

Monaghan County Council

# CLIMATE ACTION PLAN (2024-2029)



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# FOREWORD







The Monaghan County Council Climate Action Plan outlines our ambitions to create a resilient and prosperous County for all who live, work, and visit Co. Monaghan. The plan sets out how the Council will work to further reduce greenhouse gas emissions and improve energy efficiencies in our buildings and operations, while making Monaghan a more climate resilient county over the next 5 years.

Community engagement is at the heart of the plan. Monaghan County Council has an important leadership role to play in tackling climate change, and in doing so will positively engage with residents and community organisations. The Council launched the Community Climate Action Fund in December 2023 which allows us to work with local groups to help build low carbon communities, focusing on themes such as energy, travel, food & waste, recycling, and local climate action.

This Plan builds on the successful implementation of the Climate Change Adaptation Strategy 2019 to 2024. The council will also continue to lead by example, introducing ambitious emissions reduction measures in our own operations, such as decarbonising our vehicle fleet, and by retrofitting our social housing stock.

The actions in this Plan aim to influence how we can move towards a greener future and net-zero carbon emissions across the wider county. As a Council we will increase energy efficiency throughout our public buildings, fleet and other assets and simultaneously decrease greenhouse gas emissions through our functional areas to reach the targets set.

Targeted emission reduction measures and initiatives will also be piloted in our Decarbonising Zone in Monaghan Town and the lessons learned there will be applied across our county.

Progress on this Plan will be continually monitored by a dedicated climate action team working with all Council departments, supported by a steering group at senior management level; and working with the Climate Action & Environment Strategic Policy Committee and elected members.



*Cathaoirleach Co.  
Monaghan  
Cllr David Maxwell*



*Chief Executive  
Robert Burns*





# EXECUTIVE SUMMARY







This Climate Action Plan has been prepared to meet the increasing challenge of climate change for our county and to support meeting the national obligation of achieving a 51% reduction in greenhouse gas emission and to increase energy efficiency by 50%. The plan aims to secure a sustainable future for the people of Monaghan and to create a low carbon and more climate resilient county. The development of the Plan has been informed by extensive consultation and collaboration with Elected Members, all departments within the Council, neighbouring Local Authorities, business representatives, and the public.

The plan sets out how the Council is responsible for enhancing climate resilience, increasing energy efficiency, and reducing greenhouse gas emissions, across its own assets, services, and infrastructure, which it is fully accountable for, whilst also demonstrating a broader leadership role of influencing, advocating, and facilitating other sectors, to meet their own climate targets and ambitions and to increase climate literacy.

Section 1 of the plan presents the climate policy context for climate actions across the county. In section 2 a summary is given of the evidence base for climate action planning in the county. Here the main sources of emissions are examined as well as the risk that is involved with a changing climate. The Framework of Climate Action (Section 3) defines where the Local Authority would like to lead

the county in terms of climate action via the Plan Vision & Mission, Strategic Goals, Objectives, and Actions. Section 4 of the plan details the Monaghan Town Decarbonising Zone. This defined area was chosen to act as a test bed for a range of ambitious climate action measures which, if successful, may be extended to other areas in the county. Section 5 outlines how the Council will report on an annual basis on the implementation of the Climate Action Plan, and how it will collaborate with communities and other sectors to support all citizens in transitioning Monaghan into a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy. This Plan will be implemented by the Council and will require a whole-of-Council approach. The Council will also work collaboratively and in partnership with a range of key external stakeholders to support the delivery of this Plan.



An aerial photograph of a park area. In the foreground, there is a paved parking lot with several cars. To the left, a paved path leads to a picnic area with several picnic tables. In the center, there is a large, multi-colored playground with various structures and equipment. The park is surrounded by dense trees, some of which are showing autumn colors. The overall scene is a well-maintained outdoor recreational space.

**1**

# INTRODUCTION





**Our climate is changing. We urgently need to work on measures to tackle the sources and causes of climate change and to adapt and build resilience to the inevitable impacts that our changing climate brings.**

The Climate (Amendment) Act 2021 specifically requires all Local Authorities in Ireland to prepare and make a Climate Action Plan. The Monaghan County Council Climate Action Plan sets out how the Council will work across its services and functions and in partnership with government agencies, businesses, communities, public sector, and other stakeholders, to help deliver on national climate obligations at the local level.

By tackling climate change, we will need to transform how we generate energy and radically re-think how we live, travel, do business, produce goods, and deal with our waste.

In doing so, a host of benefits can be achieved for current and future generations including warmer homes, vibrant and resilient communities, biodiversity-rich landscapes, improved health and wellbeing, new skills and jobs and a thriving green local economy.



**Climate  
Action  
Monaghan**

## CLIMATE PLAN VISION



**That Monaghan County Council will be an exemplar organisation that leads, supports, and inspires action to achieve a Climate Resilient, Biodiversity Rich, Environmentally Sustainable County and Climate Neutral Local Economy.**



**This Action Plan Covers Five Years of Delivery From 2024-2029.**



## 1.1 Climate Change

Climate change refers to a large-scale, long-term shift in the earth's weather patterns and average temperature, caused by the release of carbon dioxide (CO<sub>2</sub>) and other greenhouse gases such as methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O), to the earth's atmosphere.

**Greenhouse gases trap heat from leaving the earth's surface causing warming in the atmosphere, raising global temperatures.**


Overwhelming evidence has shown that the climate has changed since the pre-industrial era. Human activities through greenhouse gas emissions generated from burning of fossil fuels for energy and changes in land use are attributed to increased warming. In the 2011-2020 period global surface temperatures have reached 1.1°C above the period 1850-1900.

