughlin, Laytown/Bettystown, Kells, Navan, Ratoath and Trim*. A further breakdown of emissions within each of the Decarbonising Zones is available in Section 5.0 Decarbonising Zones of this Plan.

4.2.1 Meath County Council - Direct Emission Baseline

Meath County Council's buildings, operations and activities account for <1% of the total CO₂eq emissions of County Meath. The breakdown of the source of the emissions for Meath County Council is shown in Chart 2 and detailed in Table 5 below.

Meath County Council Emissions (ktCO₂eq)



Emission Source	Energy Use (kWh)	% of Energy Use	Emissions (ktCO ₂ eq)	% of Emissions
Electricity	12,501,772	49%	4.7	62%
Heat	8,067,693	32%	1.7	22%
Transport	4,884,457	19%	1.3	16%

Table 5 – Emissions by Meath County Council source.

4.2.2 County Meath - Emission Baseline

The main sources of emissions within County Meath are industrial processes (29%), agriculture (25%), manufacturing and commercial (13%) and transport (10%) respectively. The sectors outlined below align with the sectors addressed by the National Emissions Inventory.

Emission Baseline (ktCO₂eq)

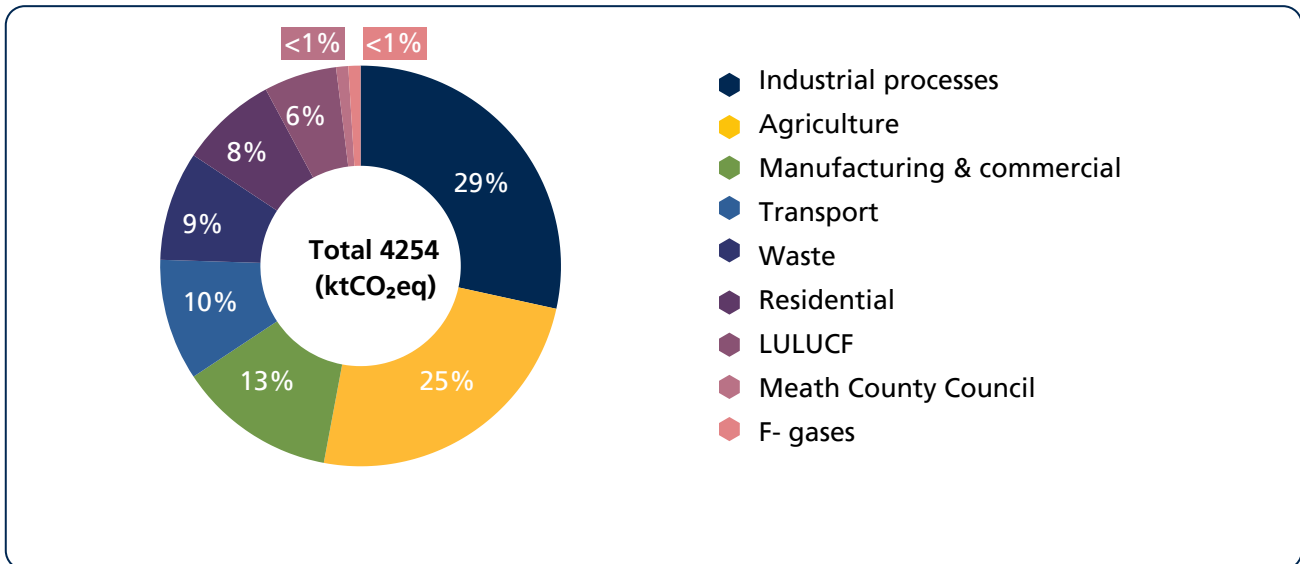


Chart 3 – Emissions per each sector in County Meath as outlined in table 6.

Sector Category	Sector Emissions County Meath (ktCO ₂ eq)	Sector Emissions as % of County Meath Total Emissions	Sector Emissions per National Inventory*
Industrial processes	1,230	29%	3.80%
Agriculture	1,054	25%	38.40%
Manufacturing & commercial	556	13%	8.40%
Transport	419	10%	19.10%
Waste	378	9%	1.40%
Residential	353	8%	10.00%
LULUCF	264	6%	Not available
Meath County Council**	8	<1%	1.1%**
F-gases	0.0004	<1%	1.20%
Total	4,254		

* Source: EPA: Greenhouse Gas Emissions by sector in 2022
 ** Categorised as Public Services in the national inventory

Table 6 – Emissions per sector and percentage of the total emissions for each emission category for County Meath along with the percentage of emissions for each sector at a national level.

The total emissions in Ireland in 2018 according to the Ireland National Inventory Report is 67,312 ktCO₂eq.

4.2.3 Decarbonising Zones Emission Baseline

The nine Decarbonising Zones (DZs) account for 19% of total emissions in County Meath, totalling 824 ktCO₂eq. The four main sectors where the emissions were material across the nine DZs were residential, manufacturing & commercial, transport and waste. Further breakdown of emissions within each of the decarbonising zones are available in Section 5.0 Decarbonising Zones of this Plan.

Decarbonising Zones Emissions (ktCO₂eq)

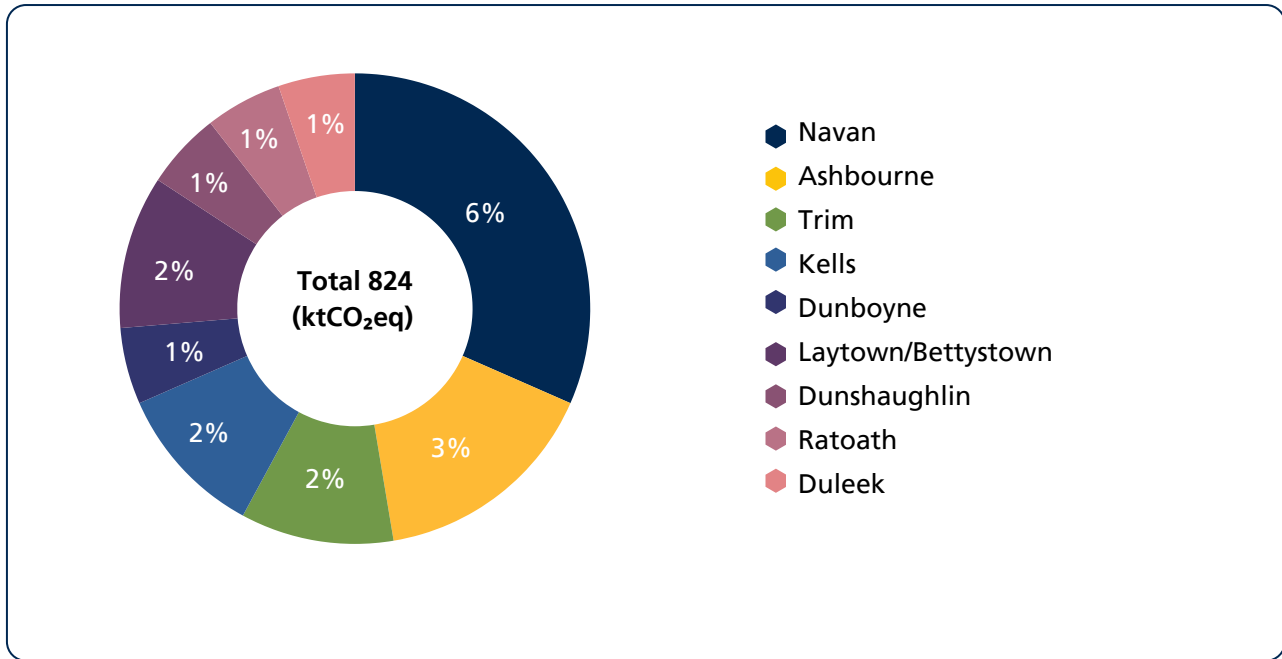


Chart 4 - ktCO₂eq Emissions per each Decarbonising Zone within County Meath.

DZ Zone	DZ Total	
	ktCO ₂ eq	% of County Emissions
Navan	269	6
Ashbourne	118	3
Trim	84	2
Kells	71	2
Dunboyne	61	1
Laytown/Bettystown	83	2
Dunshaughlin	51	1
Ratoath	53	1
Duleek	33	1
Total of all DZ's	824	19

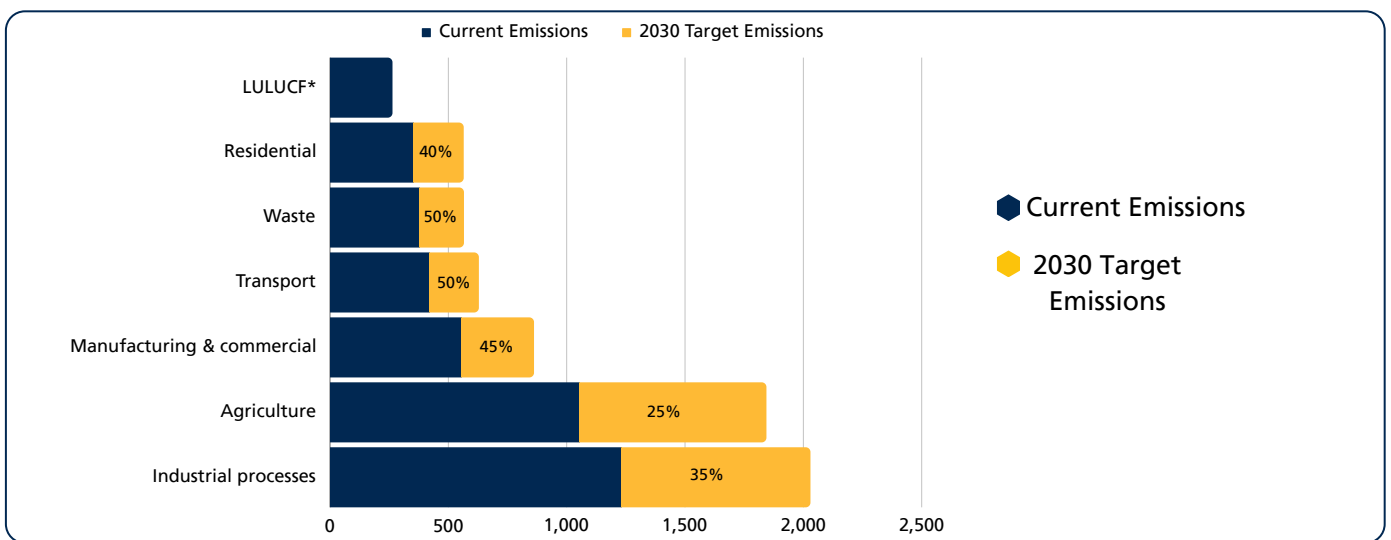
Table 7 – ktCO₂eq per each Decarbonising Zone within County Meath across the residential, manufacturing & commercial, transport and waste sectors against the percentage of the county-wide emissions.

In 2018, the baseline year, greenhouse gas (GHG) emissions within Meath County Council Administrative Area was 4,254 ktCO₂eq. Meath County Council accounts for emissions of 7.7 ktCO₂eq, representing less than one percent of county-wide emissions in Meath of 4,96 ktCO₂eq. Additionally, the DZs identified account for 824 ktCO₂eq, representing 19% of County-wide emissions for the material sectors identified.

The Climate Action and Low Carbon Development (Amendment) Act, 2021 commits Ireland to reach a legally binding target to deliver a reduction of 51% by 2030.

An overall emission reduction of 2,170 ktCO₂eq (reducing the BEI of 4,254 ktCO₂eq to 2,084 ktCO₂eq) is required for County Meath across all sectors to achieve the target to reduce GHG emissions by 51% by 2030. The figure below shows the current emissions in County Meath and the required 2030 sectoral emission reduction targets (National Sectoral Targets).

Current Emissions in County Meath V 2030 National Sectoral Targets (ktCO₂eq)



	LULUCF*	Residential	Waste	Transport	Manufacturing & commercial	Agriculture	Industrial processes
Current emissions	264	353	378	419	556	1054	1230
2030 target emissions	0	212	188	210	306	790	800
Reduction Target %	Not available*	40%	50%	50%	45%	25%	35%

Chart 5 and Table 8– Current emissions in County Meath V 2030 National Sectoral Target Emission Reduction.

*A national percentage reduction target has currently not been set for the LULUCF sector.

The Climate Action and Low Carbon Development (Amendment) Act, 2021 commits Ireland to reach a legally binding target to deliver a reduction of 51% by 2030.

An overall emission reduction of 2,170 ktCO₂eq (reducing the BEI of 4,254 ktCO₂eq to 2,084 ktCO₂eq) is required for County Meath across all sectors to achieve the target to reduce GHG emissions by 51% by 2030.

5.0 Decarbonising Zones

Working together to create climate resilient, biodiverse rich, vibrant, and sustainable towns that supports healthy lifestyles and jobs growth.

A Decarbonising Zone (DZ) is a chosen area where local authorities and communities work together to reduce the amount of carbon produced by their everyday activities. By looking within the community for ways to live, work and play more sustainably, these zones can find local solutions to global problems, such as reducing greenhouse gas emissions, improving air quality, saving energy and reducing waste.

Targets and Purpose

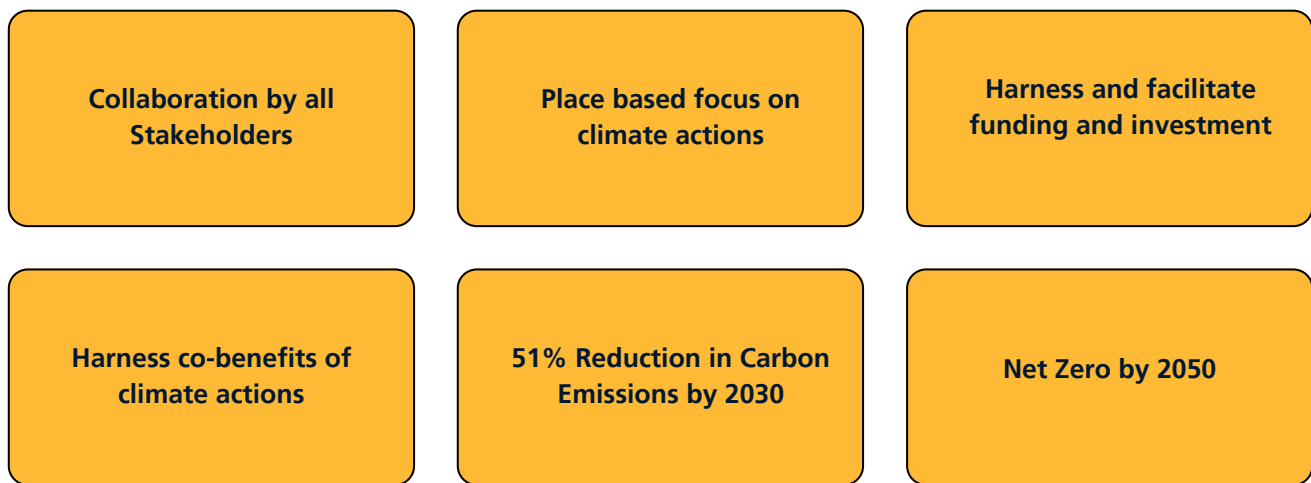


Figure 12: Targets and purposes

Meath County Council have identified nine DZs:

- Navan
- Ashbourne
- Trim
- Kells
- Dunboyne
- Laytown/Bettystown
- Dunshaughlin
- Ratoath
- Duleek



Figure 13: Map of County Meath showing location of the nine DZs.

These different urban areas vary in terms of their location and emission profiles. The findings show that there are different actions that are relevant and specific to the different towns to support the reduction in greenhouse gas emissions. The baseline year used to determine the DZ emissions was 2018, which is aligned to the County-wide baseline emissions inventory (BEI).

It was found that there were only four main sectors where the emissions were material for the nine DZs, these include residential, manufacturing & commercial, transport and waste emissions.

By creating these DZs within Meath, different approaches and projects can be tested and perfected, allowing other communities to apply these ideas based on their own needs.

DZ Town	Commercial		Transport		Residential		Waste		DZ Total	
	kt CO ₂ eq	% of county total	kt CO ₂ eq	% of county total	kt CO ₂ eq	% of county total	kt CO ₂ eq	% of county total	kt CO ₂ eq	% of county total
Navan	101	18	46	11	55	16	67	18	269	6
Ashbourne	53	10	18	4	21	6	26	7	118	3
Trim	33	6	15	3	17	5	20	5	84	2
Kells	39	7	9	2	11	3	13	3	71	2
Dunboyne	29	5	9	2	11	3	13	3	61	1
Laytown/ Bettystown	3	1	21	5	27	8	32	8	83	2
Dunshaughlin	18	3	9	2	11	3	14	4	51	1
Ratoath	8	1	12	3	15	4	18	5	53	1
Duleek	12	2	6	1	7	2	9	2	33	1
Sector Total	295		145		173		211		824	
County Total	556	53	419	33	353	50	378	55	4254	19

Table 9 – Emissions by decarbonising zone (ktCO₂eq) and sector (commercial, transport, residential, waste)

Emissions Profile of the Decarbonisation Zones

The different mix between, manufacturing & commercial, transport, waste, and residential emissions in each DZ shows in some cases a disproportionate emission profile. In the case of Ashbourne and Kells there may be opportunities to support local businesses in the manufacturing & commercial sector. When looking at Ratoath and Laytown/Bettystown emissions associated with their transport and residential sectors, it may be possible to have a positive impact if these areas are focused on.

Meath's population is slowly trending toward more urban settings, and more densely populated spaces. While there is a potential challenge for Meath County Council in terms of providing services to these locations as they grow, there is also an opportunity to take advantage of the efficiencies that can be gained through being able to provide better services to these locations.

Role of Meath County Council within Decarbonising Zones

To support and deliver the Decarbonising Zone Plan, action will be needed by Meath County Council, but also other public sector organisations, local businesses and industry, social and community groups, and the wider public.

Recognising this, Meath County Council will play several roles while supporting climate action within the DZs.

These roles are:

Lead delivering on climate action in areas within the local authority's direct control including buildings, infrastructure, systems, operations, and staff.

Enable delivering on climate action by coordinating, connecting, and linking others. This may include stakeholder engagement, capacity-building, developing partnerships, funding, and policy support, among other enabling activities.

Inspire communicating, influencing, and building on a shared vision of the DZs, as well as raising awareness of the DZ plans and developing climate actions within a wide network of local stakeholders to achieve support from the local community.

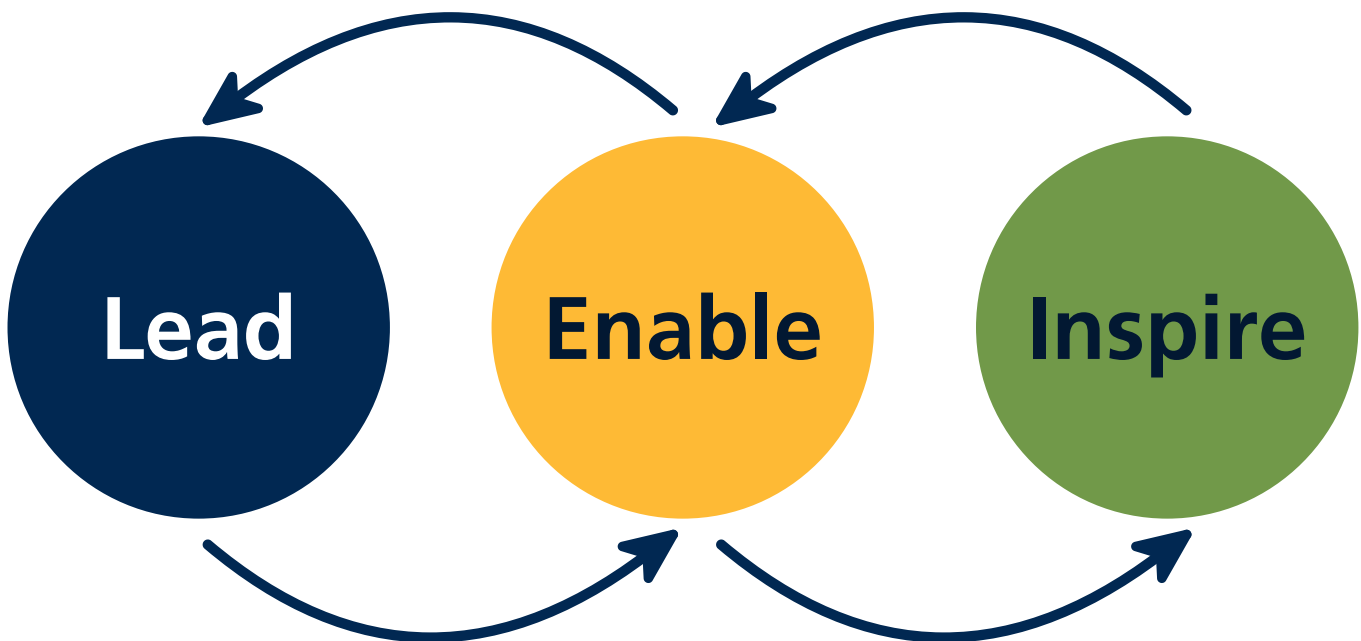


Figure 14: Meath County Council's Climate Role within DZ

DZ Vision and Objectives

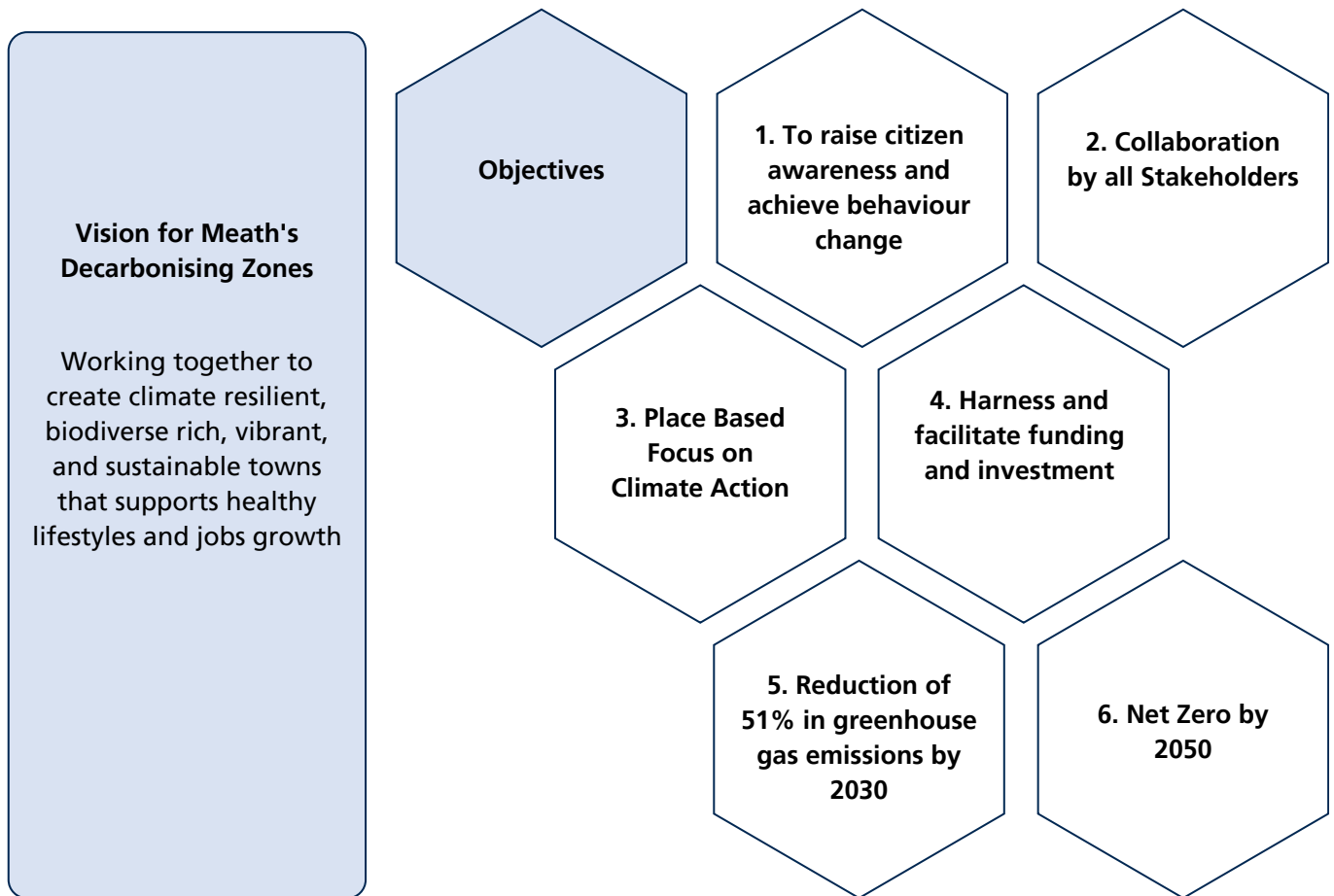


Figure 15: DZ Vision and Objectives

Each town has completed a DZ emissions profile, register of opportunities and actions are included in Section 6.0.