The global increase in temperatures prompting climate change will cause more heatwaves, droughts, intense rainfall, and other extreme weather across the world. These impacts will increase the likelihood and severity of a variety of risks including flooding, migration of people, damage to infrastructure, food insecurity and loss of biodiversity. Ireland's climate is changing in line with global patterns and the impacts of this are evident. Through the increase in frequency and intensity of extreme weather events and impacts to our critical built and natural systems.


## 1.2 Purpose of this plan

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.

Monaghan County Council has prepared this climate action plan 2024-2029, to set out how the Local Authority can help tackle climate change and promote a range of mitigation, adaptation and other climate action measures, to help deliver on the national climate obligations and 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.*



**Climate Change 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 we best use our land; and



**Climate Change 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).

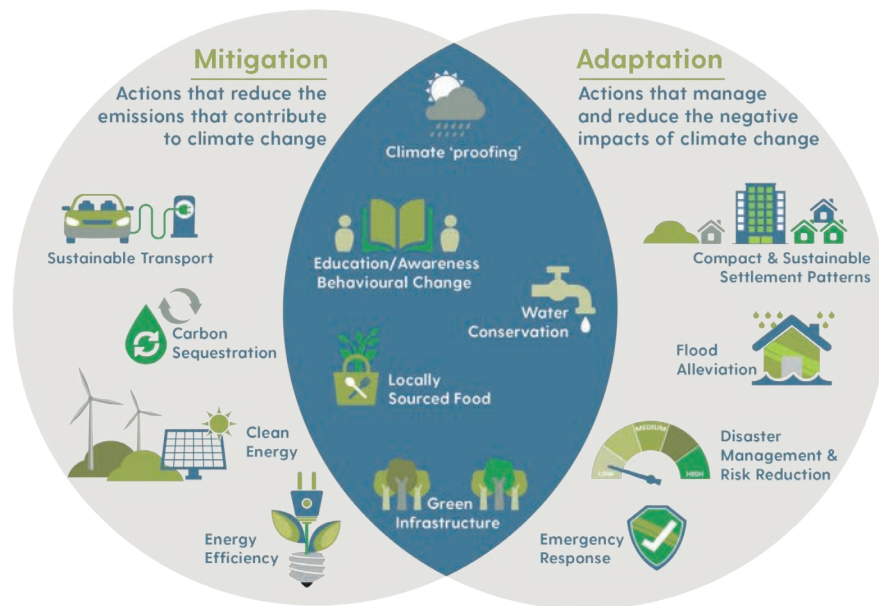


Figure 1 – Climate Mitigation & Adaptation  
(Source: Eastern and Midland Climate Action Regional Office).

More broadly in helping to deliver on national climate obligations the plan also assists to:

**Purpose of this Climate Action Plan:**

- ▶ Signal Monaghan County Council’s commitment to address climate change and the environmental, social, and economic challenges.
- ▶ Help communities living in Monaghan to understand and effectively respond to climate change impacts.
- ▶ Support Co. Monaghan to transition to a climate neutral local economy where activities don’t have a negative impact on the climate. Ensure Monaghan makes a meaningful contribution towards national and global climate action targets under the Paris Agreement and Sustainable Development Goals.
- ▶ Position the county to stay competitive and attractive to live, work and visit in the transition to climate neutrality.
- ▶ Demonstrate leadership through influence, coordination facilitation, raising awareness, advocacy and cultivating necessary partnerships.
- ▶ Support the Monaghan Town Decarbonising Zone (DZ) as a test bed for a range of climate mitigation, adaptation, and biodiversity measures.
- ▶ This plan has been prepared in accordance with 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 in March 2023, and has taken account of relevant national climate legislation and policy.



## 1.3 Climate 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.

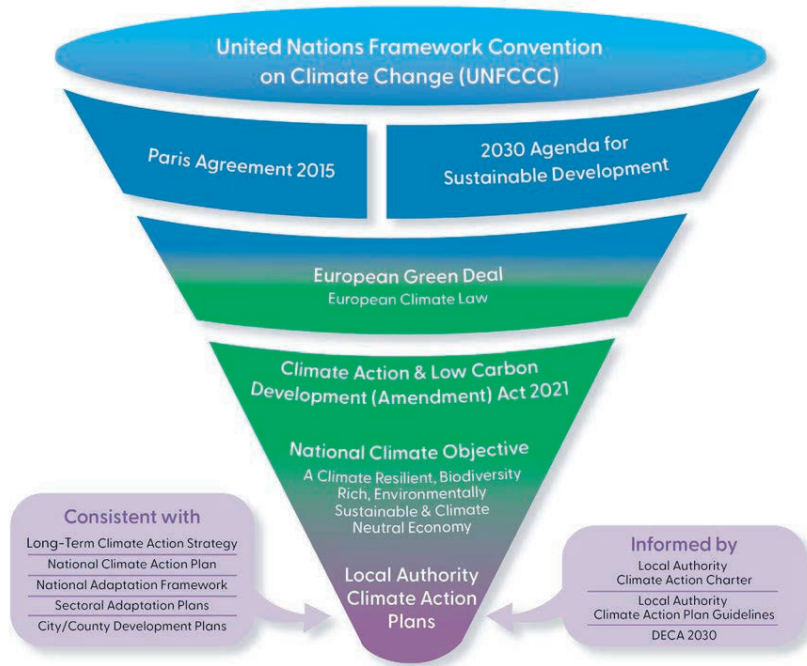


Figure 2 - Legislation and policy context for the Climate Action Plan.

### 1.3.1 International Climate Change Policy

It has been recognised that successfully tackling climate change requires cooperation and ambition on an international level. Since the establishment of the [United Nations Framework Convention on Climate Change \(UNFCCC\)](#) in 1994, countries have sought to build international cooperation to limit the increase in the average global temperature and deal with the impacts of climate change that result from these temperature increases.

These efforts led to the signing of the Paris Agreement 2015 at the [Conference of the Parties 21 \(COP21\)](#). The [Paris Agreement 2015](#) is a legally binding international treaty on climate change which was signed by all 196 member countries, including Ireland, and entered into force on 4th November 2016. Through two clearly defined goals the Paris Agreement strives for progressive and ambitious climate action over time to avoid dangerous climate change by:

- i. Holding global average temperature increases to well below 2°C and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels; and
- ii. Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience.

Another International agreement closely linked with the Paris Agreement is the [2030 Agenda for Sustainable Development](#) which was adopted by UN Member States in September 2015. At the Agenda’s core are 17 [Sustainable Development Goals \(SDGs\)](#). These goals aim to “end poverty, protect the planet and improve the lives and prospects of everyone, everywhere.” The 17 SDGs contain 169 targets to be achieved by 2030. In 2019, world leaders called for a ‘decade of action’ to achieve the goals within this timeframe.



In December 2019, as part of the Paris Agreement commitments, the European Commission, announced the [European Green Deal](#) aimed at making Europe the first climate neutral continent. The Deal seeks to achieve no net emissions of greenhouse gases by 2050, to decouple economic growth from resource use and to leave no one behind. The EU introduced a set of proposals to align the EU’s climate, taxation, energy and transport policies to support achieving this aim. The [European Climate Law](#) which made these targets legally binding also includes achieving a reduction in net greenhouse gas emissions of at least 55% by 2030 and climate neutrality by 2050.

### 1.3.2 Climate Change Policy in Ireland

Climate change policy in Ireland now reflects the ambition of the EU and that required to confront the challenges of climate change. Working towards the National Climate Objective the [Climate \(Amendment\) Act 2021](#), enacted on the 23rd of July 2023 promotes a sustainable economy and society where greenhouse gas emissions are balanced or exceeded by the removal of greenhouse gases. Through progressive economy-wide carbon budgets, sectoral ceilings, a suite of strategies devised to promote a combination of adaptation and mitigation measures, as well as robust oversight and reporting arrangements, climate policy is working to scale up efforts across all of society and deliver a step change on ambitious and transformative climate action to 2030 and beyond to 2050.

The [Climate Action Plan 2023](#), launched on 21st December 2022, is the second annual update to the States’ Climate Action Plan 2019 and the first to be prepared under the Climate Action and Low Carbon Development (Amendment) Act 2021, and following the introduction, in 2022, of economy-wide carbon budgets and sectoral emission ceilings. Climate Action Plan 2023 sets out a roadmap to 2025 towards taking decisive action to halve emissions by 2030 and reach net zero, no later than by the end of 2050, as committed to in the Programme for Government.

Ireland published its first [National Adaptation Framework \(NAF\)](#) in 2018, which set out the context to ensure key sectors and Local Authorities, can assess the key risks and vulnerabilities of climate change, implement climate resilient actions, and ensure climate adaptation considerations are mainstreamed into national, regional and local policy making.

Ireland’s current [Long-term Strategy on Greenhouse Gas Emissions Reductions](#) sets out indicative pathways, beyond 2030, towards achieving carbon neutrality for Ireland by 2050. The strategy builds upon the decarbonisation pathways set by the carbon budgets, sectoral emissions ceilings, and the national Climate Action Plan, to ensure coherent and effective climate policy. It is underpinned by analysis of transition options across each key sector of the economy and provides a crucial link between Ireland’s 2030 climate targets and the long-term goal set by Ireland’s National Climate 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. They were developed applying a six-step adaptation planning process described in the sectoral planning guidelines for Climate Change Adaptation, published by the Department of the Environment, Climate and Communications. 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](#), signed by Monaghan County Council in October 2019, represents a commitment to scale up efforts and play a key role locally and nationally in delivering effective climate action. It tasks all Local Authorities with providing robust leadership in advancing climate action at regional and local levels, with adhering to the UN SDGs, in particular Goal 13 Climate Action, as well as reducing emissions from their own operations and to collaborate and partner with local enterprise, community groups, citizens as well as public, private, and educational sectors on climate action initiatives.

[Delivering Effective Climate Action 2030 \(DECA 2030\)](#) is the local government strategy on climate action published in April 2021. The strategy represents an overarching sectoral commitment to ensuring a coherent approach to climate action across the administrative and political structures of all 31 local authorities. At a sectoral level the strategy communicates a general strategic intent through an envisaged leadership position, to engage the Local Authority network in effective climate action. Within the sector, the overall strategy represents a top-level consensus on the approach to climate action and a strong commitment to the prescribed leadership role. The strategy is a stated roadmap for Local Authorities in delivering the required decarbonisation and adaptation responses to climate change.

### 1.3.3 Local Authority Climate Action Planning

The Monaghan County Council climate action plan strengthens the links between national and international climate policy and the delivery of effective climate action at local and community levels, through place-based climate action. The intrinsic value of the climate action plan is that it plays a significant role in reinforcing the commitment by the local government sector to lead on climate action at local and national levels, as reflected in the local government strategy DECA 2030. Over its preparation and implementation, the Council's climate action plan offers an opportunity to bring together critical stakeholders across

communities and businesses to build a vision for a climate neutral future.

Monaghan County Council and other Local Authorities across Ireland, are already well positioned at the forefront of climate action in this country. Monaghan County Council plays a significant role in terms of delivering adaptation and mitigation measures at local and community levels. We are entrusted to work through our regulatory and strategic functions to operationalise the ambitious national climate targets and policy at local levels, to assist in the delivery of the National Climate Objective.