- | | | |
|---------------|------------------------|------------------|
| 5.1 Navan | 5.4 Kells | 5.7 Dunshaughlin |
| 5.2 Ashbourne | 5.5 Dunboyne | 5.8 Ratoath |
| 5.3 Trim | 5.6 Laytown/Bettystown | 5.9 Duleek |



5.1 Navan

Navan, Ireland’s Floral Town, located in the heart of the Boyne Valley, is the administrative centre of County Meath. It evolved as a market town at the meeting point of the Boyne and Blackwater rivers and today is a vibrant business centre and shopping destination.

As County Town, Navan is the principal employment centre in the County. Navan is situated on one of the principal arterial motorways to Dublin the M3, which links to the M50, the Dublin Orbital Motorway at 36 minutes and at 42 minutes to Dublin Airport.

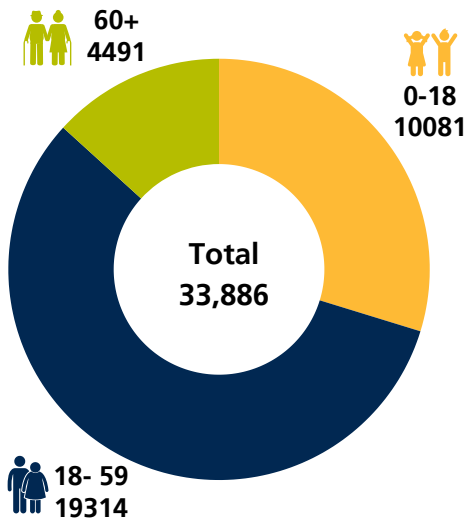
Navan is also located on the N51, a national primary route which links the town going East with N2 to Derry and the M1 motorway to Belfast and going West with the N4/N5 and the M6 motorway to Galway.



Figure 16: Navan Decarbonisation Zone

Small area statistics (2022 Census)

Population data 2022 age groups



Navan population data 2022

0 - 18	18 - 59	60 +	Total 2022	Total 2016
10081	19314	4491	33886	30173

Table 10: Population data for Navan DZ

Housing Data

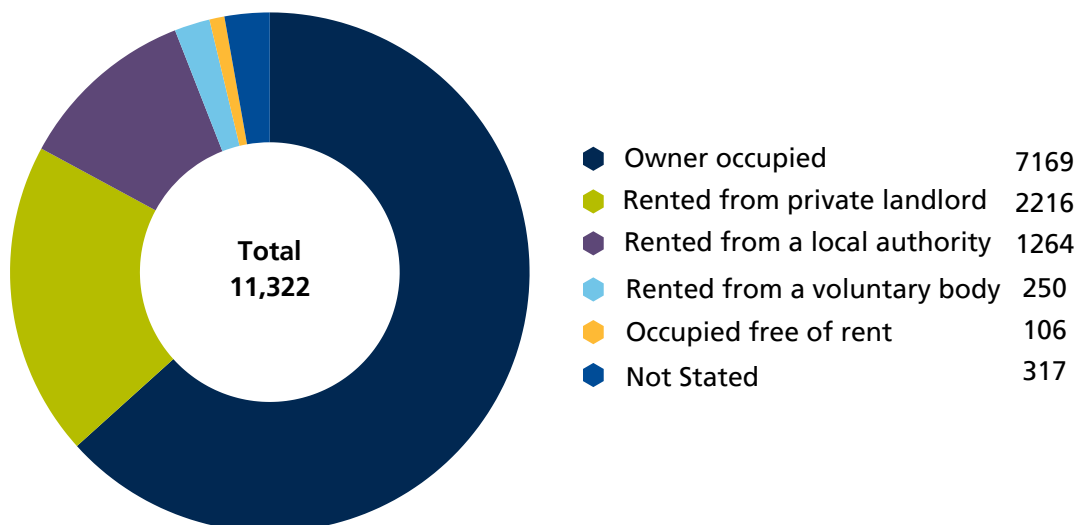


Table 11: Housing data for Navan DZ

Heating: Permanent private households 2022

Navan	
No central heating	55
Oil	2715
Natural gas	6921
Electricity	967
Coal (incl. anthracite)	151
Peat (incl. turf)	27
Liquid petroleum gas (LPG)	34
Wood (incl. wood pellets)	48
Other	32
Not stated	372
Total	11322

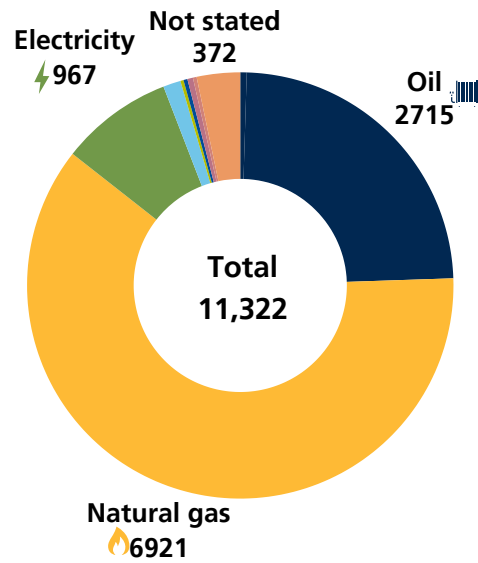


Table 12: Domestic energy sources for Navan DZ

Commuting data for Navan

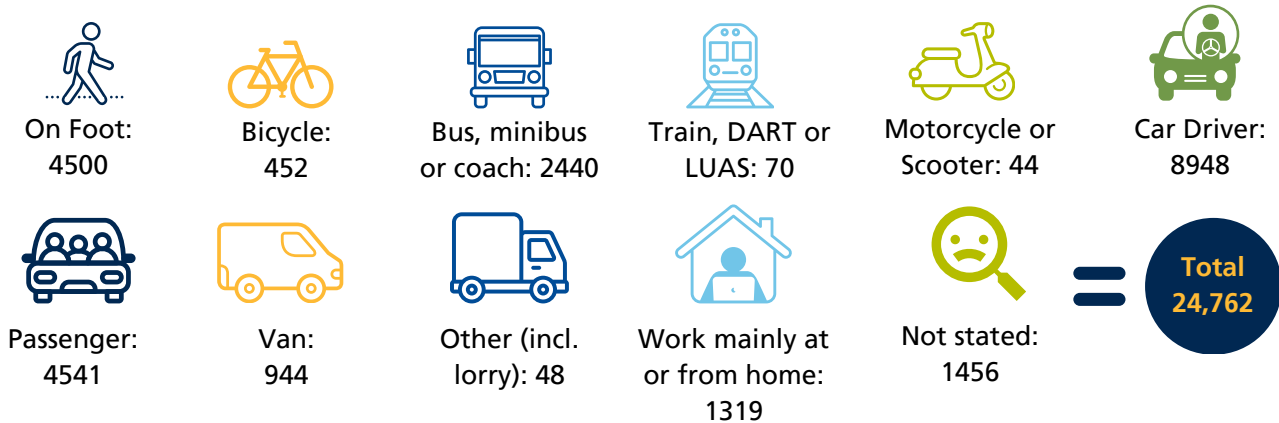
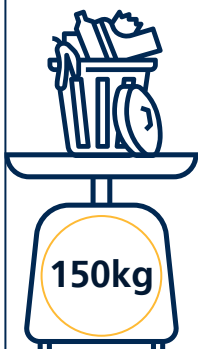


Table 13: Commuting data for Navan DZ



EPA data shows:
The average Irish household throws out **150 kg** of food waste each year: at a cost of approximately **€700**.

Food waste data for Navan

Number of houses	Total food waste/Navan	Cost @ €700 per household
11322	1698.3t	€7,925,400

Table 14: Food waste data for Navan DZ

Working from home

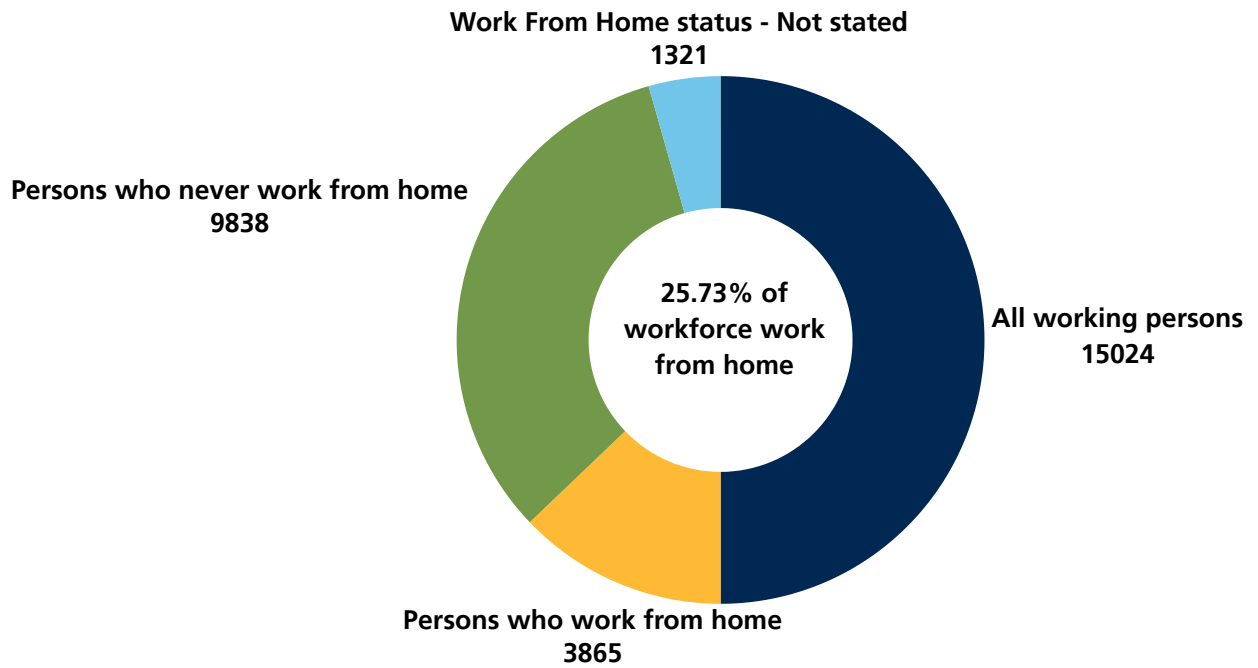


Table 15: Work from home data for Navan DZ

Business Types Navan

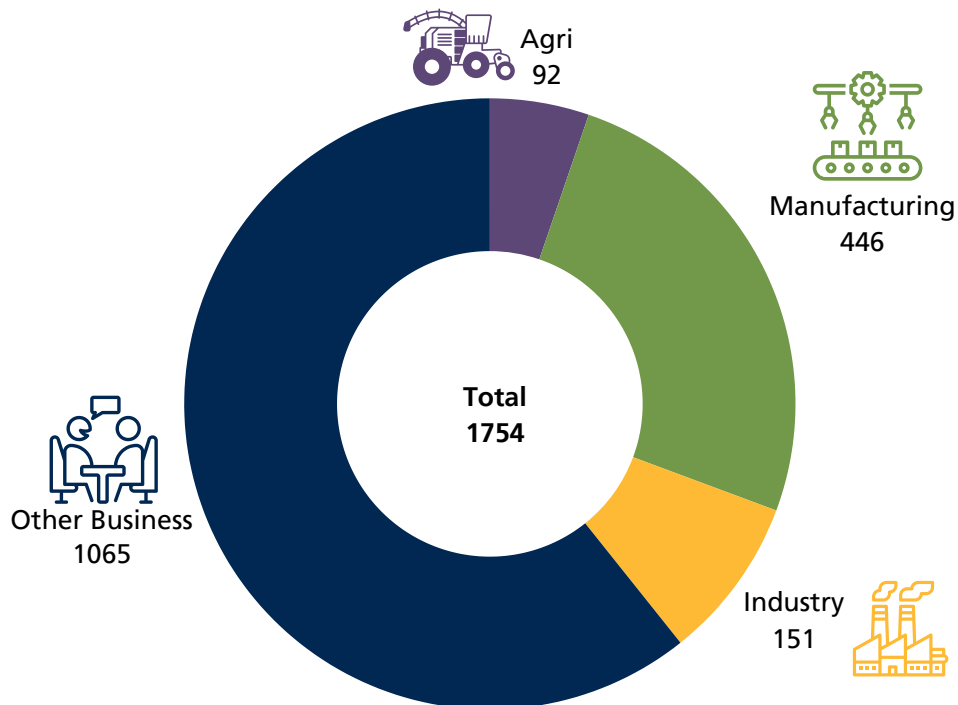






Table 16: Business Type Navan DZ

Emissions profile for Navan:

Commercial 		Transport 		Waste 		Residential 	
ktCO ₂ eq	101	ktCO ₂ eq	46	ktCO ₂ eq	67	ktCO ₂ eq	55
% of county total	18%	% of county total	11%	% of county total	18%	% of county total	9.9%
County Total	556	County Total	419	County Total	378	County Total	556

DZ Total:

ktCO ₂ eq	269
% of county total	6%
County total	4,254

Table 17 – Emissions per each material sector and the % of the county-wide emissions associated with the Navan DZ.

Emissions for the Navan DZ represent 6% of the total emissions for County Meath, with emissions from the Commercial Sector and Waste Sector in Navan DZ both representing 18% of the respective sector totals for County Meath.


Sector	2018 BEI		2030 Sectoral Reduction target		Projected Reduction 2030		Pathway to 51% emission reduction
	ktCO ₂ eq	Reduction target ktCO ₂ eq	Reduction target as a % of 2018 BEI	Reduction target ktCO ₂ eq	Reduction target as a % of 2018 BEI		
Commercial	101	-45	45%	-31	31%		
Transport	46	-23	50%	-23	50%		
Residential	55	-22	40%	-20	36%		
Waste	67	-34	50%	-34	50%		

Table 18 – The Register of Opportunities for Navan

5.2 Ashbourne

Ashbourne is a self-sustaining growth town. It is strategically located in the South of County Meath and is the second biggest town within the County. Situated on the M2 motorway, Ashbourne links to the M50, the Dublin Orbital Motorway in just 15 minutes, and within 21 minutes links to Dublin Airport. The town is served by several public transport bus companies, which provide transport to Dublin and other towns located within County Meath. In recent years, Ashbourne has seen rapid development with the creation of a brand-new town centre and streetscapes.

Ashbourne has a solid employment base, however relative to the resident workforce in the town the total number of jobs is quite low.

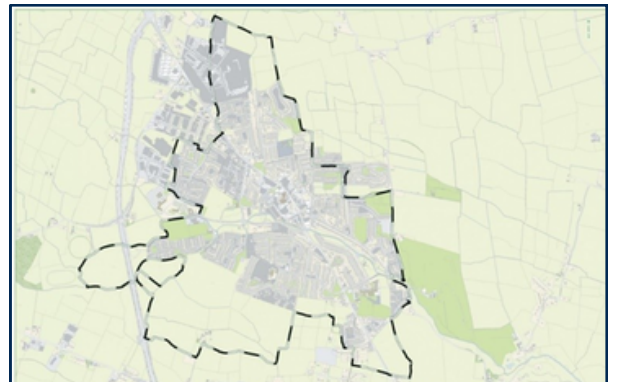
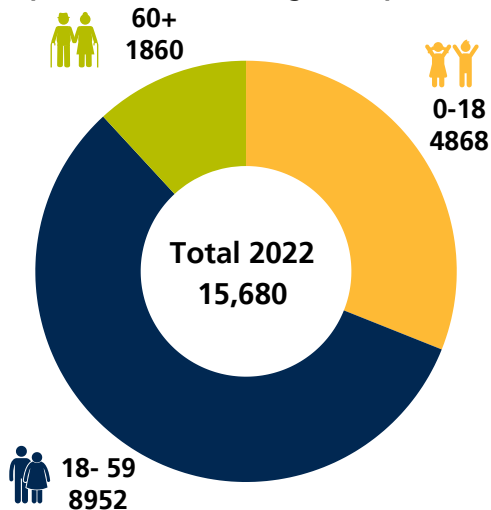


Figure 17: Ashbourne Decarbonisation Zone

Small area statistics (2022 Census)

Population data 2022 age groups



Ashbourne population data 2022

0 - 18	18 - 59	60 +	Total 2022	Total 2016
4868	8952	1860	15680	12679

Table 19: Population data for Ashbourne DZ

Housing Data

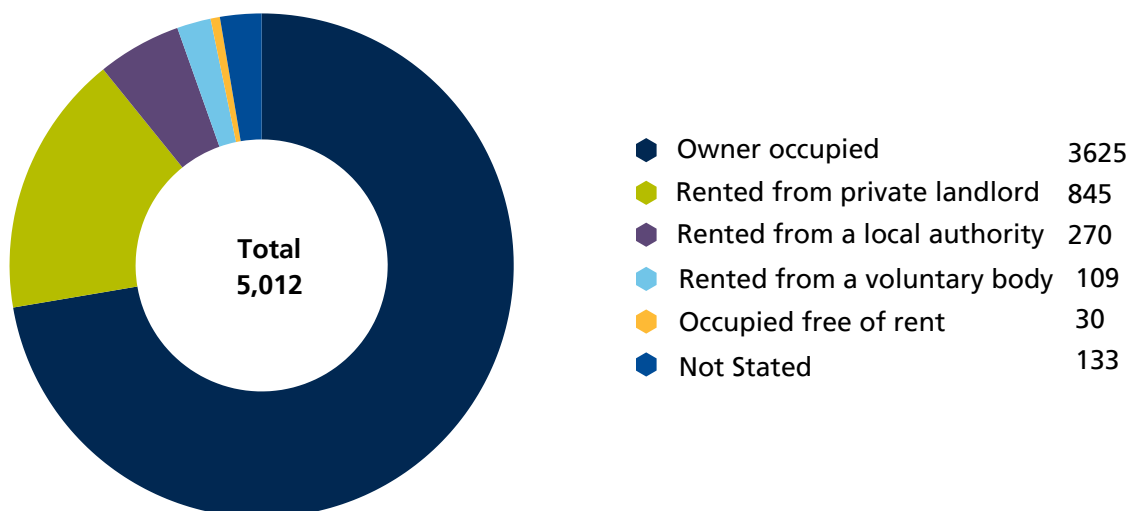


Table 20: Housing data for Ashbourne DZ

Heating: Permanent private households 2022

Ashbourne	
No central heating	25
Oil	695
Natural gas	3431
Electricity	665
Coal (incl. anthracite)	14
Peat (incl. turf)	7
Liquid petroleum gas (LPG)	13
Wood (incl. wood pellets)	10
Other	23
Not stated	129
Total	5012

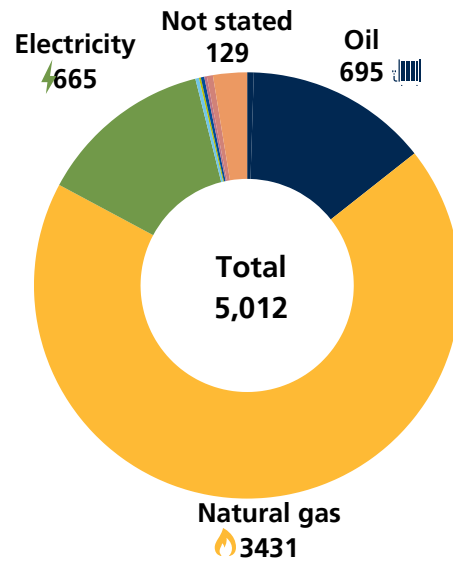


Table 21: Domestic energy sources for Ashbourne DZ

Commuting data for Ashbourne

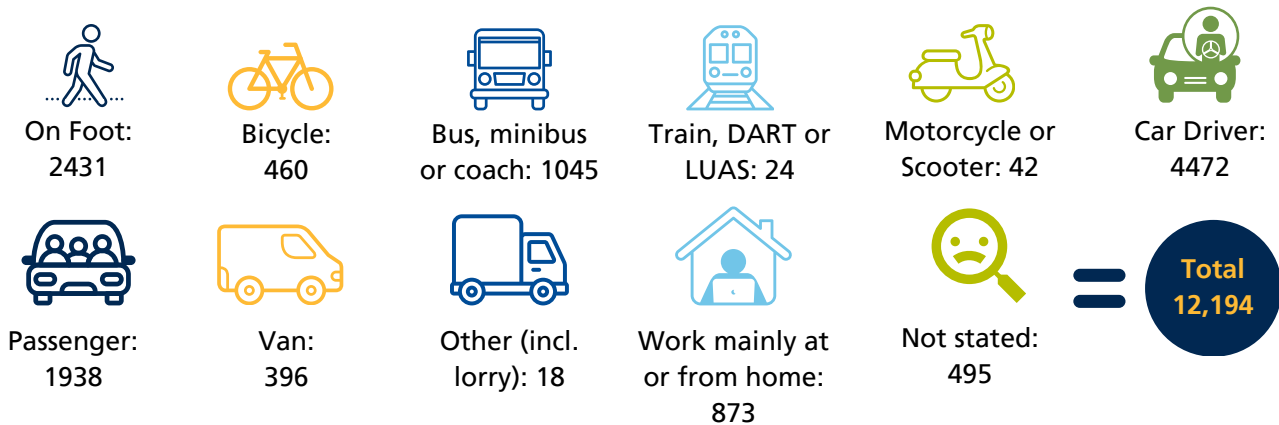
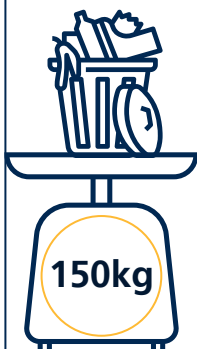


Table 22: Commuting data for Ashbourne DZ

Food waste data for Ashbourne



EPA data shows:
The average Irish household throws out **150 kg** of food waste each year: at a cost of approximately **€700**.