This plan is part of longer-term efforts that require a sustained and planned response to support the delivery of the climate neutrality objective at local and community levels. It provides a mechanism for bringing together both adaptation and mitigation actions to help drive positive climate action and outcomes across the Local Authority and the county of Monaghan. The framework of climate actions set within the plan ensures alignment between on the ground actions and the high-level vision that the plan aspires to deliver.

This 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.



### 1.3.4 Community Climate Action Fund

In 2023 the Minister for the Environment, Climate and Communication launched the Climate Action Fund Strand 1 - Building Low Carbon Communities. This is a 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 aims to support communities to carry out climate action projects.

Community projects eligible for potential funding will address the following five themes:



This fund required the appointment of a dedicated Community Climate Action Officer (CCAO) in all local authorities to guide and support communities from the very start. The Council has recruited a CCAO to facilitate the administration of this fund.





## 1.4 Focus of this plan

This plan assumes an organisational focus as well as a countywide focus on climate action.

The plan sets out how Monaghan County Council will be responsible for enhancing climate resilience, increasing energy efficiency, and reducing greenhouse gas emissions, across its own assets, services, and infrastructure, which it is fully accountable for, whilst also demonstrating a broader role of influencing, advocating, and facilitating other sectors,

to meet their own 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.

This presents an opportunity for Monaghan County Council to consider our role as a facilitator and an enabler in confronting the challenges of climate change. We have a key role to play as an influencer within Co. Monaghan, working with the wider community and local businesses to promote positive climate action.

Full Accountability	Influence	Co-ordinate & Facilitate	Advocate
Delivering on climate action in areas within own remit including local authority’s own buildings, infrastructure, systems, operations and staff.	Influence sectors and communities on climate action.  <b>Direct:</b> Procurement/supply chains and staff protocols.  <b>Regulatory:</b> Decision-making on planning and development, waste, byelaws, application of standards,  <b>Broad:</b> Through the provision of services across the range of functions, prioritisation, channelling investment etc.	<b>Coordinate</b> efforts between different stakeholders e.g. Decarbonising Zones and  <b>Facilitate</b> through the identification of funding, use of regulatory levers. Collaborate and engage in partnerships on climate action.	Creating the local vision, communication, awareness raising, promotion, capacity building

Figure 3 – Local Authority Scope on Climate Action (Source: Local Authority Climate Action Plan Guidelines, 2023)



Monaghan County Council will work to influence, support, and enable others to achieve their own targets and climate ambitions:

**51%**

Society wide Emission Reduction target.

**Net Zero**

by no later than end of 2050.



Monaghan County Council will reduce its own greenhouse gas emissions and improve its energy efficiency in line with national targets for Local Authorities:

**51%**

Emission Reductions by 2030 compared to 2018 baseline.

**50%**

Energy Efficiency Improvement by 2030 compared to 2009 baseline.





## 1.5 Co-Benefits of climate action

The benefits of climate action extend far beyond reducing greenhouse gas emissions and reducing climate risks, as depicted in figure 4.

Climate co-benefits are beneficial outcomes from action that are not directly related to addressing climate change through the reduction of emissions. Such co-benefits include cleaner air, green job creation, public health benefits from active travel, and biodiversity improvement through expansion of green space etc.

Climate action that delivers co-benefits can help maximise opportunities to address multiple social, environmental, and economic challenges, and part of the role of delivering this plan will lead to positive effects. Monaghan County Council is committed to ensuring that this climate action plan works to derive as many co-benefits as possible.