Number of houses	Total food waste/Ashbourne	Cost @ €700 per household
5012	751.8t	€3,508,400

Table 23: Food waste data for Ashbourne DZ

Working from home

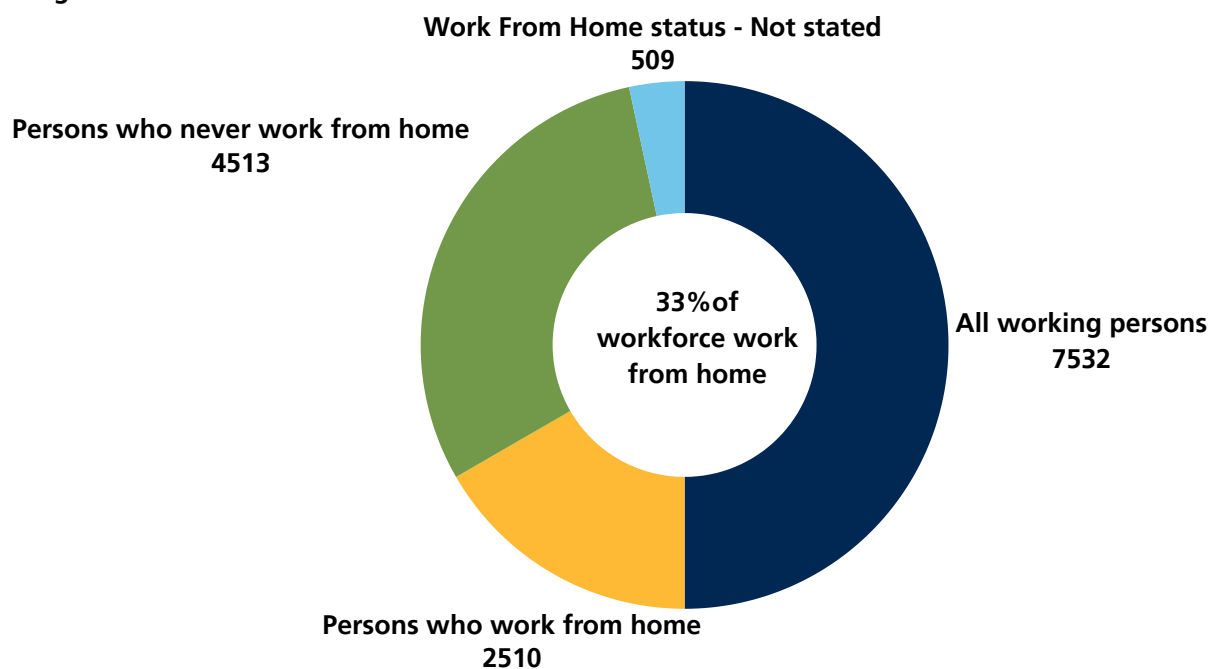


Table 24: Work from home data for Ashbourne

Business Types Ashbourne

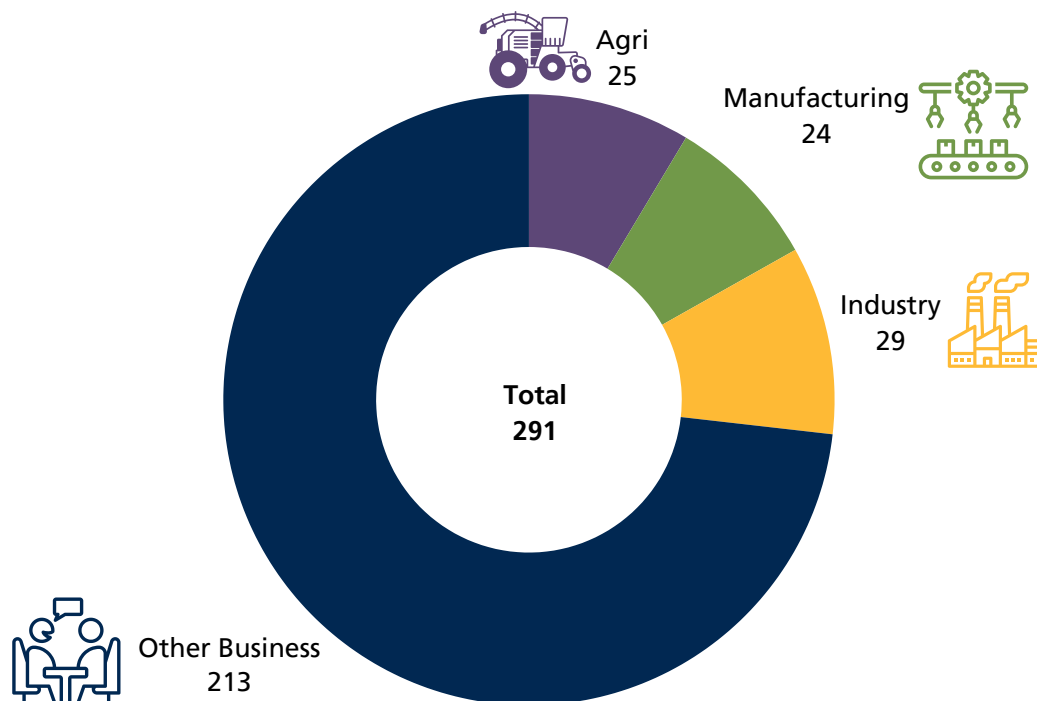






Table 25: Business Types Ashbourne DZ

Emissions profile for Ashbourne:

Commercial 		Transport 		Waste 		Residential 	
ktCO ₂ eq	53	ktCO ₂ eq	18	ktCO ₂ eq	26	ktCO ₂ eq	21
% of county total	10%	% of county total	4%	% of county total	7%	% of county total	6%
County Total	556	County Total	419	County Total	378	County Total	353

DZ Total:

ktCO ₂ eq	118
% of county total	3%
County total	4,254

Table 26 – Emissions per each material sector and the % of the county-wide emissions associated with the Ashbourne DZ.

Emissions for the Ashbourne DZ represent 3% of the total emissions for County Meath, with emissions from the Commercial sector representing 10% and Waste Sector in Ashbourne both representing 7% of the respective sector totals for County Meath.


Sector	2018 BEI	2030 Reduction target		Projected Reduction 2030		Pathway to 51% emission reduction 
	ktCO ₂ eq	ktCO ₂ eq	ktCO ₂ eq	ktCO ₂ eq	ktCO ₂ eq	
Commercial	53	-24	45%	-16	30%	This reduction is based on an increase in energy efficiency of 30% by retrofitting commercial buildings and increasing renewable energy in collaboration with businesses in the community.
Transport	18	-9	50%	-9	50%	This reduction is based on achieving a target of 50% EVs (3,000 approx.) as well as a 10% decrease in carbon emissions due to increased Active Travel.
Residential	21	-8	40%	-4	17%	This reduction is based on 100% of residential buildings with a D1 BER rating or higher (600 approx.) retrofitting to a B1 BER rating.
Waste	26	-13	50%	-13	50%	This reduction is based on decreasing black bin waste by 50% in each household by encouraging recycling and composting.

Table 27 – The register of opportunities for Ashbourne DZ

5.3 Trim

Trim is a vibrant and flourishing market town located on the river Boyne and is the administrative centre for Southwest Meath. It is a thriving town where many activities, historical and cultural, regularly take place. Trim is the second largest centre for employment in the County.

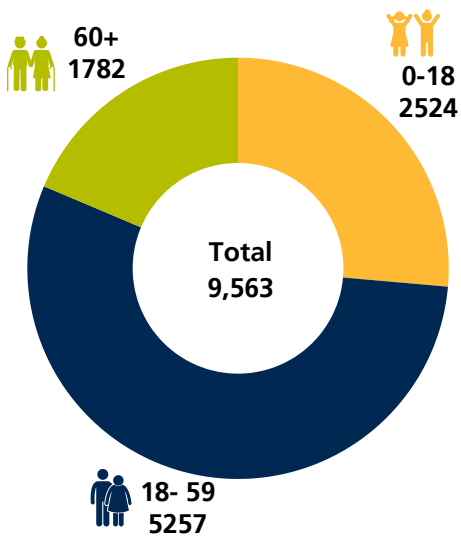
The town is located on regional road R154, which connects with the M3 at junction 5 which links to the M50, the Dublin Orbital Motorway at 46 minutes and at 43 minutes to Dublin Airport.



Figure 18: Trim Decarbonisation Zone

Small area statistics (2022 Census)

Population data 2022 age groups



Trim population data 2022

0 - 18	18 - 59	60 +	Total 2022	Total 2016
2524	5257	1782	9563	9194

Table 28: Population data for Trim DZ

Housing Data

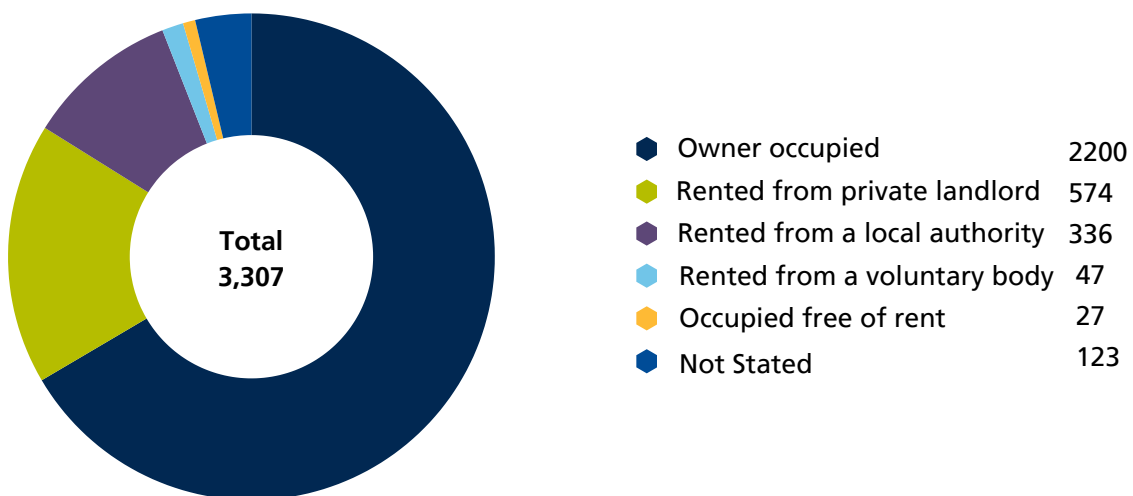


Table 29: Housing data for Trim DZ

Heating: Permanent private households 2022

Trim	
No central heating	12
Oil	1176
Natural gas	1597
Electricity	250
Coal (incl. anthracite)	84
Peat (incl. turf)	15
Liquid petroleum gas (LPG)	14
Wood (incl. wood pellets)	27
Other	21
Not stated	111
Total	3307

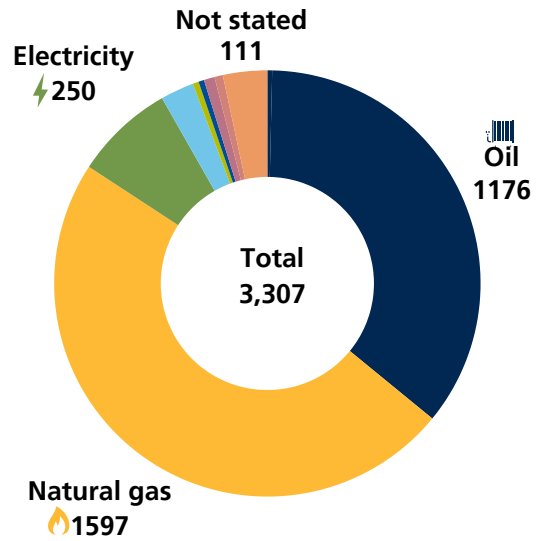


Table 30: Domestic energy sources for Trim DZ

Commuting data for Trim

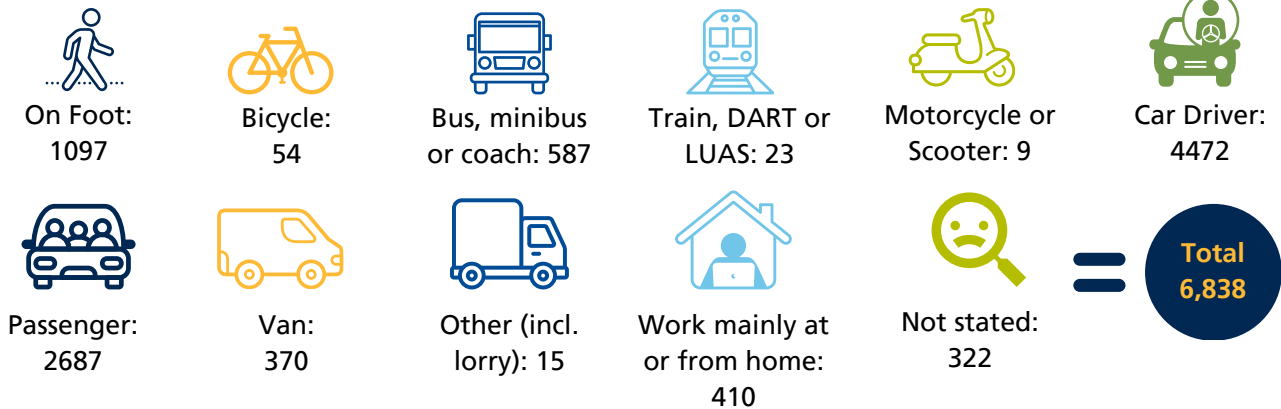
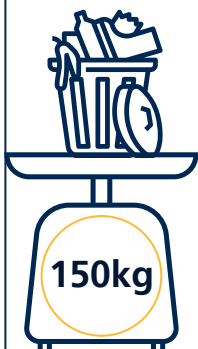


Table 31: Commuting data for Trim DZ



EPA data shows:
The average Irish household throws out **150 kg** of food waste each year: at a cost of approximately **€700**.

Food waste data for Trim

Number of houses	Total food waste/Trim	Cost @ €700 per household
3307	496.05t	€2,314,900

Table 32: Food waste data for Trim DZ

Working from home

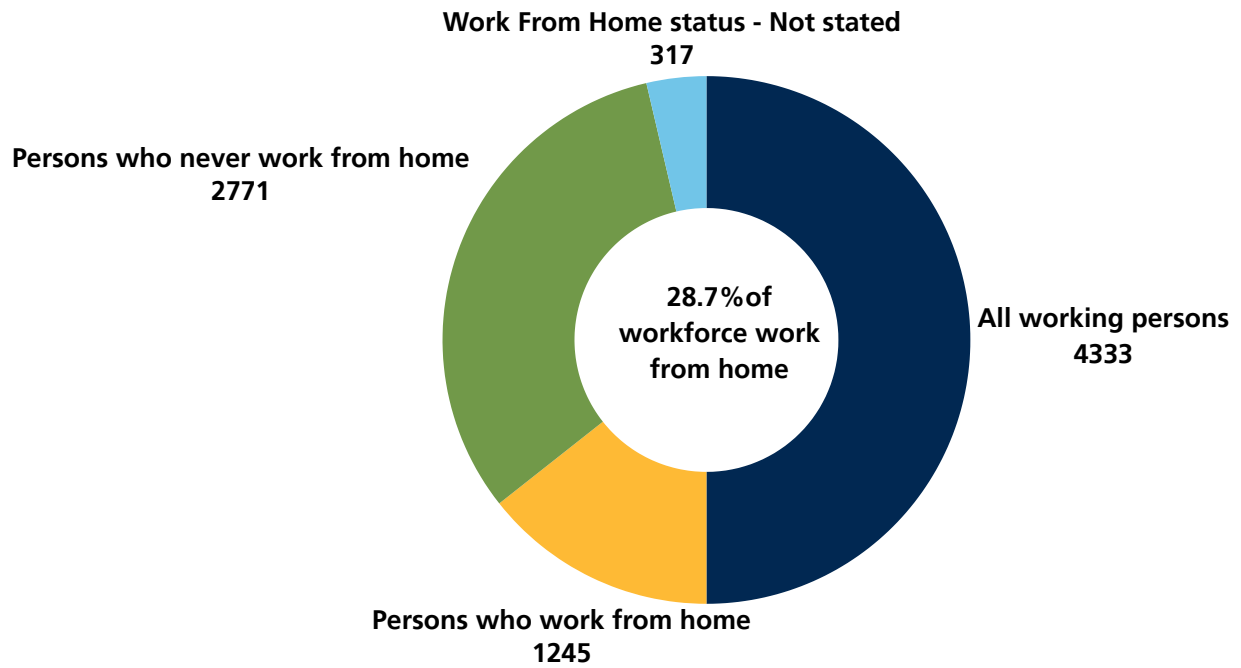


Table 33: Work from home for Trim DZ

Business Types Trim

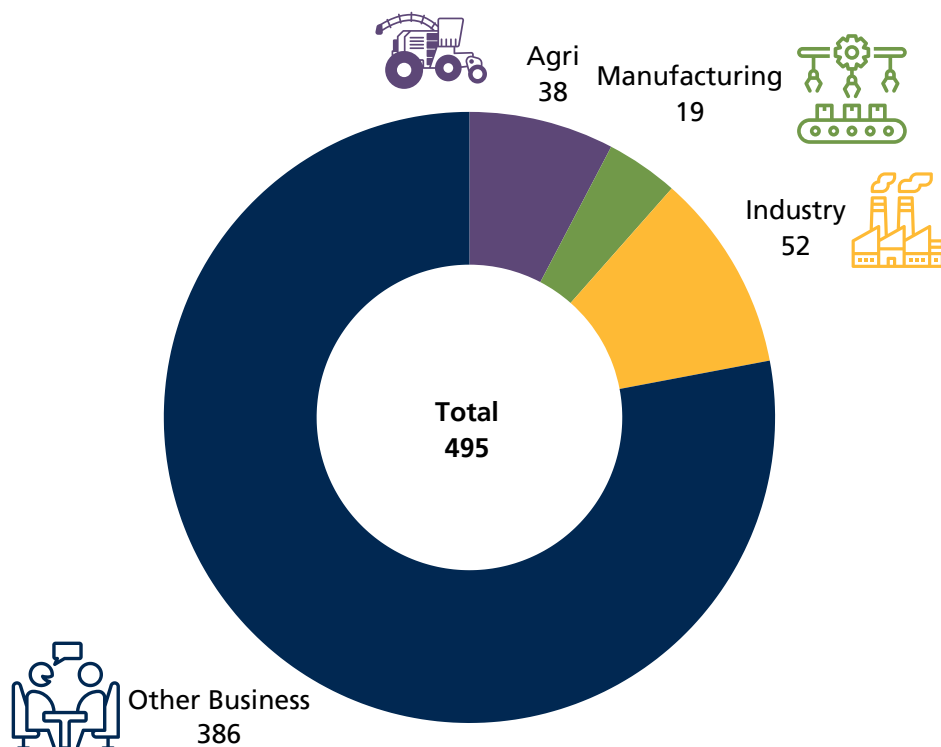






Table 34: Business Types Trim DZ

Emissions profile for Trim:

Commercial 		Transport 		Waste 		Residential 	
ktCO ₂ eq	33	ktCO ₂ eq	15	ktCO ₂ eq	20	ktCO ₂ eq	17
% of county total	6%	% of county total	3%	% of county total	5%	% of county total	5%
County Total	556	County Total	419	County Total	378	County Total	353

DZ Total:

ktCO ₂ eq	85
% of county total	2%
County total	4,254

Table 35 – Emissions per each material sector and the % of the county-wide emissions associated with the Trim DZ

Emissions for the Trim DZ represent 2% of the total emissions for County Meath, emissions from the Commercial Sector represents 6% and Waste and Residential Sectors both representing 5% of the respective sector totals for County Meath.


Sector	2018 BEI	2030 Reduction target		Projected Reduction 2030		Pathway to 51% emission reduction 
	ktCO ₂ eq	ktCO ₂ eq	ktCO ₂ eq	ktCO ₂ eq	ktCO ₂ eq	
Commercial	33	-15	45%	-10	30%	This reduction is based on an increase in energy efficiency of 30% by retrofitting commercial buildings and increasing renewable energy in collaboration with businesses in the community.
Transport	15	-7	50%	-8	56%	This reduction is based on achieving a target of 50% EVs (2,000 approx.) as well as a 10% decrease in carbon emissions due to increased Active Travel.
Residential	17	-7	40%	-7	43%	This reduction is based on 100% of residential buildings with a D1 BER rating or higher (1,000 approx.) retrofitting to a B1 BER rating.
Waste	20	-10	50%	-10	50%	This reduction is based on decreasing black bin waste by 50% in each household by encouraging recycling and composting.

Table 36– The register of opportunities for Trim DZ

5.4 Laytown-Bettystown

Laytown-Bettystown has developed on the basis of outbound commuting to Dublin, which is facilitated by the rail line into Dublin Connolly Station, and the M1 Motorway linking the North-east of the County to the capital. A strategic employment site has been identified in Laytown adjacent to the train station to provide a focus for addressing the employment deficiencies in this area. The town can be considered a self-sustaining town with a high level of population growth but a weak employment base which is reliant on other areas for employment and/or services and which require targeted 'catch up' investment to become more self-sustaining.

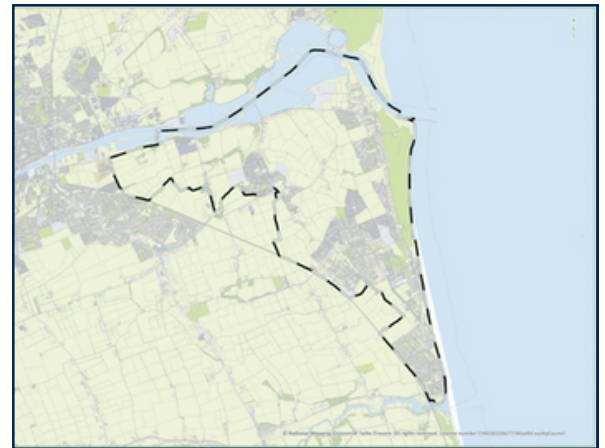
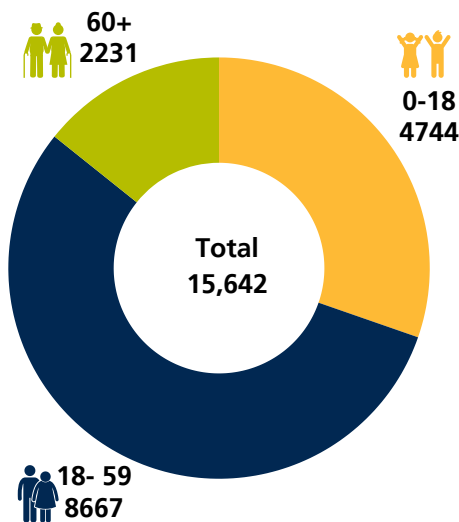


Figure 19: Laytown-Bettystown Decarbonisation Zone

Small area statistics (2022 Census)

Population data 2022 age groups



Laytown-Bettystown population data 2022

0 - 18	18 - 59	60 +	Total 2022	Total 2016
4744	8667	2231	15,642	11,872

Table 37: Population data for Laytown-Bettystown DZ

Housing Data

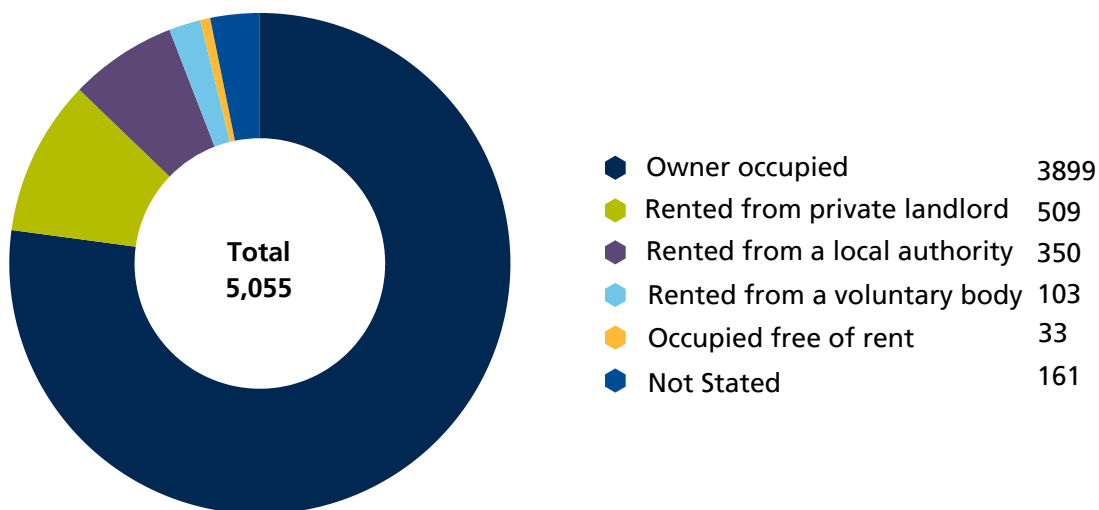


Table 38: Housing data for Laytown-Bettystown DZ

Heating: Permanent private households 2022

Laytown-Bettystown	
No central heating	20
Oil	941
Natural gas	3314
Electricity	509
Coal (incl. anthracite)	48
Peat (incl. turf)	1
Liquid petroleum gas (LPG)	19
Wood (incl. wood pellets)	6
Other	31
Not stated	166
Total	5055

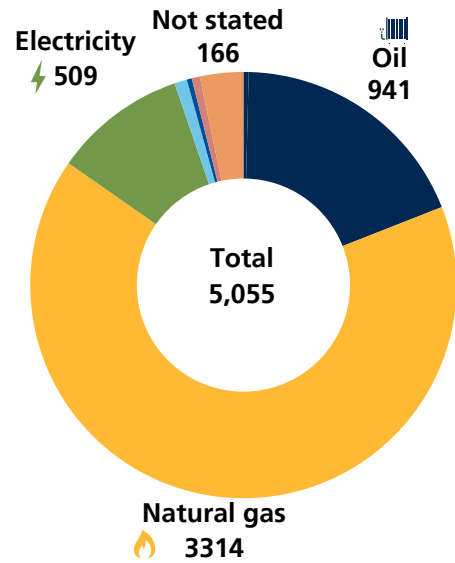


Table 39: Domestic energy sources for Laytown-Bettystown DZ

Commuting data for

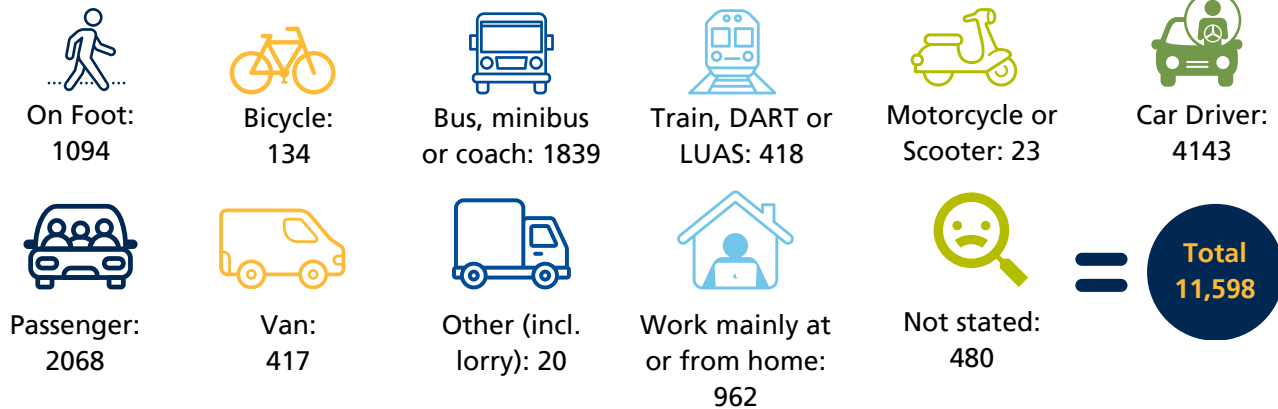
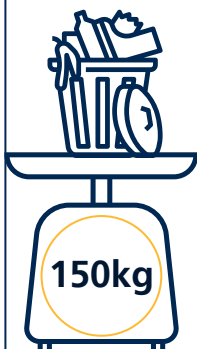


Table 40: Commuting data for Laytown-Bettystown

Food waste data for Laytown-Bettystown



EPA data shows:
The average Irish household throws out **150 kg** of food waste each year: at a cost of approximately **€700**.

Number of houses	Total food waste/ Laytown-Bettystown	Cost @ €700 per household
5505	825.75t	€3,853,500

Table 41: Food waste data for Laytown-Bettystown DZ

Working from home

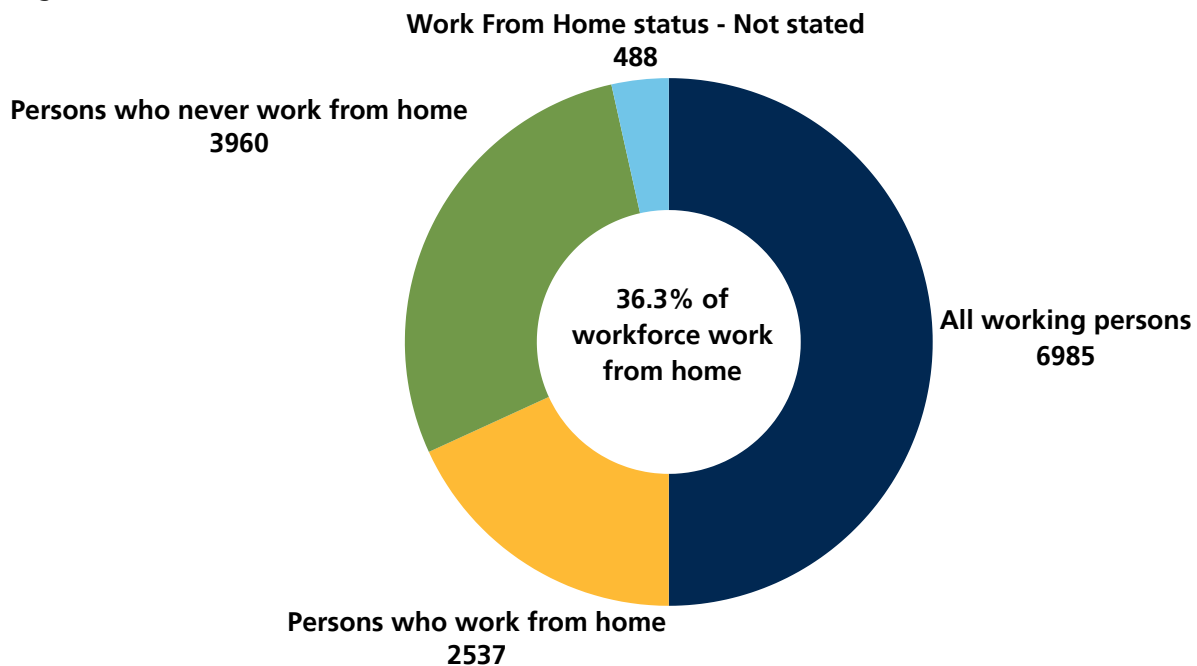


Table 42: Work from home data for Laytown-Bettystown

Business Types Laytown-Bettystown

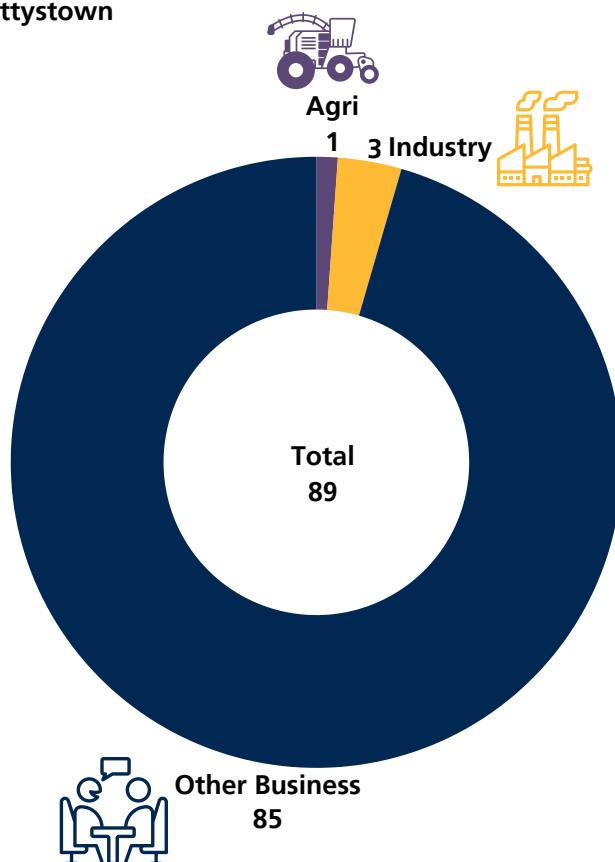






Table 43: Business Types Laytown-Bettystown DZ

Emissions profile for Laytown-Bettystown:

Commercial 		Transport 		Waste 		Residential 	
ktCO ₂ eq	3	ktCO ₂ eq	21	ktCO ₂ eq	32	ktCO ₂ eq	27
% of county total	1%	2%	5%	% of county total	8%	% of county total	8%
County Total	556	County Total	419	County Total	378	County Total	353

DZ Total:

ktCO ₂ eq	83
% of county total	2%
County total	4,254

Table 44 – Emissions per each material sector and the % of the county-wide emissions associated with the Laytown/Bettystown DZ.

Emissions for the Laytown-Bettystown DZ represent 2% of the total emissions for County Meath, with emissions from the Residential and Waste Sectors representing 8% and the transport sector representing 5% of the respective sector totals for County Meath.


Sector	2018 BEI	2030 Reduction target		Projected Reduction 2030		Pathway to 51% emission reduction 
	ktCO ₂ eq	ktCO ₂ eq	ktCO ₂ eq	ktCO ₂ eq	ktCO ₂ eq	
Commercial	3	-1%	45%	-1	25%	This reduction is based on an increase in energy efficiency of 30% by retrofitting commercial buildings and increasing renewable energy in collaboration with businesses in the community.
Transport	21	-11	50%	-11%	51%	This reduction is based on achieving a target of 50% EVs (3,500 approx.) as well as a 10% decrease in carbon emissions due to increased Active Travel.
Residential	21	-11	40%	-3	10%	This reduction is based on 100% of residential buildings with a D1 BER rating or higher (500 approx.) retrofitting to a B1 BER rating.
Waste	32	-16	50%	-16	50%	This reduction is based on decreasing black bin waste by 50% in each household by encouraging recycling and composting.

Table 45 – The register of opportunities for Laytown-Bettystown DZ

5.5 Kells

Kells is one of the most historic towns in Ireland, with a unique cultural and built heritage, making the town an important tourist destination. The town serves as the administrative centre for North Meath and is an important centre for local enterprise and employment. The town is situated on one of the principal arterial motorways to the Capital, M3, which links to the M50, the Dublin Orbital Motorway at 42 minutes and at 49 minutes to Dublin Airport.

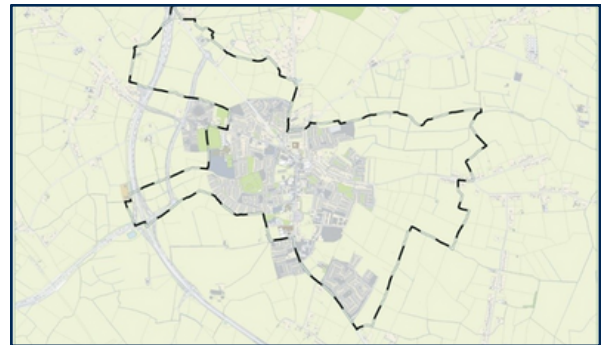
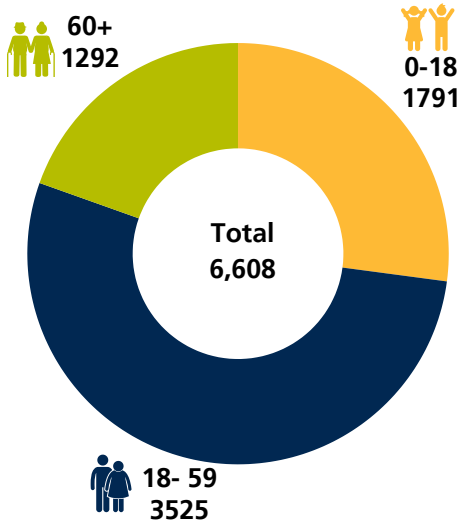


Figure 20: Kells Decarbonisation Zone

Kells is also located on the N52, a national primary route which links the Town going East with N2 to Derry and the M1 motorway to Belfast and going West with the N4/N5 and the M6 motorway to Galway. The town is served by a regular public bus route.

Small area statistics (2022 Census)

Population data 2022 age groups



Kells population data 2022

0 - 18	18 - 59	60 +	Total 2022	Total 2016
1791	3525	1292	6608	6135

Table 46: Population data for Kells DZ

Housing Data

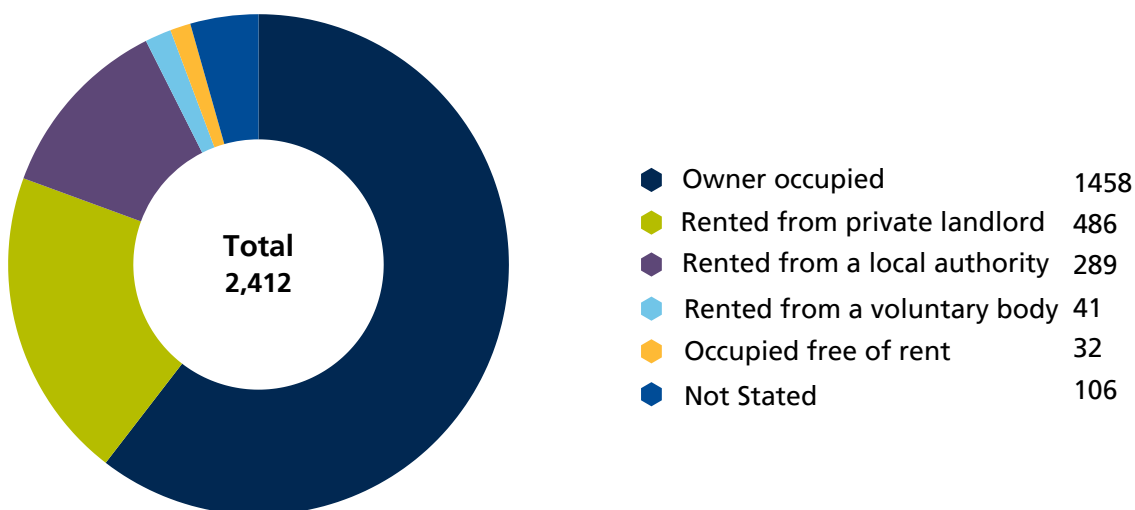


Table 47: Housing data for Kells DZ

Heating: Permanent private households 2022

Kells	
No central heating	23
Oil	1639
Natural gas	203
Electricity	201
Coal (incl. anthracite)	118
Peat (incl. turf)	19
Liquid petroleum gas (LPG)	61
Wood (incl. wood pellets)	17
Other	17
Not stated	114
Total	2412

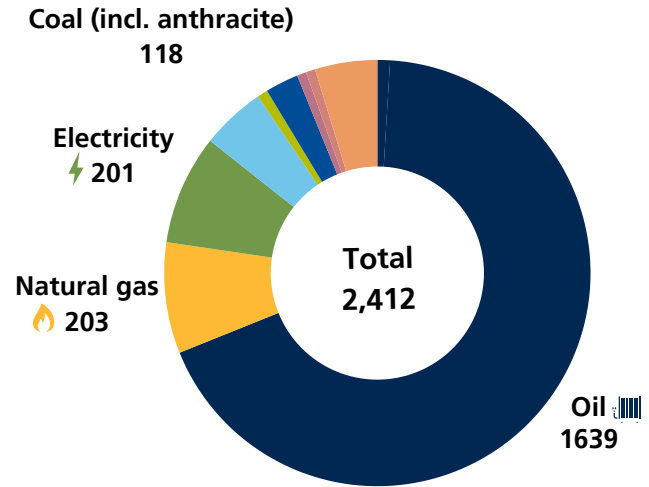


Table 48: Domestic energy sources data for Kells DZ

Commuting data for

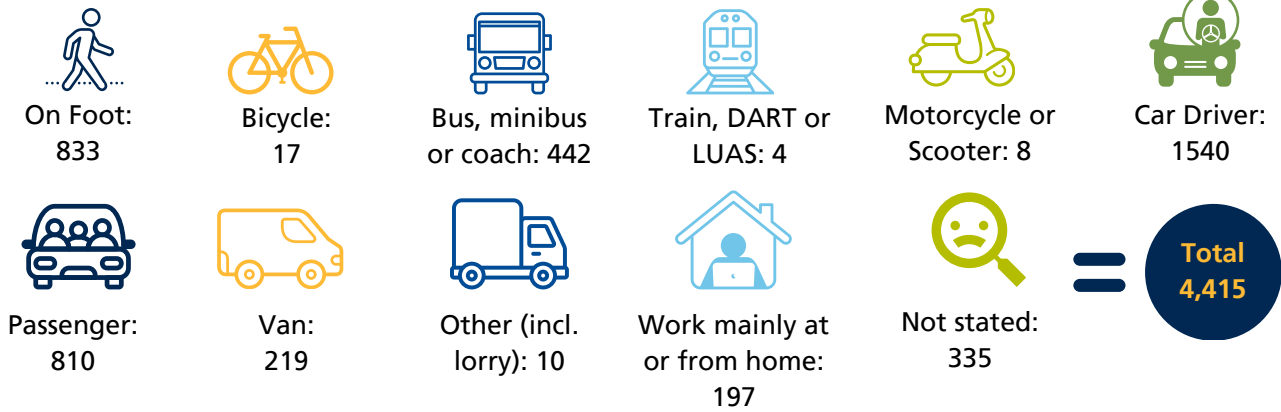
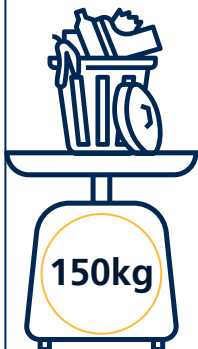


Table 49: Commuting data for Kells DZ

Food waste data for Kells



EPA data shows:
The average Irish household throws out **150 kg** of food waste each year: at a cost of approximately **€700**.

Number of houses	Total food waste/Kells	Cost @ €700 per household
2412	361.8t	€1,688,400

Table 50: Food waste data for Kells DZ

Working from home

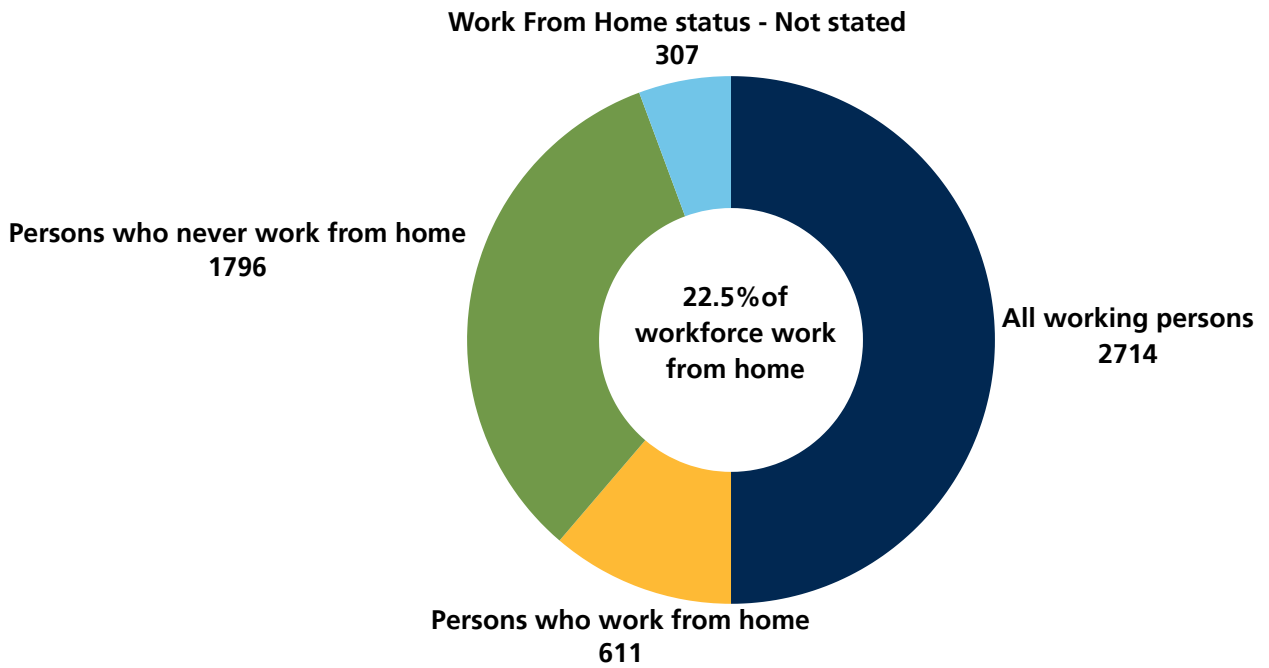


Table 51: Work from home data for Kells DZ

Business Types Kells

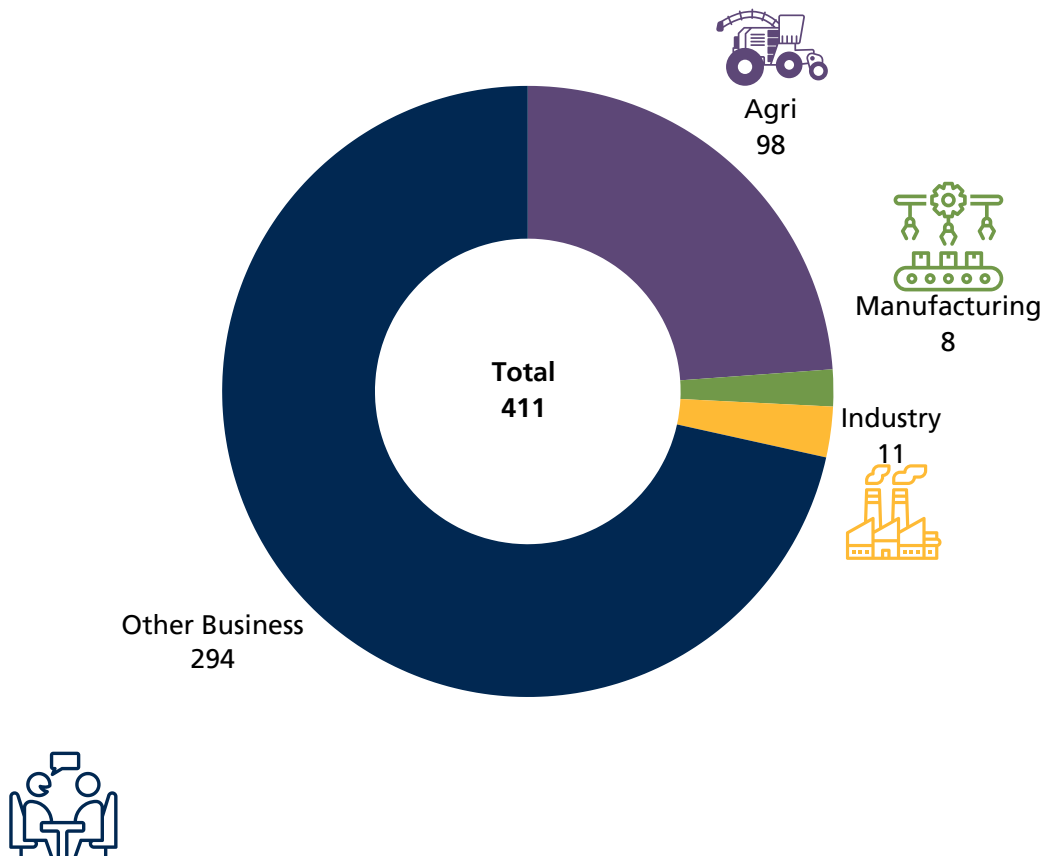






Table 52: Business Type Kells DZ

Emissions profile for Kells:

Commercial 		Transport 		Waste 		Residential 	
ktCO ₂ eq	39	ktCO ₂ eq	9	ktCO ₂ eq	13	ktCO ₂ eq	11
% of county total	7%	% of county total	2%	% of county total	3%	% of county total	3%
County Total	556	County Total	419	County Total	378	County Total	353

DZ Total:

ktCO ₂ eq	72
% of county total	2%
County total	4,254

Table 53 – Emissions per each material sector and the % of the county-wide emissions associated with the Kells DZ.