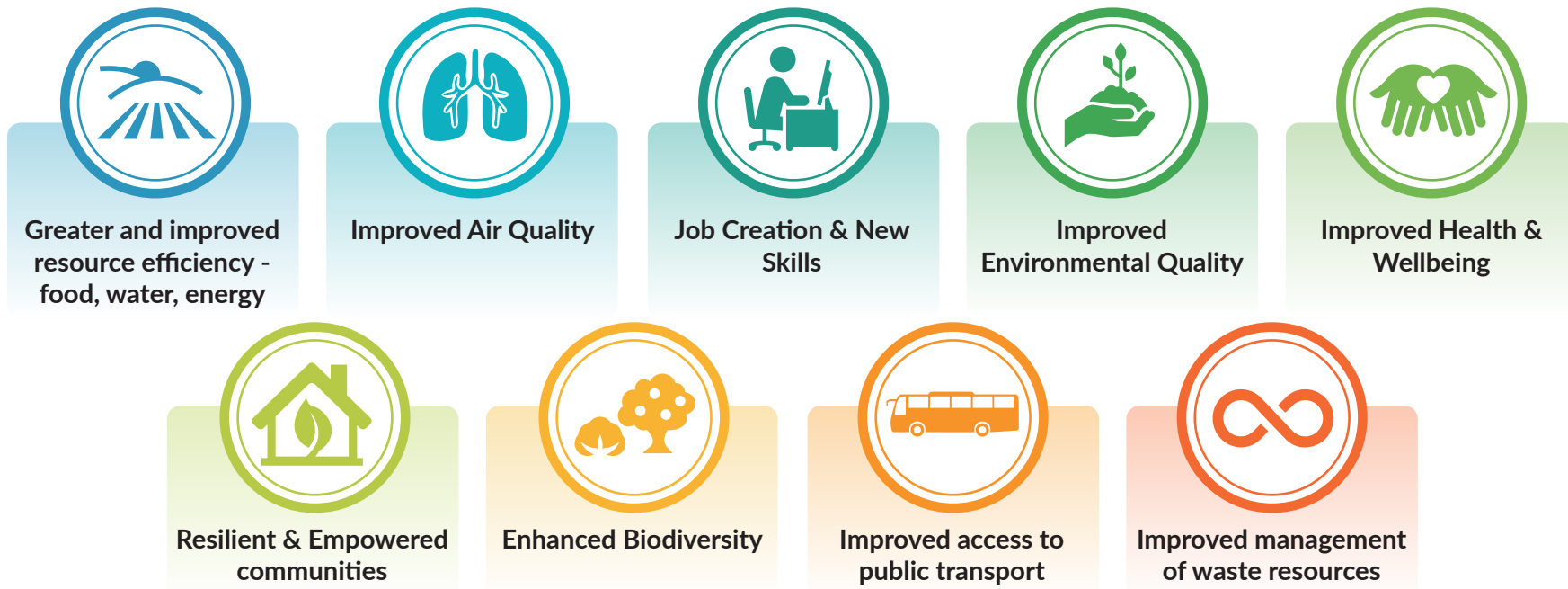


Figure 4 – Co-Benefits of pursuing climate action



## 1.6 Cross cutting considerations

There are several cross-cutting considerations built in as part of the framework of climate actions of this plan.

 <b>Action Focus &amp; Prioritisation</b>	 <b>Partnership &amp; Collaboration</b>	 <b>Just Transition &amp; Fairness</b>	 <b>Maximising Co-Benefits</b>
<p>Actions of this plan have been identified based on their ability to help deliver on climate obligations of reducing emissions and building resilience.</p> <p>Actions &amp; projects will be prioritised based on their positive climate impact, the multiple co-benefits they accrue and value for money in that context.</p> <p>The Council will take an evidence-based approach to assessing options and decision making to support the implementation of climate actions.</p> <p>Multiple funding/grant sources will be used to implement actions and projects.</p>	<p>This plan will operate on the model of collaborative climate action.</p> <p>Implementing actions of this plan will require engagement, collaboration, and partnership with a broad range of stakeholders from Government to community level, to deliver on climate action.</p> <p>This plan will promote and harness ideas, knowledge, and collective enthusiasm of stakeholders.</p> <p>This plan supports research partnerships with 3rd level colleges and universities and wider national and international research organisations.</p>	<p>This plan upholds the principles of climate justice and fairness.</p> <p>This plan will ensure that the people in Co. Monaghan who are most vulnerable and have the lowest capacity to engage with climate action are supported.</p> <p>The Council is committed to monitoring and identifying the needs and deficiencies of communities and to giving a voice and support to enable communities to take climate action.</p> <p>The Council will strive to provide easy to understand climate information, supporting the most vulnerable communities through education and advocating for the need to engage with climate action.</p>	<p>The Council’s approach to sustainable climate neutrality includes an ambition to identify and realise multiple co-benefits where possible.</p> <p>Co-benefits targeted will strive to optimise protection and enhancement of the natural environment to improve health and wellbeing outcomes as well as support for a clean and green local economy.</p>

Table 1 – Cross cutting considerations of framework of actions.

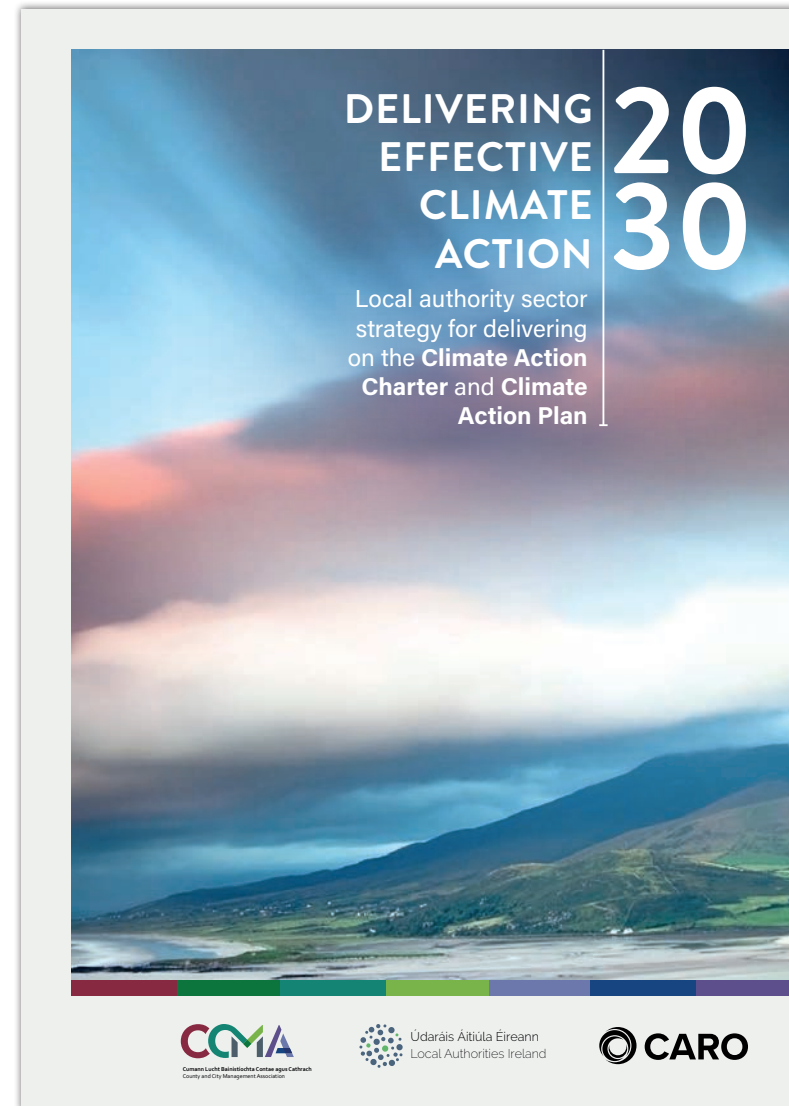
## 1.7 Alignment with policy/commitments

This climate action plan is consistent with the most recently approved national **Climate Action Plan** and **National Adaptation Framework**. The plan is informed by the **sectoral emissions ceilings and budgets** that help to shape and inform government policy on climate action over the next five years.