Emissions for the Kells DZ represent 2% of the total emissions for County Meath, with emissions from the Commercial Sector representing 7% and Waste and Residential Sectors both representing 3% of the respective sector totals for County Meath.


Sector	2018 BEI	2030 Reduction target		Projected Reduction 2030		Pathway to 51% emission reduction 
	ktCO ₂ eq	ktCO ₂ eq	ktCO ₂ eq	ktCO ₂ eq	ktCO ₂ eq	
Commercial	39	-17	45%	-12	30%	This reduction is based on an increase in energy efficiency of 30% by retrofitting commercial buildings and increasing renewable energy in collaboration with businesses in the community.
Transport	9	-4	50%	-5	54%	This reduction is based on achieving a target of 50% EVs (1,000 approx.) as well as a 10% decrease in carbon emissions due to increased Active Travel.
Residential	11	-4	40%	-8	76%	This reduction is based on 100% of residential buildings with a D1 BER rating or higher (1,000 approx.) retrofitting to a B1 BER rating.
Waste	13	-6	50%	-6	50%	This reduction is based on decreasing black bin waste by 50% in each household by encouraging recycling and composting.

Table 54 – The register of opportunities for Kells DZ

5.6 Dunboyne

Dunboyne is a vibrant and rapidly growing district in South Meath. Dunboyne has a solid employment base however relative to the resident workforce, the total number of jobs is quite low.

The strategic location of Dunboyne within the Dublin Metropolitan Area provides opportunities to increase employment and economic activity. The town lies parallel to the M3 Motorway, which connects to the M50 in Dublin.

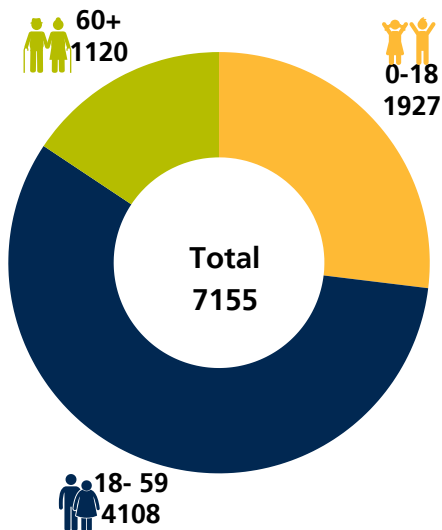


Figure 21: Dunboyne Decarbonisation Zone

There are two rail stations in Dunboyne, with Dunboyne railway station located on the east side of the town and the M3 Parkway Railway Station outside the Town to cater for commuters using the M3. The Town is served by several public transport bus companies. The River Tolka flows in and around Dunboyne.

Small area statistics (2022 Census)

Population data 2022 age groups



Dunboyne population data 2022

0 - 18	18 - 59	60 +	Total 2022	Total 2016
1927	4108	1120	7155	7272

Table 55: Population data for Dunboyne DZ

Housing Data

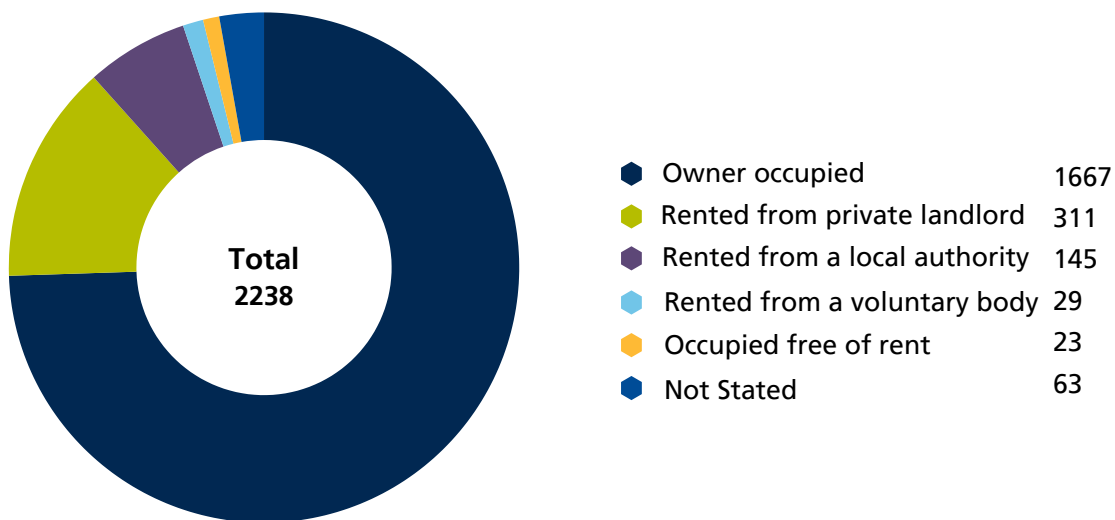


Table 56: Housing data for Dunboyne

Heating: Permanent private households 2022

Dunboyne	
No central heating	8
Oil	564
Natural gas	1260
Electricity	283
Coal (incl. anthracite)	15
Peat (incl. turf)	3
Liquid petroleum gas (LPG)	11
Wood (incl. wood pellets)	10
Other	5
Not stated	79
Total	2238

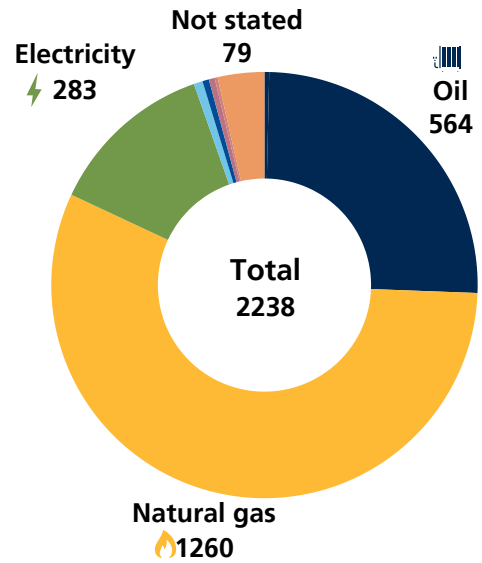


Table 57: Domestic energy sources data for Dunboyne DZ

Commuting data for

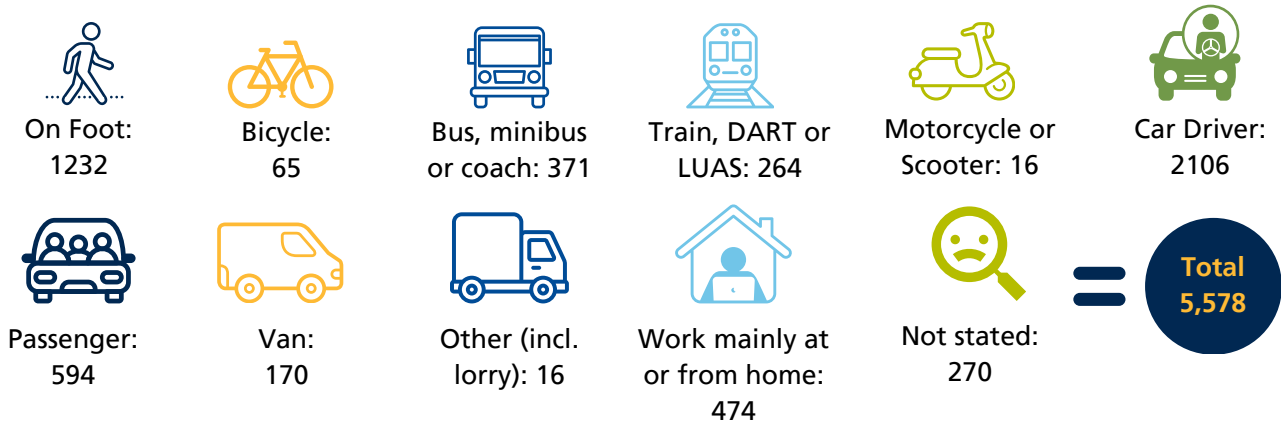
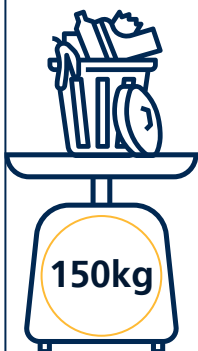


Table 58: Commuting data for Dunboyne DZ



EPA data shows:
The average Irish household throws out **150 kg** of food waste each year: at a cost of approximately **€700**.

Food waste data for Dunboyne

Number of houses	Total food waste/Dunboyne	Cost @ €700 per household
2238	335.7t	€1,566,600

Table 59: Food waste data for Dunboyne DZ

Working from home

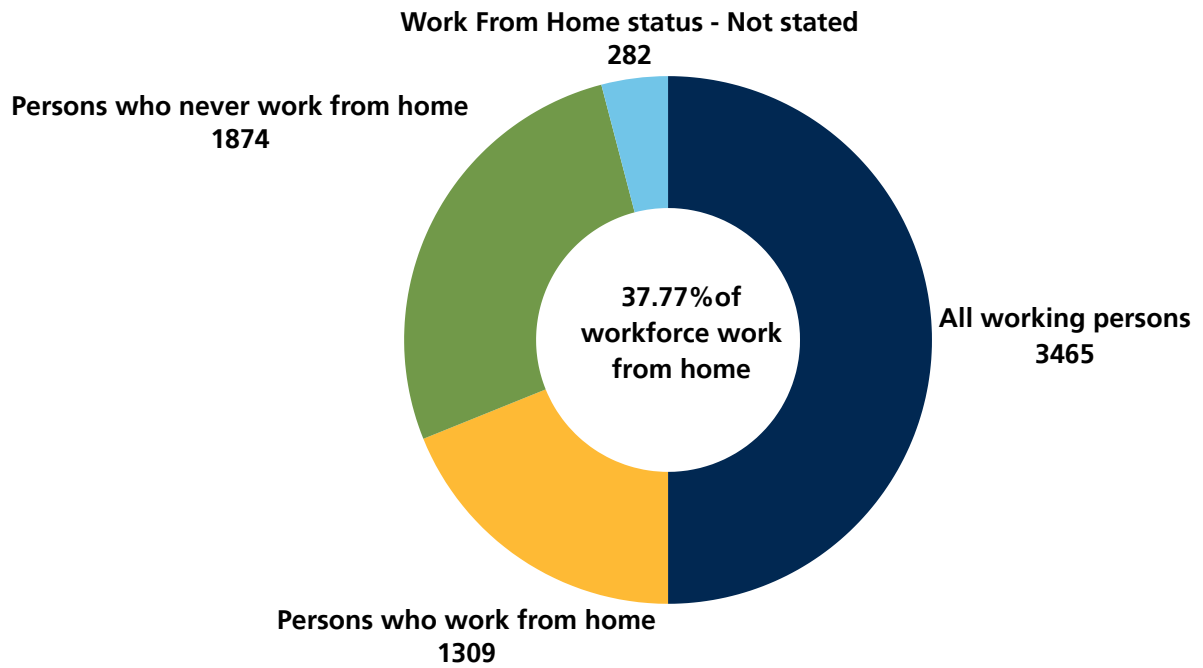


Table 60: Work from home data for Dunboyne DZ

Business Types Dunboyne

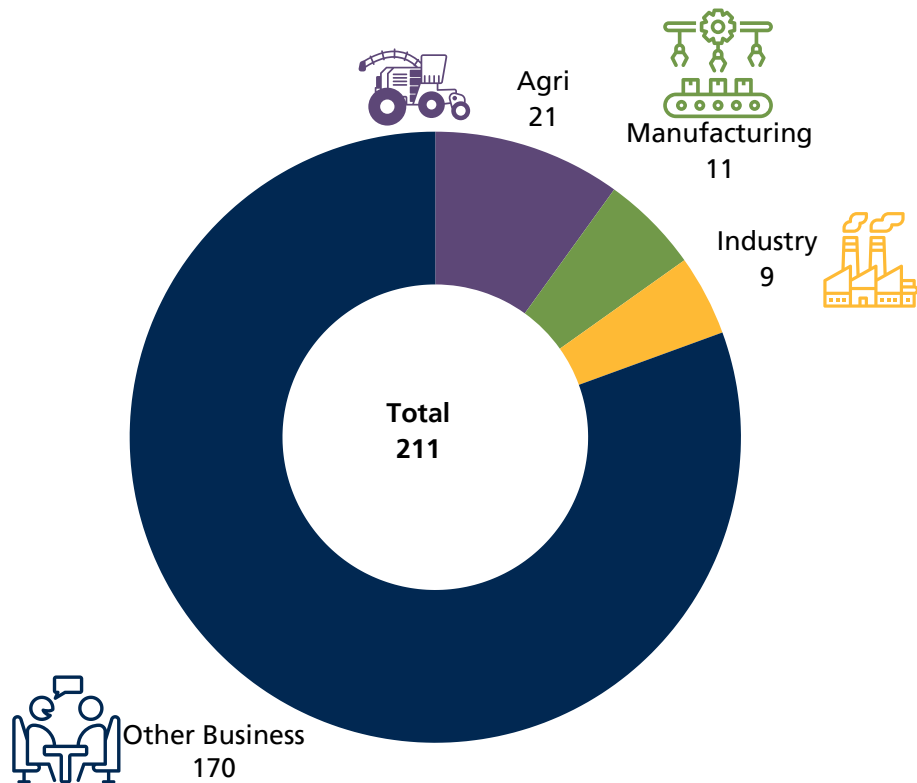






Table 61: Business Types Dunboyne DZ

Emissions profile for Dunbooyne:

Commercial 		Transport 		Waste 		Residential 	
ktCO ₂ eq	29	ktCO ₂ eq	9	ktCO ₂ eq	13	ktCO ₂ eq	11
% of county total	5%	2%	2%	% of county total	3%	% of county total	3%
County Total	556	County Total	419	County Total	378	County Total	353

DZ Total:

ktCO ₂ eq	62
% of county total	1%
County total	4,254

Table 62 – Emissions per each material sector and the % of the county-wide emissions associated with the Dunbooyne DZ.

Emissions for the Dunbooyne DZ represent 1% of the total emissions for County Meath, emissions from the Commercial Sector represents 5% and Residential and Waste Sectors both representing 3% of the respective sector totals for County Meath.


Sector	2018 BEI	2030 Reduction target		Projected Reduction 2030		Pathway to 51% emission reduction 
	ktCO ₂ eq	ktCO ₂ eq	ktCO ₂ eq	ktCO ₂ eq	ktCO ₂ eq	
Commercial	29	-13	45%	-9	30%	This reduction is based on an increase in energy efficiency of 30% by retrofitting commercial buildings and increasing renewable energy in collaboration with businesses in the community.
Transport	9	-4	50%	-5	54%	This reduction is based on achieving a target of 50% EVs (1,000 approx.) as well as a 10% decrease in carbon emissions due to increased Active Travel.
Residential	11	-4	40%	-8	76%	This reduction is based on 100% of residential buildings with a D1 BER rating or higher (1,000 approx.) retrofitting to a B1 BER rating.
Waste	13	-6	50%	-6	50%	This reduction is based on decreasing black bin waste by 50% in each household by encouraging recycling and composting.

Table 63 – The register of opportunities for Dunbooyne DZ

5.7 Ratoath

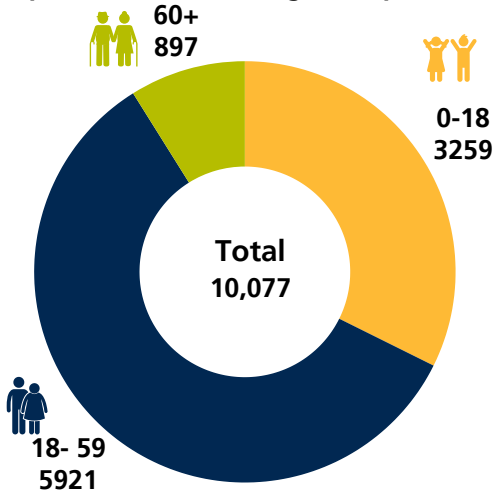
Ratoath Town has developed on the basis of outbound commuting to Dublin and has recorded the highest levels of growth in the County. While social and physical infrastructure and employment provision in this location has struggled to keep pace with the population growth, there is opportunities to provide additional employment pathways in Ratoath by supporting the integration of existing major equestrian facilities. To facilitate such economic investment a strategic employment site has been identified and will be strongly promoted from an economic and employment creation perspective. The town is around 25 kilometres northwest of Dublin City Centre and is closely located to the N2 and N3, both of which link to the M50.



Figure 22: Ratoath Decarbonisation Zone

Small area statistics (2022 Census)

Population data 2022 age groups



Ratoath population data 2022

0 - 18	18 - 59	60 +	Total 2022	Total 2016
3259	5921	897	10,077	9,533

Table 64: Population data for Ratoath DZ

Housing Data

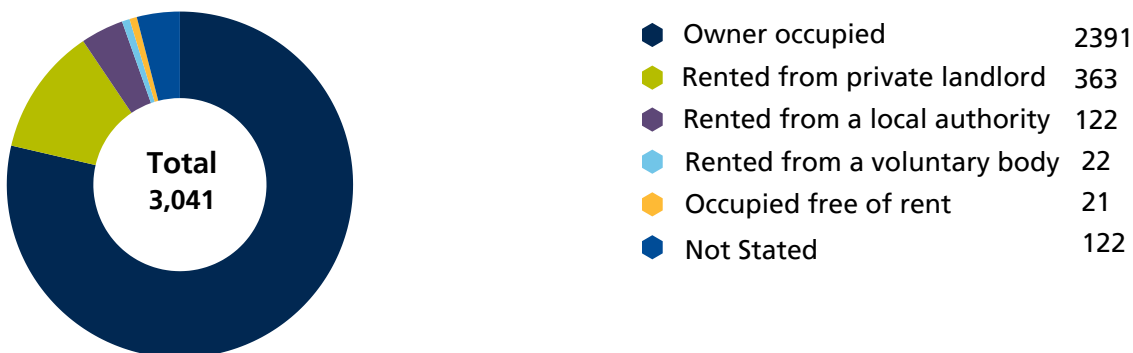


Table 65: Housing data for Ratoath DZ

Heating: Permanent private households 2022

Ratoath	
No central heating	5
Oil	523
Natural gas	2046
Electricity	297
Coal (incl. anthracite)	6
Peat (incl. turf)	1
Liquid petroleum gas (LPG)	7
Wood (incl. wood pellets)	8
Other	28
Not stated	120
Total	3041

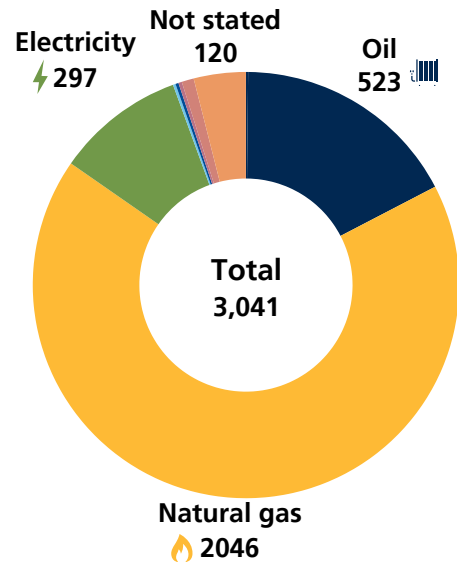


Table 66: Domestic energy sources data for Ratoath DZ

Commuting data for

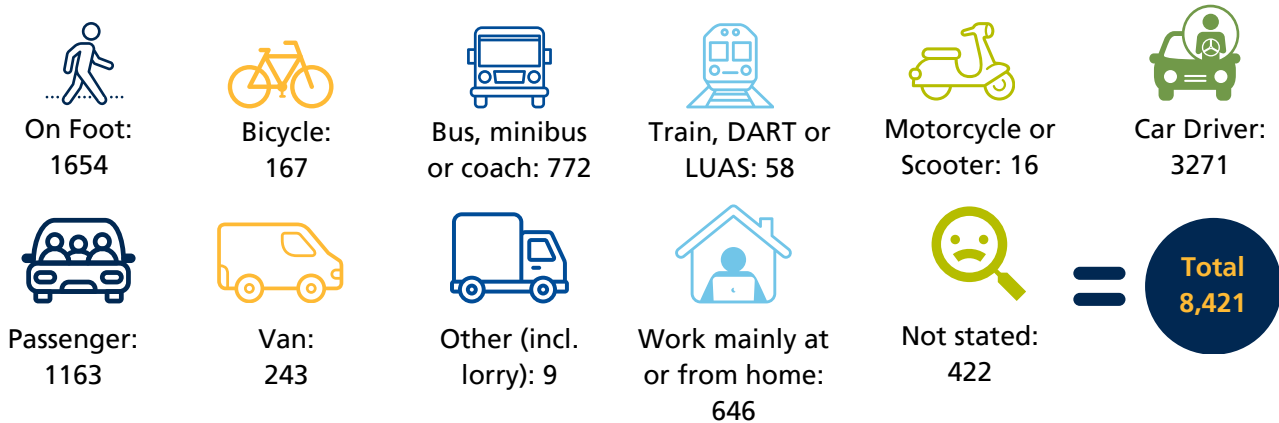
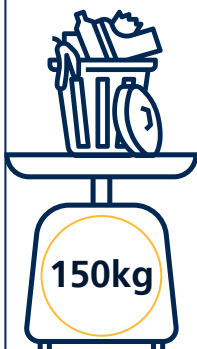


Table 67: Commuting data for Ratoath DZ

Food waste data for Ratoath



EPA data shows:
The average Irish household throws out **150 kg** of food waste each year: at a cost of approximately **€700**.

Number of houses	Total food waste/Ratoath	Cost @ €700 per household
3041	456.15t	€2,128,700

Table 68: Food waste data for Ratoath DZ

Working from home

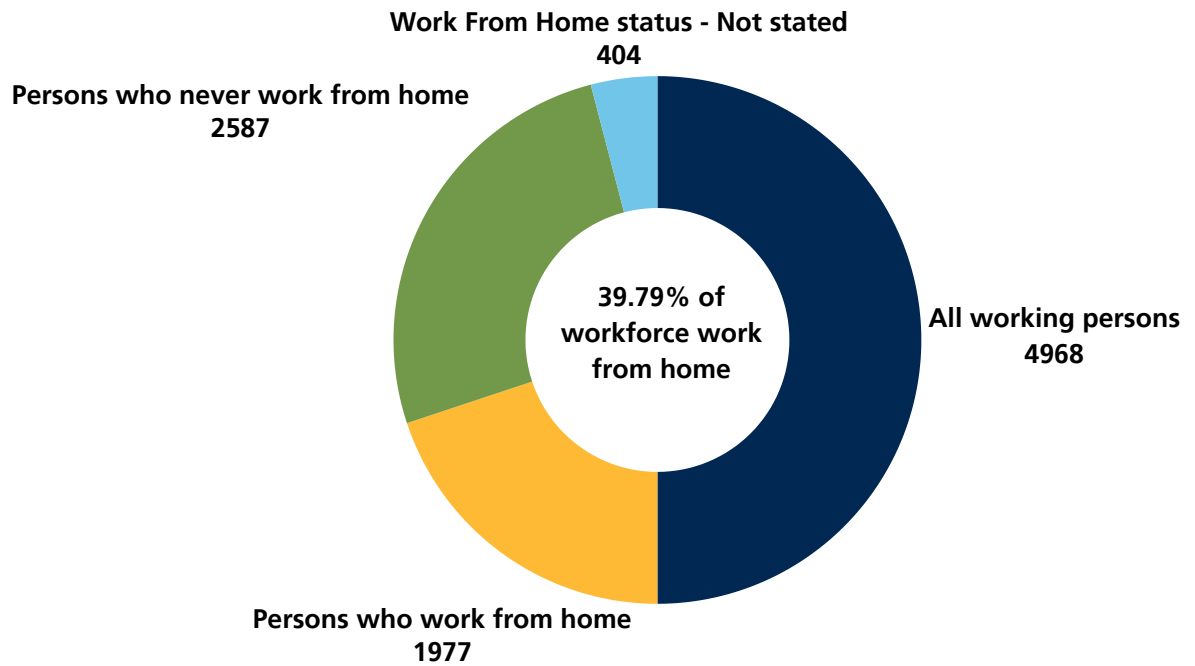


Table 69: Work from home data for Ratoath DZ

Business Types Ratoath

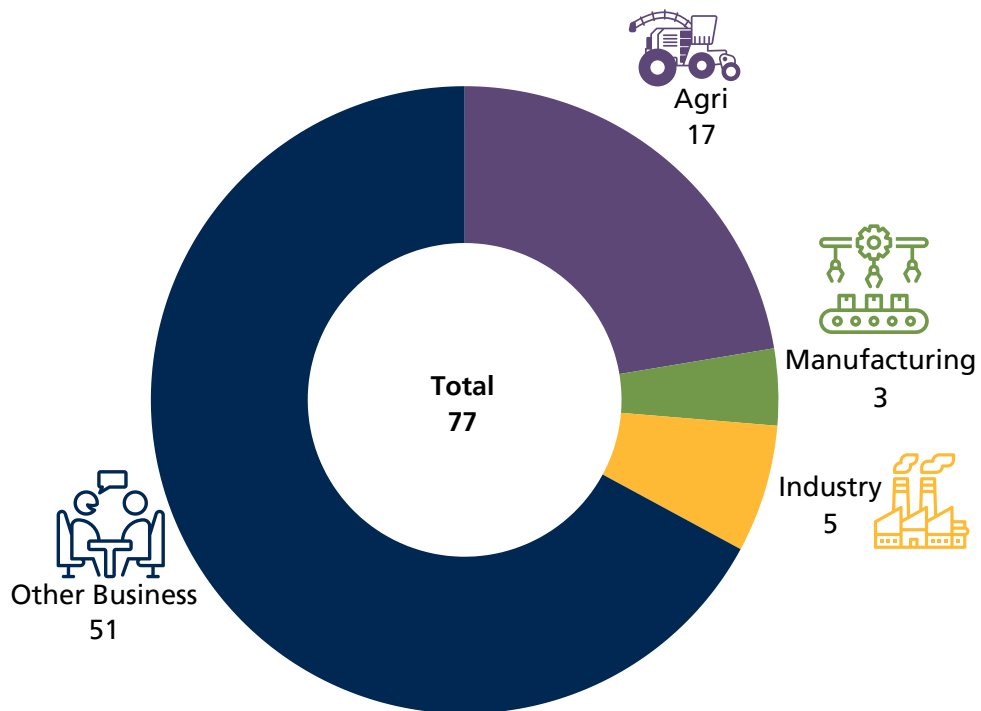






Table 70: Business Types Ratoath DZ

Emissions profile for Ratoath:

Commercial 		Transport 		Waste 		Residential 	
ktCO ₂ eq	8	ktCO ₂ eq	12	ktCO ₂ eq	18	ktCO ₂ eq	15
% of county total	1%	2%	3%	% of county total	5%	% of county total	4%
County Total	556	County Total	419	County Total	378	County Total	353

DZ Total:

ktCO ₂ eq	53
% of county total	1%
County total	4,254

Table 71 – Emissions per each material sector and the % of the county-wide emissions associated with the Ratoath DZ.

Emissions for the Ratoath DZ represents 1% of the total emissions for County Meath, with emissions from the Waste Sector representing 5% and Residential Sector representing 4% of the sector total for County Meath.


Sector	2018 BEI	2030 Reduction target		Projected Reduction 2030		Pathway to 51% emission reduction 
	ktCO ₂ eq	ktCO ₂ eq	ktCO ₂ eq	ktCO ₂ eq	ktCO ₂ eq	
Commercial	8	-4	45%	2	30%	This reduction is based on an increase in energy efficiency of 30% by retrofitting commercial buildings and increasing renewable energy in collaboration with businesses in the community.
Transport	12	-6	50%	-6	51%	This reduction is based on achieving a target of 50% EVs (2,000 approx.) as well as a 10% decrease in carbon emissions due to increased Active Travel.
Residential	15	-6	40%	-1	7%	This reduction is based on 100% of residential buildings with a D1 BER rating or higher (200 approx.) retrofitting to a B1 BER rating.
Waste	18	-9	50%	-9	50%	This reduction is based on decreasing black bin waste by 50% in each household by encouraging recycling and composting.

Table 72: Register of Opportunities for Ratoath DZ

5.8 Dunshaughlin

Dunshaughlin is a thriving satellite market town in South Meath, located at Junction 6 on the M3 motorway which connects to the capital.

Dunshaughlin is situated on one of the principal arterial motorways to the Capital, which links to the M50, the Dublin Orbital Motorway at 30 minutes and at 39 minutes to Dublin Airport. The town has a regular public bus service to Dublin and Navan, Kells and Cavan. In addition, the town is located along the route of the proposed future rail-line to Navan.

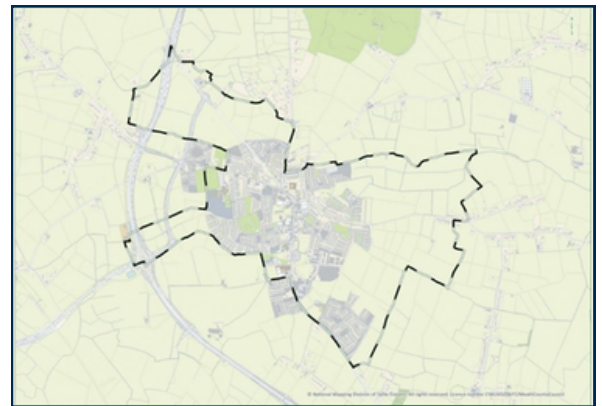
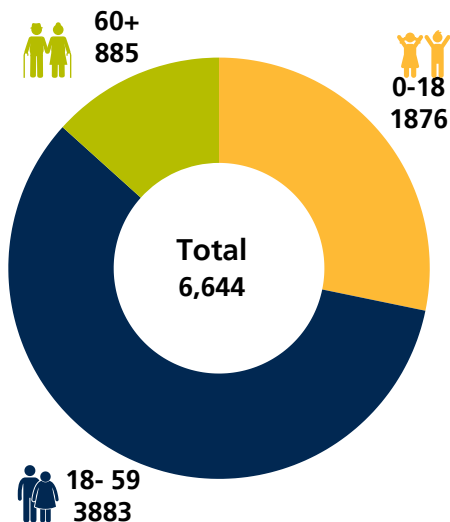


Figure 23: Dunshaughlin Decarbonisation Zone

Small area statistics (2022 Census)

Population data 2022 age groups



Dunshaughlin population data 2022

0 - 18	18 - 59	60 +	Total 2022	Total 2016
1876	3883	885	6644	4035

Table 73: Population data for Dunshaughlin DZ.

Housing Data

Owner occupied	1753	Rented from a voluntary body	30
Rented from private landlord	276	Occupied free of rent	11
Rented from a local authority	137	Not Stated	83

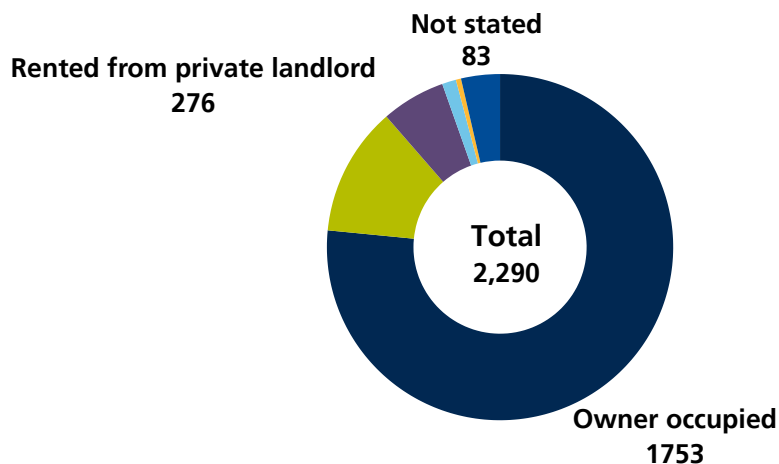


Table 74: Housing data for Dunshaughlin DZ.

Heating: Permanent private households 2022

Dunshaughlin	
No central heating	8
Oil	613
Natural gas	1108
Electricity	395
Coal (incl. anthracite)	20
Peat (incl. turf)	1
Liquid petroleum gas (LPG)	10
Wood (incl. wood pellets)	7
Other	36
Not stated	92
Total	2290

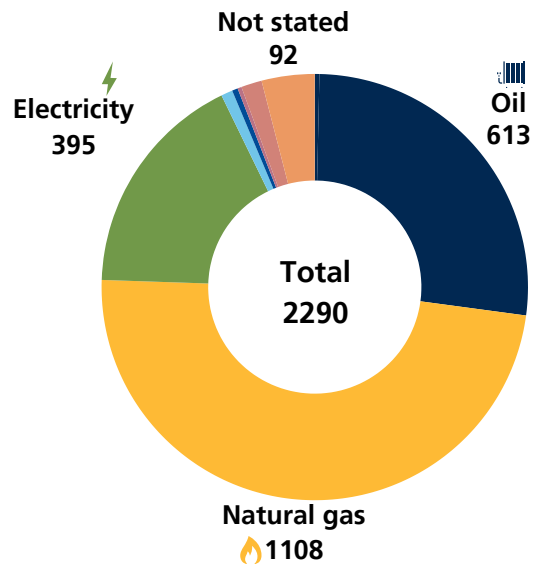


Table 75: Domestic energy sources data for Dunshaughlin DZ

Commuting data for

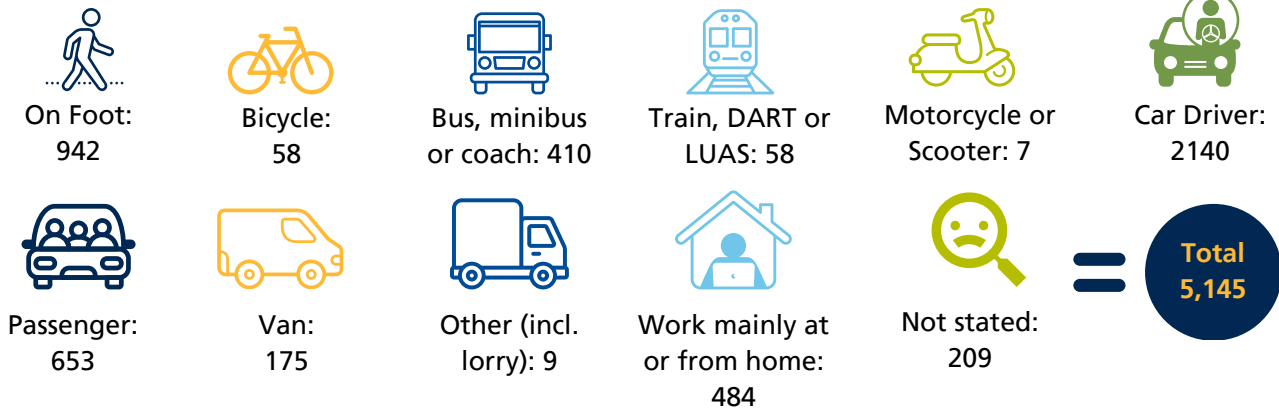
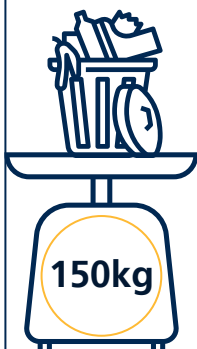


Table 76: Commuting data for Dunshaughlin DZ

Food waste data for Dunshaughlin



EPA data shows:
The average Irish household throws out **150 kg** of food waste each year: at a cost of approximately **€700**.

Number of houses	Total food waste/Dunshaughlin	Cost @ €700 per household
2290	344.5t	€1,603,000

Table 77: Food waste data for Dunshaughlin DZ

Working from home

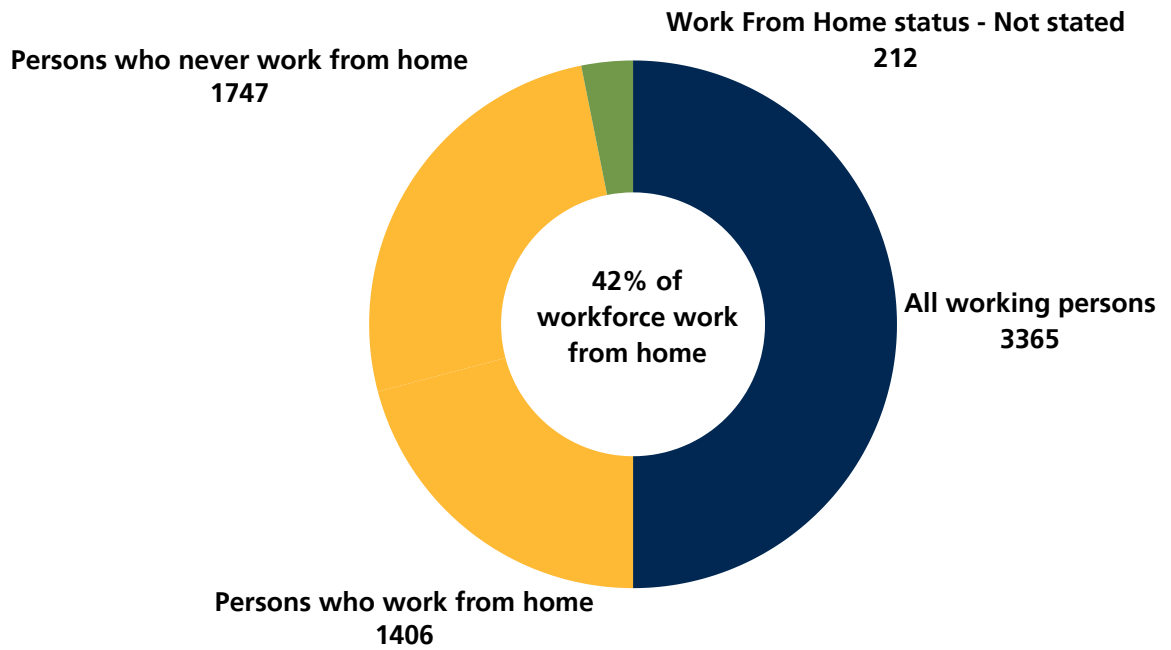


Table 78: Work from home data for Dunshaughlin DZ.

Business Types Dunshaughlin

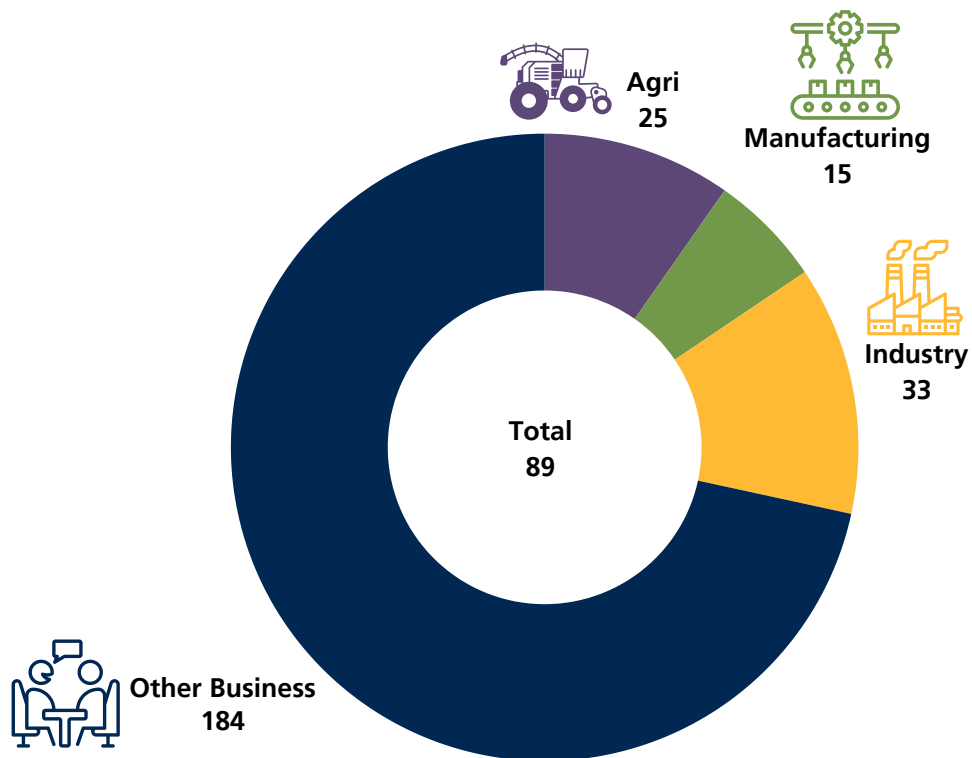






Table 79: Business Types Dunshaughlin DZ.

Emissions profile for Dunshaughlin:

Commercial 		Transport 		Waste 		Residential 	
ktCO ₂ eq	18	ktCO ₂ eq	9	ktCO ₂ eq	14	ktCO ₂ eq	11
% of county total	3%	2%	2%	% of county total	4%	% of county total	3%
County Total	556	County Total	419	County Total	378	County Total	353

DZ Total:

ktCO ₂ eq	52
% of county total	1%
County total	4,254

Table 80 – Emissions per each material sector and the % of the county-wide emissions associated with the Dunshaughlin DZ.

Emissions for the Dunshaughlin DZ represents 1% of the total emissions for County Meath, emissions from the Waste Sector represents 4% and Commercial and Residential Sectors both representing 3% of the respective sector totals for County Meath.


Sector	2018 BEI	2030 Reduction target		Projected Reduction 2030		Pathway to 51% emission reduction 
	ktCO ₂ eq	ktCO ₂ eq	ktCO ₂ eq	ktCO ₂ eq	ktCO ₂ eq	
Commercial	18	-8	45%	-5	29%	This reduction is based on an increase in energy efficiency of 30% by retrofitting commercial buildings and increasing renewable energy in collaboration with businesses in the community.
Transport	9	-4	50%	-5	51%	This reduction is based on achieving a target of 50% EVs (1,500 approx.) as well as a 10% decrease in carbon emissions due to increased Active Travel.
Residential	11	-4	40%	-1	135	This reduction is based on 100% of residential buildings with a D1 BER rating or higher (300 approx.) retrofitting to a B1 BER rating.
Waste	14	-7	50%	-7	50%	This reduction is based on decreasing black bin waste by 50% in each household by encouraging recycling and composting.

Table 81: The register of opportunities for Dunshaughlin DZ

5.9 Duleek

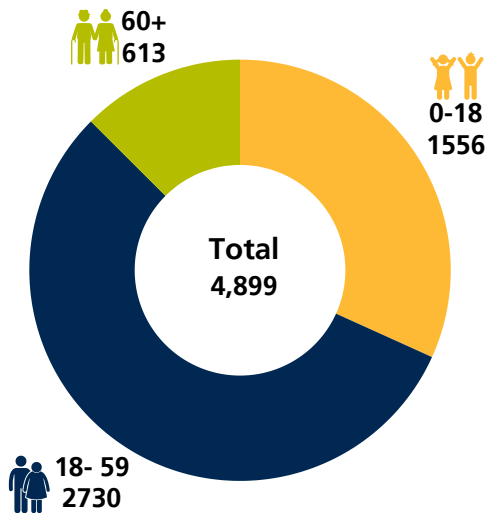
Duleek town is the administrative centre for East Meath. This self-sustaining town has experienced a high level of commuter led residential growth but weak employment base reliant on other areas for employment and services. However, Duleek does have a high capacity to generate additional employment in the existing business park and facilitate residential growth on a number of infill sites. It is situated 8km Southwest of Drogheda, 19km East of the County town, Navan, 13 km West of the coast at Laytown-Bettystown and 42km North of Dublin. Duleek is on the R150 and R152 regional roads. Bus Éireann regional routes serve Duleek from Dublin and Drogheda.



Figure 24: Duleek Decarbonisation Zone

Small area statistics (2022 Census)

Population data 2022 age groups



Duleek population data 2022

0 - 18	18 - 59	60 +	Total 2022	Total 2016
1556	2730	613	4,899	4,219

Table 82: Population data for Duleek DZ

Housing Data

- Owner occupied 1068
- Rented from private landlord 177
- Rented from a local authority 200
- Rented from a voluntary body 24
- Occupied free of rent 12
- Not Stated 80

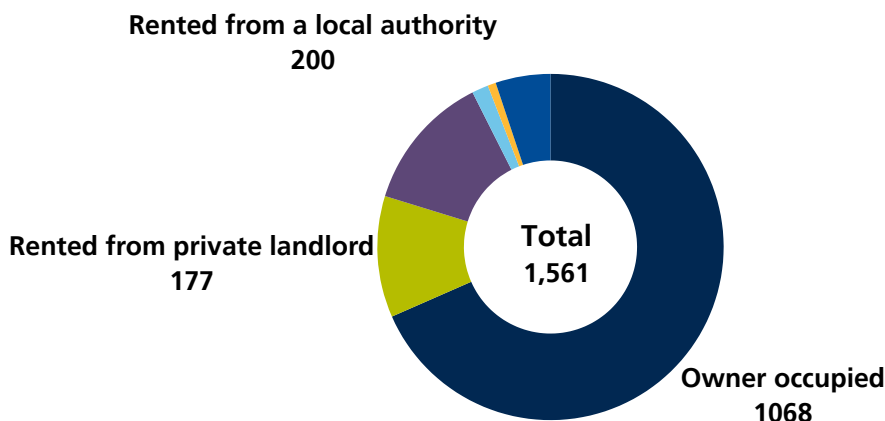


Table 83: Housing data for Duleek DZ

Heating: Permanent private households 2022

Duleek	
No central heating	3
Oil	616
Natural gas	696
Electricity	88
Coal (incl. anthracite)	56
Peat (incl. turf)	0
Liquid petroleum gas (LPG)	5
Wood (incl. wood pellets)	8
Other	10
Not stated	79
Total	1561

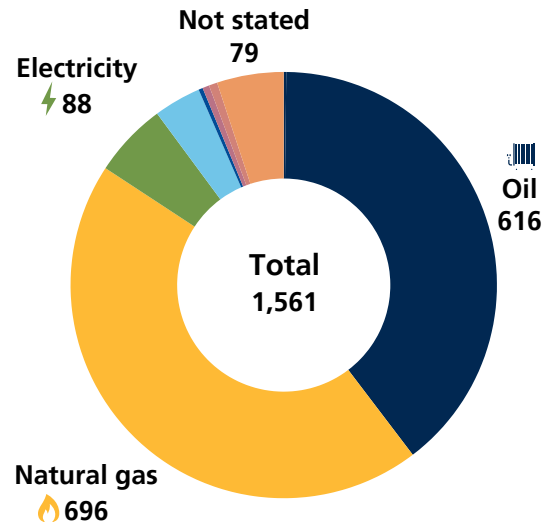


Table 84: Domestic energy sources data for Duleek DZ

Commuting data for

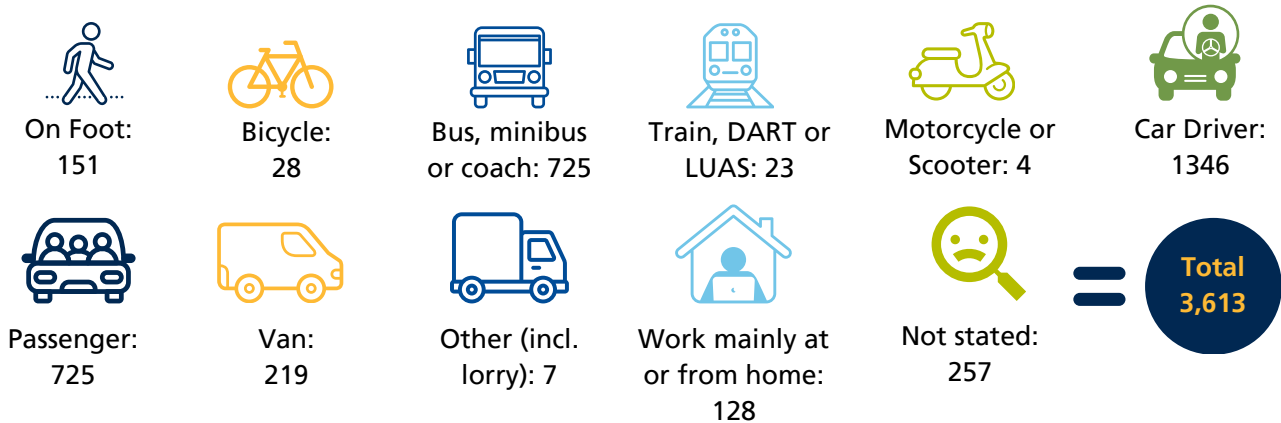
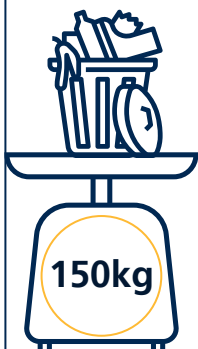


Table 85: Commuting data for Duleek DZ



EPA data shows:
The average Irish household throws out **150 kg** of food waste each year: at a cost of approximately **€700**.