Additionally, this plan is aligned with the strategic goals of the Local Government strategy *Delivering Effective Climate Action 2030 (DECA)* published in April 2021. This sectoral strategy sets out the overarching commitment on climate action leadership to ensure a coherent approach to climate action across the administrative and political structures of all 31 Local Authorities, across the 6 goals outlined below.

<b>Goal 1:</b>	Foster governance, leadership, and partnerships for climate action.
<b>Goal 2:</b>	Achieve our carbon emission and energy efficiency targets for 2030 and 2050.
<b>Goal 3:</b>	Deliver on climate adaptation and climate resilience.
<b>Goal 4:</b>	Mobilise climate action in local communities.
<b>Goal 5:</b>	Mobilise climate action in enterprise and support transition to an inclusive, net zero and circular economy.
<b>Goal 6:</b>	Achieve a ‘just transition’ particularly for communities that may be economically disadvantaged by decarbonising projects.

Table 2 – DECA 2030 Goals





The 2022-2024 **Sustainable Development Goals (SDGs)** National Implementation Plan acknowledged that local government “has a crucial role to play in translating national policies into tangible practical actions that can help to concretise the SDG objectives into our individual and communities’ behaviours and goals.” The importance of this role is highlighted in the second National Implementation Plan for SDGs

Strategic Objective 2: *To integrate the SDGs into Local Authority work to better support the localisation of the SDGs.*

The 17 Sustainable Development Goals are illustrated in the figure 5 below. All actions proposed for the County and for Monaghan town DZ have been informed by these SDGs.



Figure 5 – Agenda 2030: Sustainable Development Goals.



Over the lifetime of the plan, the Council will have regard to current legislation, policy and best practice and remains committed to considering and integrating relevant updates to the National Climate Action Plan, National Planning Framework, State of the Environment report (EPA) and all other relevant Local Government plans.

## 1.8 Accompanying 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, stakeholder contributions and environmental assessments, to help shape and inform actions. Accompanying this plan are three annexes providing distinct elements of the evidence base and environmental assessments that have informed the plan. This climate action plan should be read in conjunction with the accompanying annexes:

**Annex A Climate Change Risk Assessment (CCRA)** provides an evidence base and assessment of Monaghan’s climate change risks and impacts on the delivery of services by Monaghan County Council.

**Annex B County-wide Baseline Emissions Inventory (BEI)** highlights the sources of GHG emissions within the broader administrative area of Monaghan County Council as well as emissions from sources within the full control of Monaghan County Council.

**Annex C Decarbonising Zone BEI** identifies the source of GHG emissions from within Monaghan Town as the identified Decarbonising Zone within the county.

**Strategic Environmental Assessment (SEA)** is a systematic process of predicting and evaluating the likely environmental effects of implementing a plan, to ensure that these effects are appropriately addressed at the earliest appropriate stage of decision-making. The plan is accompanied by an Environmental Report, prepared in accordance with the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (S.I. 435 of 2004 as amended by S.I. 200 of 2011) for Strategic Environmental Assessment.

**Natura Impact Report**, Articles 6(3) and 6(4) of the Habitats Directive (92/43/EEC) place an obligation on competent authorities to consider the effects of every plan and project on its own or in combination with other plans or projects on one or more European sites (Natura 2000 sites) through a process known as Appropriate Assessment. Natura sites are Special Protection Areas (SPAs) for birds and Special Areas of Conservation (SACs) for habitats and species. A formal process of Appropriate Assessment was carried out as part of the preparation of this plan. In accordance with Article 6(3) of the Habitats Directive, a Stage 2 Natura Impact Report accompanies this plan.

## 1.9 Structure of this plan

This climate action plan has taken into full consideration international and national climate change policy and legislation, the most up-to-date knowledge on current characteristics of climate change as well as its impacts and projections for the future. Arising from this process, this climate action plan is set out in five sections:

	<h3>Section 1 Introduction</h3>
	<p>Introduces the plan and highlights its context and purpose as well as the co-benefits of implementing this plan.</p>
	<h3>Section 2 Evidenced-based Climate Action</h3>
	<p>Highlights the key findings of the evidence base developed to inform climate action. The evidence base includes a climate change risk assessment and emissions baseline profile of Co. Monaghan and of Monaghan County Council as well as contributions by stakeholders.</p>
	<h3>Section 3 Framework of Climate Actions</h3>
	<p>Outlines the Framework for Climate Action including the Plan Vision, Mission, Strategic Goals, Objectives, and Actions.</p>
	<h3>Section 4 Monaghan Town Decarbonising Zone</h3>
	<p>Focuses on Monaghan Town as the selected Decarbonising Zone (DZ), including the Vision for the area, strategic priority areas and actions.</p>
	<h3>Section 5 Implementation and Reporting</h3>
	<p>Sets out the Council’s approach to implementing actions, measuring progress, the use of metrics as well as how the Council will report on actions over the lifetime of the plan.</p>

Figure 6 – Structure of Plan





**2**

# EVIDENCE-BASED CLIMATE ACTION



**This section presents both the adaptation and mitigation evidence that forms the basis of Monaghan’s climate action plan: the county’s climate vulnerability and risk assessment, and the greenhouse gas emissions inventory. It also includes information on stakeholder engagement that has helped inform and shape the plan.**

## 2.1 Monaghan’s context for climate action

Monaghan County Council is located within the Eastern and Midlands Climate Action Region (CARO). Co. Monaghan is approximately 1,295km<sup>2</sup> making it the 5th smallest of Ireland’s thirty-two counties. Monaghan is bounded by Cavan, Meath, Louth, Armagh, Tyrone and Fermanagh and, as the most northerly inland county in the Republic of Ireland, some 90% of Monaghan is located within 10 miles of the border with Northern Ireland.

Monaghan County’s population is 65,288 people (CSO,2022) which represents a 6% increase compared to 2016. Co. Monaghan is a largely rural county, agriculture is the primary land use and remains a crucial part of the economy of the county.

**County Monaghan is largely shaped by the last ice age. The county topography is characterised by rolling drumlines, lakes, and wetlands. In terms of land use, 69% of the county area is dedicated to agriculture, 4% to forestry and 1.7% is covered by lakes. There is one Special Areas of Conservation (SAC) in the county, Kilroosky Lough Cluster, along with Special Protected Area (SPA) Sliabh Beagh.**

**To prepare for its future growth, Co. Monaghan is already investing in renewable energy resources, upgrading its infrastructure, and piloting more sustainable social housing projects.**

Most economic activity for the county is concentrated in the towns of Monaghan, Carrickmacross, Castleblayney, Clones and Ballybay. Monaghan county’s primary economic drivers are the agricultural and food sector with over 60% of Monaghan’s employment from these sectors. Approximately 90% of food produced in the county is exported and 14 of Ireland’s top 100 food producing companies are based in Monaghan.

Monaghan’s development pattern is characterised by traditional dispersed settlement in rural areas tied together by a network of towns and villages. Today, less than 30% of the county’s population lives in the urban areas.

**Monaghan County Council recognises the need to put in place sustainable development strategies and actively plan for and invest in the transition to a low carbon, climate resilient society and economy to cater for a growing population.**

# How is County Monaghan projected to change?



- Population is projected to increase from **61,000** in 2016 to **69-71,000** in 2031 (NPF)
- Population of Monaghan Town is expected to grow by **c.1,700** by 2025 (CDP)
- **3,056** new housing units required by 2028 (ESRI NPF scenario)
- Shift towards living in urban areas where services and facilities are generally located, with more compact urban forms and redevelopment of existing urban areas in accordance with the National Planning Framework.

Figure 7 – County Monaghan Population Projected Change.





## 2.2 Climate Change Risk Assessment

One dimension of climate action is to work towards the reduction of greenhouse gas emissions, to limit the impact of warming global temperatures. The second dimension is that we must also aim to help places, people, and nature be ready and adapt for unavoidable climate change. This includes understanding risks and opportunities from climate change for business, infrastructure, housing, and the natural environment. There is a need to prepare the Council’s services to deliver for the needs of the community as weather patterns change.

**The aim of adaptation planning is to reduce the risks posed by climate change for Co. Monaghan and increase resilience. Climate Change Risk Assessments (CCRA) identifies the likelihood of future climate hazards and their potential impacts. The CCRA will inform the prioritisation of climate action and investment in climate action.**

Understanding the risks posed by climate at the local level is an essential first step for Monaghan County Council to develop effective and efficient adaptation actions in response to current and projected climate change.

A qualitative CCRA was undertaken as part of this plan to support the identification and prioritisation of potential future climate risks and to help identify where adaptation actions could be required. The approach was built on two phases, where both current and future risks and impacts were assessed. The Monaghan CCRA accompanies this plan as Annex A<sup>1</sup>.

### 2.2.1 CCRA Key findings (Observed)

In line with the climate trends of Ireland, Co. Monaghan is experiencing increasing temperatures and changing patterns of rainfall. These changes are projected to continue and intensify with a wide range of impacts for Monaghan and Monaghan County Council.

For the period 1985 to 2022, severe windstorms were the most frequent severe weather event in Co. Monaghan. Noted snowfall and freezing events when they occurred, resulted in widespread disruption of transportation, energy, and water supply networks across the county. Flooding, both river and surface/pluvial occurred on a common basis (Occurs once in a 2 to 10 years period), both causing impacts when they occurred. Heatwaves and droughts have also had impacts on the county with increased demand for water supplies, impact on integrity of road surfaces and the increased frequency of uncontrolled fires with increased demand of fire services.

The frequency of identified extreme weather events experienced in Co. Monaghan from 1985-2022 timeline is shown in Figure 8, as well as a graph showing frequency of identified events according to category from observed period in Figure 9. Highlights of observed weather events & impacts for Monaghan as examined as part of the CCRA are also highlighted in Figure 10.

<sup>1</sup> Please refer to Annex A **Monaghan Climate Change Risk Assessment**, accompanying this plan for further detail.