Food waste data for Duleek

Number of houses	Total food waste/Duleek	Cost @ €700 per household
1561	234.15t	€1,092,700

Table 86: Food waste data for Duleek DZ

Working from home

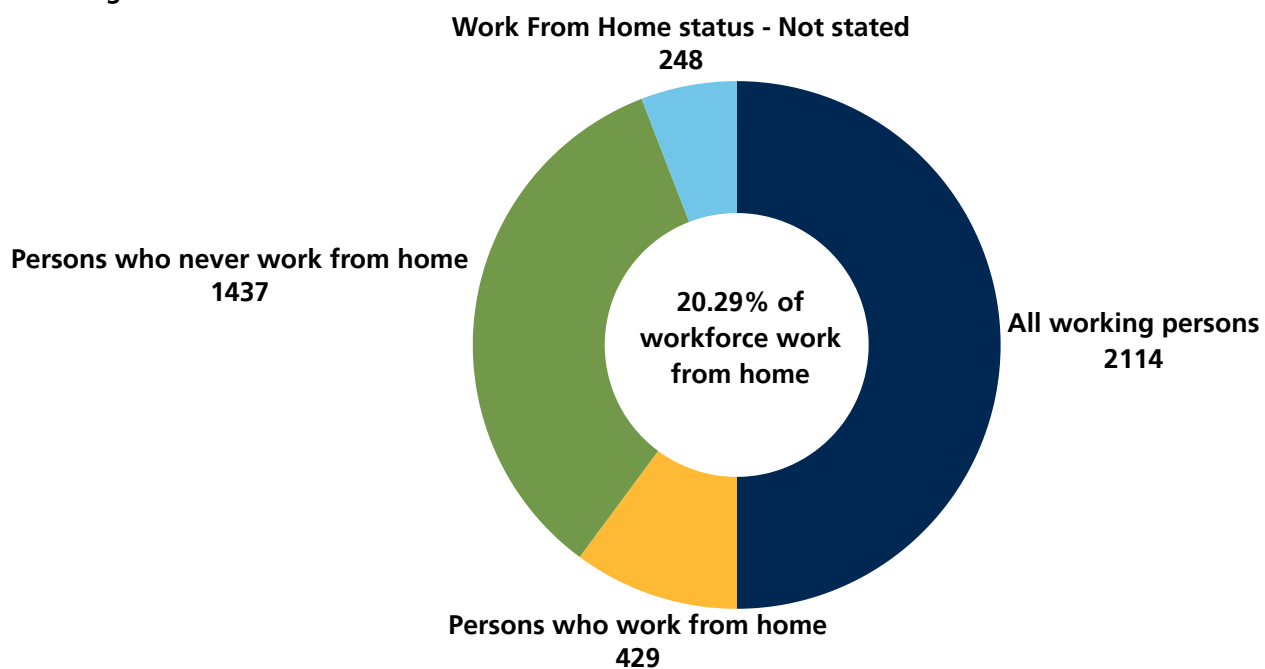


Table 87: Work from home data for Duleek DZ

Business Types Duleek

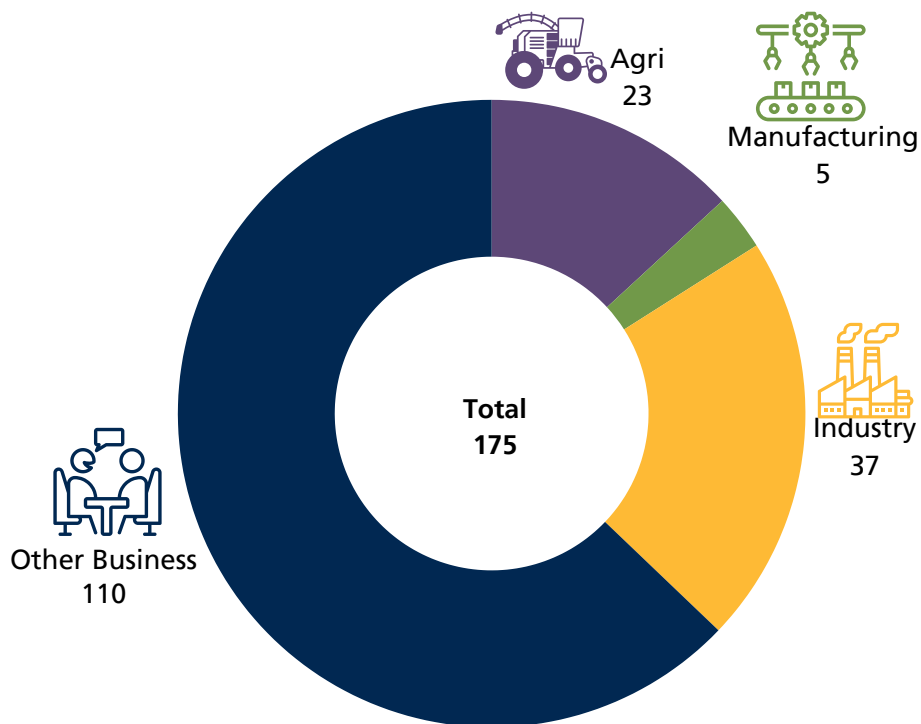






Table 88: Business Types Duleek DZ

Emissions profile for Duleek:

Commercial 		Transport 		Waste 		Residential 	
ktCO ₂ eq	12	ktCO ₂ eq	6	ktCO ₂ eq	9	ktCO ₂ eq	7
% of county total	2%	2%	1%	% of county total	2%	% of county total	2%
County Total	556	County Total	419	County Total	378	County Total	353

DZ Total:

ktCO ₂ eq	34
% of county total	1%
County total	4,254

Table 89 – Emissions per each material sector and the % of the county-wide emissions associated with the Duleek DZ.

Emissions for the Duleek DZ represents 1% of the total emissions for County Meath, emissions from the Commercial, Residential and Waste Sectors represents 2% each of the respective sector totals for County Meath.


Sector	2018 BEI	2030 Reduction target		Projected Reduction 2030		Pathway to 51% emission reduction 
	ktCO ₂ eq	ktCO ₂ eq	ktCO ₂ eq	ktCO ₂ eq	ktCO ₂ eq	
Commercial	12	-5	45%	-4	30%	This reduction is based on an increase in energy efficiency of 30% by retrofitting commercial buildings and increasing renewable energy in collaboration with businesses in the community.
Transport	6	-3	50%	-3	53%	This reduction is based on achieving a target of 50% EVs (1,000 approx.) as well as a 10% decrease in carbon emissions due to increased Active Travel.
Residential	7	-3	40%	-1	16%	This reduction is based on 100% of residential buildings with a D1 BER rating or higher (200 approx.) retrofitting to a B1 BER rating.
Waste	9	-4	50%	-4	50%	This reduction is based on decreasing black bin waste by 50% in each household by encouraging recycling and composting.

Table 90: Register of Opportunities for Duleek DZ

Next Steps

The next step for Meath County Council, is to co-create individual DZ Implementation Plans, in consultation with the local communities, and stakeholders within each of the Decarbonising Zones. This includes:

- Developing a Public Engagement Plan.
- Establishing key stakeholder groups within each Decarbonising Zones made up of representatives from the local community, businesses, transport and, energy sectors.
- Co-creating a list of prioritised actions, expanding on the strategic interventions and register of opportunities.
- Developing a governance framework for the Decarbonising Zones.
- Supporting the delivery of the Implementation Plan to achieve the Decarbonising Zone vision for 2030.



6.0 Climate Action

6.1 Implementation Planning

The implementation of this Climate Action Plan requires a whole-of-Council and society approach which will be co-ordinated by the Climate Action Section.

Climate Action Section

Meath County Council's Climate Action Section was established in 2022 and includes:

- Climate Change Co-ordinator;
- Climate Action Officer;
- Community Climate Action Officer; and
- Energy Efficiency Officer.

The role of this Section is to drive climate action within the Council, to deliver specific actions (including the Community Climate Action Fund), to support and monitor the implementation of the actions, and to co-ordinate the reporting and evaluation of the Plan following its approval by the Elected Members. The Climate Action Section is supported by each action holding department and lead representatives across Council departments. The Climate Action Section will also be the point of contact for engaging and informing citizens, communities, and businesses on climate action.

Also promoting and supporting in the delivery of this Climate Action Plan is the Climate Action Forum, which is comprised of cross-party Council Elected Members. The Climate Action Forum encourages community leadership, citizen engagement and enhances a two-way climate action conversation between Meath County Council and citizens.

6.2 Framework of Climate Actions

The most effective way of reaching our goals is to work together in achieving a unified vision of the future that supports ambitious climate action. Given the wide role that Meath County Council has, it is important to have a unifying vision which reflects a desired and shared perspective of the future in a climate resilient and climate neutral society, that will unite all stakeholders and inspire action.

Vision

Meath aims to be a climate resilient, biodiverse rich, environmentally sustainable and climate neutral economy that supports healthy lifestyles and jobs growth.

Mission

Meath County Council is committed to lead in translating the National Climate Policy into local actions through inclusive engagement, capacity building and leadership for the people of County Meath.

Actions prioritised as part of this framework will work to reduce emissions from Meath County Council's own assets and operations, influence sectors in the delivery of their own emission reductions, raise awareness of climate change and promote positive climate action at a local level.

Development of Climate Actions

The development of climate actions in this plan has been completed with due regard and cognisance of the National Climate Action Plan 2023 and National Adaptation Framework. Due consideration has also been given to the sectoral emissions ceilings and budgets that help to shape and inform government policy on climate action over the next five years has also been given.

The actions of this plan are aligned with:

- Delivering Effective Climate Action 2030, DECA
- National Implementation Plan for SDGs
- Meath County Development Plan 2021-2027

Prioritizing Impact and Co-Benefits of Actions

In order to fulfill climate obligations centred on reducing emissions and enhancing resilience, the following measures have been identified for implementation. These actions and projects will be prioritised based on their positive climate influence, the various co-benefits they offer and value for money. Multiple sources of funding and grants will be leveraged to execute these actions and projects.

A key focus of these actions will be to disseminate easily comprehensible climate information, fostering awareness and inspiring active participation in climate action.

Furthermore, the co-benefits targeted by these actions and projects will aim to concurrently safeguard and enhance the natural environment, thereby enhancing health and well-being outcomes while supporting a sustainable and environmentally friendly local economy and environment.

Dependencies

It is important to note that the delivery of actions contained in this plan will be dependent upon several factors including:

Stakeholder buy-in: To deliver the actions contained in this plan, stakeholder buy-in will be essential. Examples of stakeholders include residents, community organisations, businesses, and public sector bodies.

Available Funding: Actions often require funding outside of the local authorities' assigned budgets and the availability of funding / grants from external government and non-governmental sources will be a key determinant in the delivery of some actions contained in this plan.

Prior/Prerequisite actions: Actions contained in this plan can be dependent on the delivery of prerequisite actions e.g., feasibility studies may be required prior the installation of renewable energy technologies.

Meath aims to be a climate resilient, biodiverse rich, environmentally sustainable and climate neutral economy that supports healthy lifestyles and jobs growth.



Meath County Council is committed to lead in translating the National Climate Policy into local actions through inclusive engagement, capacity building and leadership for the people of County Meath.



Thematic Areas, Strategic Goals and Objectives


















 Governance & Leadership	 Built Environment & Transport	 Natural Environment & Green Infrastructure	 Communities: Resilience & Transition	 Sustainability & Resource Management
<p>Goal 1</p> <p>Develop appropriate structures and processes for directing and managing effective climate action.</p>	<p>Goal 2</p> <p>Achieve local government carbon emission and energy efficiency targets for 2030.</p>	<p>Goal 3</p> <p>Protect and enhance Meath's natural environment by supporting biodiversity and increasing climate resilience.</p>	<p>Goal 4</p> <p>Mobilise climate action in local communities, whilst achieving a just transition.</p>	<p>Goal 5</p> <p>Create a culture of sustainability, promoting a circular economy throughout the County.</p>
<p>1.1 Support the development and implementation of positive climate action across all services and operations of Meath County Council, collaborating with others to enable and inspire endeavours to reduce their climate impact.</p>	<p>2.1 Minimize the Council's contribution to climate change by increasing energy efficiency, reducing carbon emissions and encouraging sustainable opportunities for the broader County Meath community.</p>	<p>3.1 Support the responsible management, protection and enhancement of Meath's natural heritage, biodiversity and natural environment.</p>	<p>4.1 Promote through collaboration and partnership sustainable, inclusive and resilient communities, focusing on actions which promotes health and wellbeing benefits and supports local economies.</p>	<p>5.1 Support circular economy initiatives and infrastructure, focusing on prevention, reuse, repair and recycling and promote green business opportunities.</p>
<p>Actions</p>	<p>Actions</p>	<p>Actions</p>	<p>Actions</p>	<p>Actions</p>

Table 91: The relationship between Meath County Council's Climate Action Vision, Missions, Thematic Areas, Strategic Goals, Objectives, and Actions

Strategic Goal 1 Governance and Leadership

Thematic Area	Strategic Goal	Objectives
 <p>Governance & Leadership</p>	Develop appropriate structures and processes for directing and managing effective climate action.	1.1 Support the development and implementation of positive climate action across all services and operations of Meath County Council, collaborating with others to enable and inspire endeavours to reduce their climate impact.
<p>Policy Alignment/ Sustainable Development Goals</p>		<p>Policy Alignment/ Delivering Effective Climate Action Goals</p>
    		 
<p>Co-Benefits</p>		
<p>  Enhanced Governance  Improved Service Delivery  Green job creation and skills development  Climate Awareness and Capacity Building </p>		

The size and scale of the climate change activity requires strong governance that is sufficiently flexible to work to the complexities and challenges involved.

Ultimately, the successful implementation of this action plan is the collective responsibility of many stakeholders, beyond Meath County Council. However, a critical success factor is that Meath County Council is committed to providing strong governance and leadership in delivering this plan.

In this context Meath County Council will oversee responsibility for reducing greenhouse gas emissions from across its own assets and infrastructure, build resilience to ensure continued service provision, while more broadly, enabling and influencing others to meet their own climate obligations.

Actions set out as part of the strategic goal of Governance and Leadership will ensure that Meath County Council is mobilised to pursue positive climate action:




- **Climate Action Capacities:** Resources and governance arrangements are in place to enable effective decision making and support the implementation of the climate action plan.
- **Cross-departmental arrangements and action:** Continuation of the local authority climate action team to promote multi-departmental coordination and collaboration to give effect to the implementation of actions across all services of the Council.
- **Working together:** Engage with relevant government departments, agencies, staff and stakeholders and establish partnerships to find solutions to implement actions.
- **Mainstreaming:** All strategies, policies, plans, and projects developed by the Council are compatible with the climate action plan.
- **Legislative and Policy:** Compliance and implementation of regulations, policies, and strategies.
- **Communications and engagement:** Raise public awareness to support the implementation of the climate action plan.
- **Monitoring and reporting:** Track progress towards achieving actions and ensure transparent reporting.

Strategic Goal 1 Governance and Leadership: Actions

No.	Action	Adaptation/Mitigation	Tracking Measure	Timeframe
GL1	Implement ISO 50001 Energy Management System.	Combined	Certification to ISO 50001 attained	Q2 2024
GL2	Use green procurement where feasible in all procurement of good and services.	Combined	%Green Public Procurement spend	Annual to 2029
GL3	Prepare a Sustainable Development Goals (SDGs) Guidance Document to support the inclusion of the global goals in all plans, strategies and grant programmes published by the LA.	Combined	Document published	QR1 2025
GL4	Mainstreaming of climate mitigation and adaptation considerations into all policies, strategies and plans adopted by LA.	Combined	Climate mitigation and adaptation considered within all LA documents	2024 - 2029
GL5	Identify an appropriate monitoring and reporting protocol on the implementation of low carbon construction in public tenders and grant schemes.	Combined	Annual Report on embodied, operations and sequestered carbon	QR4 2027
GL6	Undertake annual audits of climate expenditure that considers cost effectiveness, efficiency, governance, relevance, coherence, and impacts (environment and societal).	Combined	Annual audit completed and actions identified	Annual to 2029
GL7	Identify and put in place appropriate business continuity measures to ensure continuity of service provision during severe weather events.	Combined	Business Continuity Plan published	QR4 2024
GL8	Conduct detailed study of staff modal split to identify measures to reduce staff travel emissions.	Mitigation	Study complete and measures identified	QR4 2024
GL9	Organise awareness, information, knowledge sharing and capacity initiatives with staff on mitigation and adaptation measures.	Combined	4 No. staff initiatives annually	Annual to 2029
GL10	Delivery of EV Charging Strategy for County Meath.	Mitigation	Strategy published; No. of chargers installed annually	QR4 2025 Annual to 2029
GL11	Continue to support and expand the 'Bus It 2 School' Pathfinder Project.	Combined	No. of children transitioning to travelling to school by bus	Q4 2024
GL12	Develop strategic partnerships to assist in achieving emissions targets.	Combined	No. of partnerships established	Annual to 2029
GL13	Ensure readily available information, advice, knowledge, and awareness of climate friendly actions via LA Climate Action Website and social media posts.	Combined	No. of media interactions	Annual to 2029
GL14	LA staff to receive climate action training under Local Authority Climate Action Training Programme	Mitigation	No. and percentage of staff trained Percentage of staff trained in adaptation scenario planning	Annual to 2029

Table 92: Actions for Strategic Goal 1 Governance and Leadership

Strategic Goal 2 Built Environment and Transport: Actions

Thematic Area	Strategic Goal	Objectives
 <p>Built Environment & Transport</p>	Achieve local government carbon emission and energy efficiency targets for 2030.	2.1 Minimize the Council's contribution to climate change by increasing energy efficiency, reducing carbon emissions and encouraging sustainable opportunities for the broader County Meath community.
Policy Alignment/ Sustainable Development Goals		Policy Alignment/ Delivering Effective Climate Action Goals
		
Co-Benefits		
<ul style="list-style-type: none"> ✔ Improved water quality ✔ Improved mobility ✔ Clean energy transition and security ✔ Recuded costs ✔ Resilience and infrastructure ✔ Public health and well-being ✔ Improved air quality ✔ Economic growth 		

The built environment includes buildings of domestic, public, industrial, and commercial nature across the County of Meath as well as critical infrastructure like roads, bridges, drainage network, utilities, energy and communications infrastructure.

Buildings contribute a significant proportion of the County’s emissions. Optimising energy efficiency and switching to low carbon heat sources in buildings will need to be prioritised in addition to securing renewable energy infrastructure to contribute to national grid decarbonisation and deliver a low carbon alternative to fossil fuels.

The protection of the built environment from the negative impacts of climate change is also a priority focus to minimise the exposure of key infrastructure (such as Council owned buildings, roads, stormwater drains, public facilities, and the energy grid) to climate-related hazards. This will require appropriate planning, preparedness, and asset management in liaison with key stakeholders and agencies such as the OPW on flood risk.

Transitioning towards more sustainable transport systems is one of the major challenges facing Irish society. Approximately 18% of Ireland’s GHG emissions are associated with transport, the figure for County Meath is at 10%. The primary source of the transport sector’s GHG emissions come from the burning of diesel and petrol in combustion engines. There is a high dependence on private passenger cars, which are responsible for the largest share of transport GHG emissions in County Meath at approximately 58%, followed by goods vehicles at 30%, then other vehicles incl. tractors motorcycles, buses etc at 12% while railways comes in at 1%.

The transport-related actions will support the uptake of active travel and public travel options, enable the development of electric vehicle charging infrastructure across the County and reduce the GHG emissions associated with the business and commuting travel of County Meath. Additionally, the promotion of sustainable travel and road safety initiatives can improve the safety of the roads and improve air quality in towns and villages throughout Meath.

Strategic Goal 2 Built Environment and Transport: Actions




No.	Action	Adaptation/Mitigation	Tracking Measure	Timeframe
BET1	Incorporate biodiversity, mitigation and adaptation actions into the design and delivery of urban regeneration plans.	Combined	No. of regeneration projects with climate action initiatives delivered.	Annual to 2029
BET2	Continue to work with appropriate external stakeholders to deliver social housing at a BER B2 or cost optimal standard including provision of Energy Efficient Design, on-site renewable energy, EV Charging Facilities, SuDs, and nature-based solutions, as feasible.	Mitigation	No. of properties retrofitted per year; Percentage of Energy Efficient Design, on-site renewable energy, SuDs and nature-based solutions utilised per property.	Annual to 2029
BET3	Reduce and remove where feasible plastic waste generated, through removing single use plastics within LA owned buildings and services.	Mitigation	Percentage reduction in plastic waste.	Annual to 2029
BET4	Switch to digital marketing and advertising materials wherever possible. Reduce production/waste on programmes and posters.	Mitigation	Percentage of digital marketing/advertising campaigns run.	Annual to 2029
BET5	Switch out on cleansing products to eco-friendly products.	Mitigation	Transition to eco products only.	Annual to 2029
BET6	Introduce water usage conservation measures within LA owned buildings.	Combined	Percentage reduction in water usage.	Annual to 2029
BET7	Management of municipal waste from LA owned buildings. Increase recycling/organise waste collection and reduce general waste.	Mitigation	Percentage reduction in solid waste annually; Percentage waste recycled from LA waste.	Annual to 2029
BET8	Management of energy efficient LA fleet including implementation of driving efficiency software and associated eco driving training for all staff driving LA fleet.	Mitigation	Fleet management system implemented. Software installed / training delivered.	QR1 2027
BET9	Undertake deep retrofit and install renewable energy sources as appropriate on LA owned buildings.	Combined	No. of retrofits on LA owned buildings, Number of renewable energy installs completed.	Annual to 2029
BET10	Construct all new LA properties to A2 Energy Rating or higher including provision of Energy Efficient Design, on-site renewable energy, EV Charging Facilities, SuDs, and nature-based solutions, where feasible.	Mitigation	No. properties built per year; Percentage of Energy Efficient Design, on-site renewable energy, SuDs and nature-based solutions utilised per development.	Annual to 2029

Strategic Goal 2 Built Environment and Transport

No.	Action	Adaptation/ Mitigation	Tracking Measure	Timeframe
BET11	All Buy and Renew acquisition properties retrofitted to a B2 BER rating or higher including provision of Energy Efficient Design, on-site renewable energy, EV Charging Facilities, SuDs, and nature-based solutions utilised, as feasible.	Mitigation	No. properties retrofitted per year; Percentage of Energy Efficient Design, on-site renewable energy, SuDs and nature-based solutions utilised per development.	Annual to 2029
BET12	Increase energy efficiency of ICT Infrastructure.	Mitigation	Ensure energy efficiency requirements form part of the procurement process <ul style="list-style-type: none"> • Measure current energy usage (baseline) • Measure future energy usage (comparison) 	Annual to 2029
BET13	Deliver public lighting LED retrofit project under PLEEP (Public Lighting Energy Efficient Project).	Combined	Percentage reduction in energy usage.	Retrofit programme QR4 2027; Annual
BET14	New Building projects designed to nZEB standard including provision of Energy Efficient Design, on-site renewable energy, EV Charging Facilities, SuDs, and nature-based solutions.	Mitigation	No. of projects completed.	Annual to 2029
BET15	Promote the reuse and refurbishment of vacant and derelict properties in town centres and simultaneously promote the sustainable use of these properties for appropriate active town centre uses.	Mitigation	No. of vacant and derelict properties brought back into use.	Annual to 2029
BET16	Increase active travel usage in town centres through improved sustainable active travel proposals and an enhanced pedestrian and public realm environment.	Mitigation	No. of schemes completed, or length of scheme completed.	Annual to 2029
BET17	Explore the feasibility of sustainable energy and heating solutions in County Meath.	Combined	Feasibility report completed.	QR4 2027

Table 93: Actions for Strategic Goal 2 Built Environment and Transport

Strategic Goal 3 Natural Environment and Green Infrastructure

Thematic Area	Strategic Goal	Objectives
 <p>Natural Environment & Green Infrastructure</p>	Protect and enhance Meath’s natural environment by supporting biodiversity and increasing climate resilience.	3.1 Support the responsible management, protection and enhancement of Meath’s natural heritage, biodiversity and natural environment.
Policy Alignment/ Sustainable Development Goals		Policy Alignment/ Delivering Effective Climate Action Goals
		
Co-Benefits		
<ul style="list-style-type: none"> ✔ Improved water quality ✔ Public health and well-being ✔ Enhanced biodiversity ✔ Local food security ✔ Community sustainability and vitality ✔ Improved water quality 		

Ongoing and projected climate change poses significant risks for the natural environment. Increasing temperatures and extreme weather events is depleting biodiversity and habitats. Agricultural practices are also significantly impacted with increased rates of drought or high intensity rainfall events.

Meath County Council will ensure that the natural environment of County Meath is preserved and enhanced and to increase the provision of green infrastructure where possible. Green infrastructure forms a valuable asset in supporting biodiversity, supporting stormwater and flood risk management, optimising carbon storage whilst also offering opportunities for eco-system services, active travel, amenity and recreation.

Investing to maintain and enhance the natural environment will provide a range of benefits that help to manage and reduce the risks of climate change and help build resilience by reducing soil erosion, absorbing, and slowing water run-off, providing cooling and shading areas, increasing wildlife and biodiversity and contributing to health and wellbeing.




The actions listed below are a non-exhaustive listing of all planned climate-related actions with respect to biodiversity and heritage, the forthcoming Biodiversity Plan and Heritage Plan will provide a more comprehensive and co-ordinated viewpoint on these areas.

Strategic Goal 3 Natural Environment and Green Infrastructure: Action

No.	Action	Adaptation/Mitigation	Tracking Measure	Timeframe
NE1	Installation of water butts at public buildings, to aid tidy towns committees, staff and contractors access a sustainable water source for garden maintenance.	Mitigation	No. of water butts installed.	Annual to 2029
NE2	Commence a programme of auditing of LA lands to carry out ecological and habitat surveys and highlight areas at risk and those suitable for restoration and enhanced carbon storage.	Combined	Surveys and action listing; Biodiversity improvement evidenced by monitoring.	QR2 2027
NE3	Develop options for the delivery of a National Implementation Strategy for Nature-Based Solutions and interim guidance to the management of rainwater and surface water run-off in urban areas.	Adaptation	No. of nature-based solutions for the management of rainwater and surface run-off.	QR2 2025
NE4	Plant native woodland on appropriate LA owned lands.	Combined	Hectares of land planted.	Q4 2024
NE5	Major Emergency Plan - co-ordinate update of emergency response plans and revise based on learnings of response to events, having regard to environment sensitivities.	Adaptation	Plan updated.	Q4 2024
NE6	Identification of critical infrastructure routes on the existing network for climate related extreme weather events.	Adaptation	Portal with critical infrastructure routes.	QR2 2026
NE7	Develop and implement a County (Local) Biodiversity Action Plan, to protect and enhance local biodiversity, including climate-relevant measures.	Combined	Local Biodiversity Action Plan adopted.	Q4 2027
NE8	Undertake climate risk assessment of local authority owned heritage assets (natural, built and cultural). Carry out regular programme of inspection, maintenance and phased conservation works to develop climate resilience.	Combined	Two conservation projects commenced per year. Programme of inspections underway.	Annual to 2029
NE9	Carry out an assessment of Section 4 Discharge to Water Licences.	Adaption	No. of Discharge licences reviewed.	Annual to 2029
NE10	Support the creation of community gardens through partnership with local communities and external agencies.	Mitigation	No. of community gardens.	Annual to 2029
NE11	Support and facilitate the planting of groups of trees within the boundary/built footprint of existing built-up areas.	Adaptation	Yearly Measurement.	Annual to 2029

Table 94: Actions for Strategic Goal 3 Natural Environment and Green Infrastructure

Strategic Goal 4 Communities: Resilience and Transition

Thematic Area	Strategic Goal	Objectives
 <p>Communities: Resilience & Transition</p>	Mobilise Climate Action in Local Communities, whilst achieving a just transition.	4.1 Promote through collaboration and partnership sustainable, inclusive and resilient communities, focusing on actions which promote health and wellbeing benefits and supports local economies.
Policy Alignment/ Sustainable Development Goals		Policy Alignment/ Delivering Effective Climate Action Goals
		
Co-Benefits		
<ul style="list-style-type: none"> ✔ Community sustainability and vitality ✔ Green job creation and skills development ✔ Equity and social inclusion 		

Engineering solutions will bring us part of the way to achieving our climate actions. In addition, support to and the support of communities will be required to maximise a broader societal approach and ensure everyone is playing their part in shaping a climate conscious County for future generations.

Provision of information, engagement and participation are key to ensuring meaningful and long-lasting behavioural change is achieved. This is important in so many areas to ensure success, for example uptake in active travel and the use of public transport, switching to low carbon heat or fuel sources, enhancing the natural environment and maintaining general awareness of climate change, its impacts and its opportunities.

In encouraging ongoing dialogue with the diverse range of communities it is important to hear, respond and work in partnership to address the measures required together.

There are already many active community groups involved in protecting and enhancing the environment and working to deliver on climate obligations in County Meath to create genuinely sustainable local solutions that work. The Council is committed to working with all these groups to enable them to fulfil their ambitions.

Our aim is to inform, engage and promote participation by citizens and all types of communities in identifying and delivering local solutions to achieve these climate ambitions.

Strategic Goal 4 Communities: Resilience and Transition: Action












No.	Action	Adaptation/Mitigation	Tracking Measure	Timeframe
CRT1	Installation of water refill stations at public buildings/amenity areas, to reduce the use of single use plastics.	Mitigation	No. of water refill stations installed.	Annual to 2029
CRT2	Expand Trim Air Quality Project to other Decarbonising Zones.	Combined	Air quality report for each Decarbonising Zone.	Q4 2029
CRT3	Monitor implementation of flood risk management guidelines in planning applications, having regard to environmental sensitivities e.g., biodiversity, archaeology, amenity value.	Adaptation	Guidelines adhered to.	Annual to 2029
CRT4	Expand operation and availability of bike and car share schemes. Promote bike and car share scheme.	Combined	No. and location of bike and car schemes; Percentage usage.	Annual to 2029
CRT5	Identify and map areas most susceptible to climate related extreme weather events on the road network.	Adaptation	Portal with susceptible road network mapped areas.	QR2 2027
CRT6	Promote and publicise the benefits of using the Home Energy Kits from the Libraries.	Mitigation	No. of times the kits dispensed from libraries; No. of promotional events held.	Annual to 2029
CRT7	Increase number of safe routes to school scheme, where feasible.	Mitigation	No. of active safe route to school schemes in County.	Annual to 2029
CRT8	To liaise with the OPW in the identification of new, or the reinforcement of existing flood defences and protection measures.	Combined	No. of schemes identified.	Annual to 2029
CRT9	Review of Flood events and Flood susceptibility of infrastructure and liaise with relevant MCC Sections and Uisce Eireann to identify assets at risk from flooding/extreme rainfall to inform and implement low-cost 'minor works' flood relief schemes.	Combined	No. of schemes identified and implemented.	Annual to 2029
CRT10	Carry out a Coastal Erosion and Flood Risk Study for County Meath and implement the recommendations whilst as feasible prioritise nature-based solutions.	Combined	Study complete; No. of recommendations implemented.	Annual to 2029
CRT11	Develop and provide information on Sustainable Living to engage Council Tenants on how they can reduce consumption of energy, water, and waste.	Mitigation	Percentage of tenants receiving information.	Annual to 2029

Strategic Goal 4 Communities: Resilience and Transition: Action

No.	Action	Adaptation/ Mitigation	Tracking Measure	Timeframe
CRT12	Promote and support the Sustainable Energy Communities Programme and deliver workshops.	Mitigation	No. of active SECs; 2 No. SEC workshops per year.	Annual to 2029
CRT13	Administer and support Strand 1 & 1A of Community Climate Action Programme to deliver selected Climate Action projects.	Combined	Percentage draw-down of Community Fund; No. of completed projects.	Annual to 2029
CRT14	Encourage all events approved by MCC to incorporate sustainability and integrated consideration for biodiversity and other environmental sensitivities	Mitigation	Guidance produced on Events Updated Terms and Conditions.	QR2 2025
CRT15	Guided by the Memorandum of Understanding signed between the GAA and CCMA, towards working together on sustainability and climate action projects, engage with the Green Club Programme through a nominated lead, working with the CARO and GAA, in the promotion and support of projects by participating clubs, to meet the objectives, and during key phases, of the programme to 2029	Combined	% Clubs Engaged in Green Club Programme.	2024 – 2029
CRT16	Develop and introduce a "Greening Festival" funding criteria for a selection of Meath-based festivals.	Mitigation	No. of applications; Evaluation and Recommendations Report.	Annual to 2029

Table 95: Actions for Strategic Goal 4 Communities: Resilience and Transition

Strategic Goal 5 Sustainability and Resource Management

Thematic Area	Strategic Goal	Objectives
 <p>Communities: Resilience & Transition</p>	Create a culture of sustainability, promoting a circular economy throughout the County	5.1 Support circular economy initiatives and infrastructure, focusing on prevention, reuse, repair and recycling and promote green business opportunities.
Policy Alignment/ Sustainable Development Goals		Policy Alignment/ Delivering Effective Climate Action Goals
    		    
Co-Benefits		
<ul style="list-style-type: none"> ✓ Economic growth ✓ Reduced costs ✓ Public health well-being ✓ Equity and social inclusion ✓ Local food security ✓ Circular economy ✓ Green job creation and skills development ✓ Community sustainability and vitality 		

Consumption is extremely diverse and comes from everything to do from our behaviours around energy and water use, clothing purchases, household appliances, food sourcing and travel arrangements. The manufacturing and transportation of consumer goods adds further to the climate challenge that often the consumer may not be aware of.

Our consumption of the natural resources, we depend on, threatens the ability of future generations to access and sustainably use those natural resources. EU and National Policy reflect and reinforces the urgency in transitioning from a linear economy, which follows a "take, make, dispose" pattern, to a circular economy where resources are continuously reused, recycled, or regenerated.

The Circular Economy goes beyond the management of waste. The focus is on reducing the number of raw materials we use and maximising the value of materials along the production and consumption chain. This economic model ensures that everyone uses less resources and prevents waste to achieve sustainable economic growth.

Meath County Council is committed to supporting increased levels of sustainability and the management of resources in order to create a vibrant, diversely sustainable local and circular economy while building community knowledge, skills, resilience and resources. It is vital that citizens, communities, businesses, and other organisations are enabled and empowered to affect positive change and improve quality of life through their buying power.

Strategic Goal 5 Sustainability and Resource Management: Action

No.	Action	Adaptation/Mitigation	Tracking Measure	Timeframe
SR1	Increase use of recycling and recovery for bulky household items, hazardous waste, electrical waste, and green waste.	Adaption	10% increase in free events for householders; Metric tonnes of bulky household items, hazardous waste, electrical waste, and green waste recycled.	Annual to 2029
SR2	Increase kerbside collection of Household Organic Waste using Brown Bin Scheme. Countywide Awareness Campaign in relation to roll out of Brown Bin using Radio, Print and social media.	Adaption	Campaign carried out percentage uptake of scheme.	QR1 2025
SR3	Support the establishment of 'Circular Economy Hubs' that act as physical material hubs for the drop-off and recirculation of materials and products for both commercial and residential activities.	Combined	No. of circular economy hubs.	Annual to 2029
SR4	Engage with businesses and residents to support adoption of reused and recycled materials.	Combined	4 No. engagements per year.	Annual to 2029
SR5	Support locally produced sustainable food products and promote sustainable farm practices.	Combined	4 No. of promotions.	Annual to 2029
SR6	Provision of a 2 Day Green for Business Environmental Audit amongst small businesses in the County (1-50 employees).	Mitigation	20 No. businesses availing of the scheme.	Annual to 2029
SR7	Support business in their transition via Government initiatives e.g., green for micro.	Mitigation	20 No. businesses supported.	Annual to 2029
SR8	Encourage and promote projects that will contribute positively and grow the circular and bio economy to promote sustainable rural and urban low carbon economic development	Combined	4 No. of promotions/ events held.	Annual to 2029
SR9	Promotion of local jobs and local workspaces to reduce the amount of commuting outside of the County.	Mitigation	2 No. of promotions/ events held.	Annual to 2029
SR10	Support development of enterprise hubs to facilitate remote working.	Mitigation	No. of enterprise hubs facilitating remote working.	QR3 2025
SR11	Implement improved management of construction and demolition (C&D) waste from LA activities.	Combined	Evaluation and recommendation report/s.	QR3 2025

Strategic Goal 5 Sustainability and Resource Management: Action

No.	Action	Adaptation/ Mitigation	Tracking Measure	Timeframe
SR12	In4Green Urbact Network project: Complete the Integrated Action Plan for Navan.	Combined	IAP in place.	Q3 2025
SR13	Develop a waste management plan with particular attention to the circular economy principles. Promotion of the circular economy e.g., recycling facilities / repair hubs and Bike repair days to be organised. On street waste segregation to be trialled.	Combined	Plan published; 1 No. annual promotion event per DZ.	Annual to 2029

Table 96: Actions for Strategic Goal 5 Sustainability and Resource Management

6.3 Monitoring

A key consideration for Meath County Council is accountability, and in particular the ability to track, measure and report on progress in delivering effective climate action at both local authority and sectoral level. In this regard, Key Performance Indicators (KPIs) will continue to play a significant role.

Performance by Meath County Council on the delivery of energy efficiency improvements and emission reductions relating to the Council's infrastructure and assets will continue to be analysed through the Monitoring and Reporting (M&R) System managed by the Sustainable Authority of Ireland (SEAI). In addition to this Meath County Council operates ISO50001 Energy Management System and complies with system reporting requirements.

For actions outside of this, Meath County Council communicates progress on the delivery of climate actions through Sectoral Key Performance Indicators (KPIs). This informs the performance of the Local Government Sector on climate action.

The CAROs, along with the Local Government Management Agency (LGMA), collect data on an annual basis relating to a range of themes including climate action resources; climate action training; actions delivered; enterprise support; energy efficiency; emissions reductions; active travel measures and severe weather response

KPIs will continue to be added as necessary by the Sector and the Council will contribute relevant information as required, to assist in highlighting the progress of the Local Government Sector on climate action.

7.0 Reporting

Meath County Council will monitor and report on the implementation of this Climate Action Plan, oversight of implementation will continue through a number of existing mechanisms in place:

7.1 Internal Monitoring and Reporting

Meath County Council will update and report on the implementation of climate action across all five thematic areas of the Climate Action Plan through its relevant governance and reporting structures and communication channels.

The Council will provide reports to the Climate Action, Environment, and Emergency Services Strategic Policy Committee as required, and an end of year report will be made available to Councillors annually. Annual progress reports will also be communicated via the Council's website.

Meath County Council will continue to report on its emission and energy performance annually to the Sustainable Authority of Ireland (SEAI) through the Monitoring and Reporting (M&R) system.

SEA Environmental Monitoring and Reporting

Article 10 of Directive 2001/42/EC ('SEA Directive') requires that the environmental effects of the implementation of a plan are monitored in order "to identify at an early stage unforeseen effects, and to be able to undertake appropriate remedial action."

The primary purpose of monitoring is to cross-check significant environmental effects that arise during the implementation stage against those predicted during the plan preparation stage, as well as to identify any unforeseen adverse effects. Such monitoring enables appropriate remedial action to be undertaken when adverse environmental effects are recorded. Monitoring also contributes to determining whether SEA is, as it is meant to, leading to a high level of protection of the environment and promotion of sustainable development (Article 1 of the SEA Directive).

SEA monitoring and reporting will be carried out on a regular basis during the lifetime of this Plan.

7.2 National Climate Action Plan

Meath County Council will, in accordance with part 3(w) of the Local Authority Climate Action Charter, report to the Department of the Environment, Climate and Communications (DECC) on progress regarding climate action at County level as part of the delivery of the National Climate Objective. Progress on all actions will be reported via a CARO reporting tool.

Sectoral Performance

Meath County Council will report annually on its performance on climate action by way of KPIs to inform the performance of the local government sector on climate action, as part of the local government DECA 2030 Strategy.

Glossary

Term	Definition
Adaptation	In human systems, the process of adjustment to actual or expected climate and its effects, in order to moderate harm or exploit beneficial opportunities. In natural systems, the process of adjustment to actual climate and its effects; human intervention may facilitate adjustment to expected climate and its effects.
Anthropogenic	Resulting from or produced by human activities.
Biodiversity or biological diversity	Biodiversity or biological diversity means the variability among living organisms from all sources including, among other things, terrestrial, marine and other aquatic ecosystems, and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.
Climate	The long-term average weather of an area, usually taken over 30 years. The relevant quantities are most often surface variables such as temperature, precipitation and wind.
Climate projection	A climate projection is the simulated response of the climate system to a scenario of future emission or concentration of greenhouse gases (GHGs) and aerosols, generally derived using climate models.
Coastal erosion	The breaking down of land and removal of sediment and rocks by coastal processes. Factors affecting the rate of coastal erosion include sea level rise, strong wave action, and storms.
Cold Spell	A sustained period of cold weather, where extreme low temperatures are recorded.
Coastal Flooding	Coastal flooding occurs when sea levels along the coast or in estuaries exceed neighbouring land levels, or overcome coastal defences where these exist, or when waves overtop over the coast.
Deforestation	Conversion of forested areas to non-forested areas.
Drought	A period of abnormally dry weather long enough to cause a serious hydrological imbalance.
Emission pathways	Modelled trajectories of global anthropogenic emissions over the 21st century are termed emission pathways.
Exposure	The presence of people, livelihoods, species or ecosystems, environmental functions, services, and resources, infrastructure, or economic, social, or cultural assets in places and settings that could be adversely affected.
Extreme weather event	An extreme weather event is an event that is rare at a particular place and time of year.
Fluvial flooding	Fluvial flooding occurs when rivers and streams break their banks and water flows out onto the adjacent low-lying areas (the natural floodplains).
Global Warming	Global warming refers to the increase in global surface temperature relative to a baseline reference period, averaging over a period sufficient to remove interannual variations (e.g., 20 or 30 years).

Glossary

Term	Definition
Greenhouse gases	Gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and emit radiation at specific wavelengths within the spectrum of radiation emitted by the Earth's surface, by the atmosphere itself, and by clouds. This property causes the greenhouse effect. Greenhouse gases include carbon dioxide (CO ₂), nitrous oxide (N ₂ O), methane (CH ₄) and ozone (O ₃) and human-made include sulphur hexafluoride (SF ₆), hydrofluorocarbons (HFCs), chlorofluorocarbons (CFCs) and perfluorocarbons (PFCs).
Groundwater flooding	Groundwater flooding occurs when the water table rises above the land surface. It generally requires sustained rainfall over relatively longer duration than other forms of flooding, its location is discontinuous, and they can last for weeks or months.
Hazard	The potential occurrence of a natural or human-induced physical event or trend or physical impact that may cause loss of life, injury, or other health impacts, as well as damage and loss to property, infrastructure, livelihoods, service provision, ecosystems and environmental resources.
Heat wave	A period of abnormally and uncomfortably hot weather.
Heavy Snowfall	A substantial prolonged snowfall event resulting in substantial accumulations of snow on the ground over a period of consecutive days.
Impact	The consequences of realised risks on natural and human systems, where risks result from the interactions of climate-related hazards (including extreme weather/climate events), exposure, and vulnerability. Impacts generally refer to effects on lives, livelihoods, health and wellbeing, ecosystems and species, economic, social and cultural assets, services (including ecosystem services), and infrastructure. Impacts may be referred to as consequences or outcomes and can be adverse or beneficial.
Landslide	Landslide describes a wide variety of processes that result in the downward and outward movement of ground materials under the force of gravity.
Mitigation (of climate change)	A human intervention to reduce emissions or enhance the sinks of greenhouse gases.
Pluvial flooding	Occurs when the amount of rainfall exceeds the capacity of urban storm water drainage systems or the ground to absorb it.
Representative Concentration Pathways (RCPs)	Scenarios that include time series of emissions and concentrations of the full suite of greenhouse gases (GHGs) and aerosols and chemically active gases, as well as land use/land cover.
Risk	The potential for adverse consequences for human or ecological systems, recognising the diversity of values and objectives associated with such systems. In the context of climate change, risks can arise from potential impacts of climate change as well as human responses to climate change. Relevant adverse consequences include those on lives, livelihoods, health and well-being, economic, social and cultural assets and investments, infrastructure, services (including ecosystem services), ecosystems and species. In the context of climate change impacts, risks result from dynamic interactions between climate-related hazards with the exposure and vulnerability of the affected human or ecological system to the hazards. Hazards, exposure and vulnerability may each be subject to uncertainty in terms of magnitude and likelihood of occurrence, and each may change over time and space due to socio-economic changes and human decision-making.

Glossary

Term	Definition
Severe Windstorm	A windstorm is a wind that can cause at least light damage to trees and buildings, typically exceeds 55 km/h, and may or may not be accompanied by rain.
Sustainable Development Goals	The 17 Global Goals for development for all countries established by the United Nations through a participatory process and elaborated in the 2030 Agenda for Sustainable Development, including ending poverty and hunger; ensuring health and well-being, education, gender equality, clean water and energy, and decent work; building and ensuring resilient and sustainable infrastructure, cities and consumption; reducing inequalities; protecting land and water ecosystems; promoting peace, justice and partnerships; and taking urgent action on climate change.
Vulnerability	The propensity or predisposition to be adversely affected. Vulnerability encompasses a variety of concepts and elements including sensitivity or susceptibility to harm and lack of capacity to cope and adapt.

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