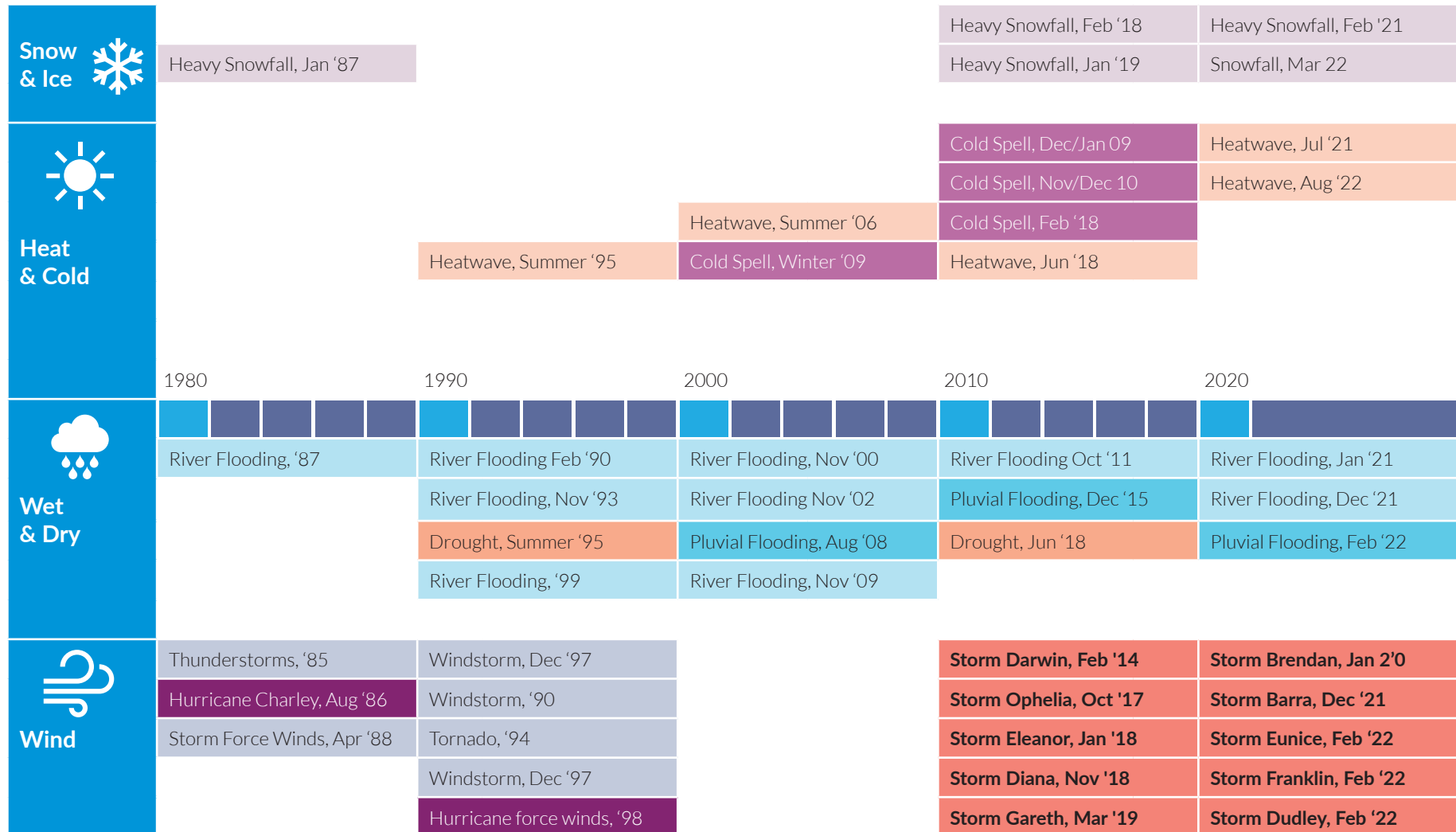


Figure 8 – Timeline of weather events experienced in Co. Monaghan from 1985-2022

### Frequency of Identified Events According to Category (1985-2022)

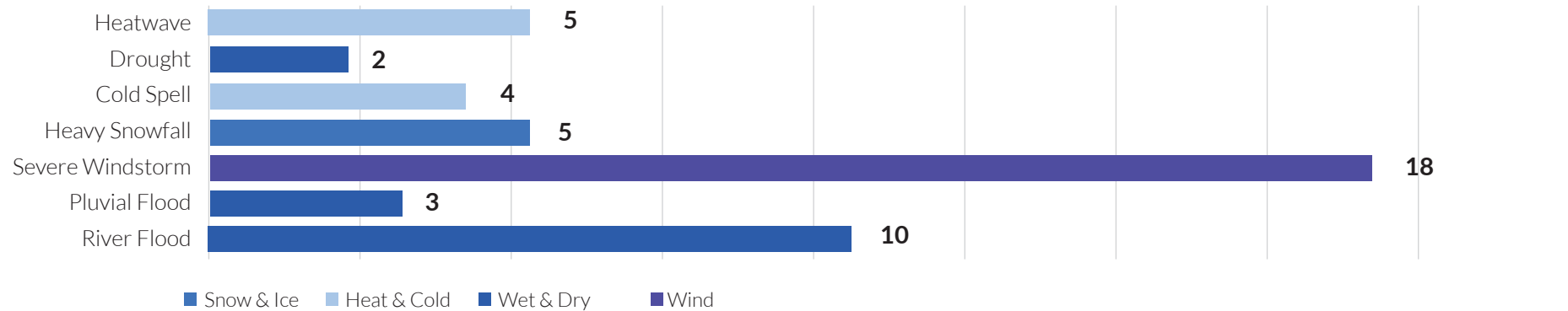
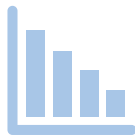


Figure 9 – Frequency of identified events according to category.

### Highlights of Observed Climate Change for Ireland and Monaghan

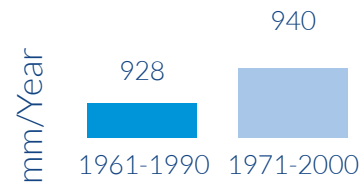
## Droughts



The 2018 Drought (24 days in duration) is the longest running summer drought in Monaghan

## Rainfall

Average annual rainfall increased by 1.3% for the most recent period of observations (1971-2000) compared to the 1961-1990 baseline



## 0.4°C

Average temperature increase for the most recent period of observations 1971-2000 when compared to the 1961-1990 baseline

8 out of the last 10 winters have recorded greater precipitation levels when compared to the 1961-1990 baseline



Highest temperature on record recorded on July 18th 2022 at Carrickmacross, Dunoge



In August 2022 the Clones water treatment plant was put under Irish water notice due to drought conditions

Figure 10 – Observed weather events & impacts for Monaghan.



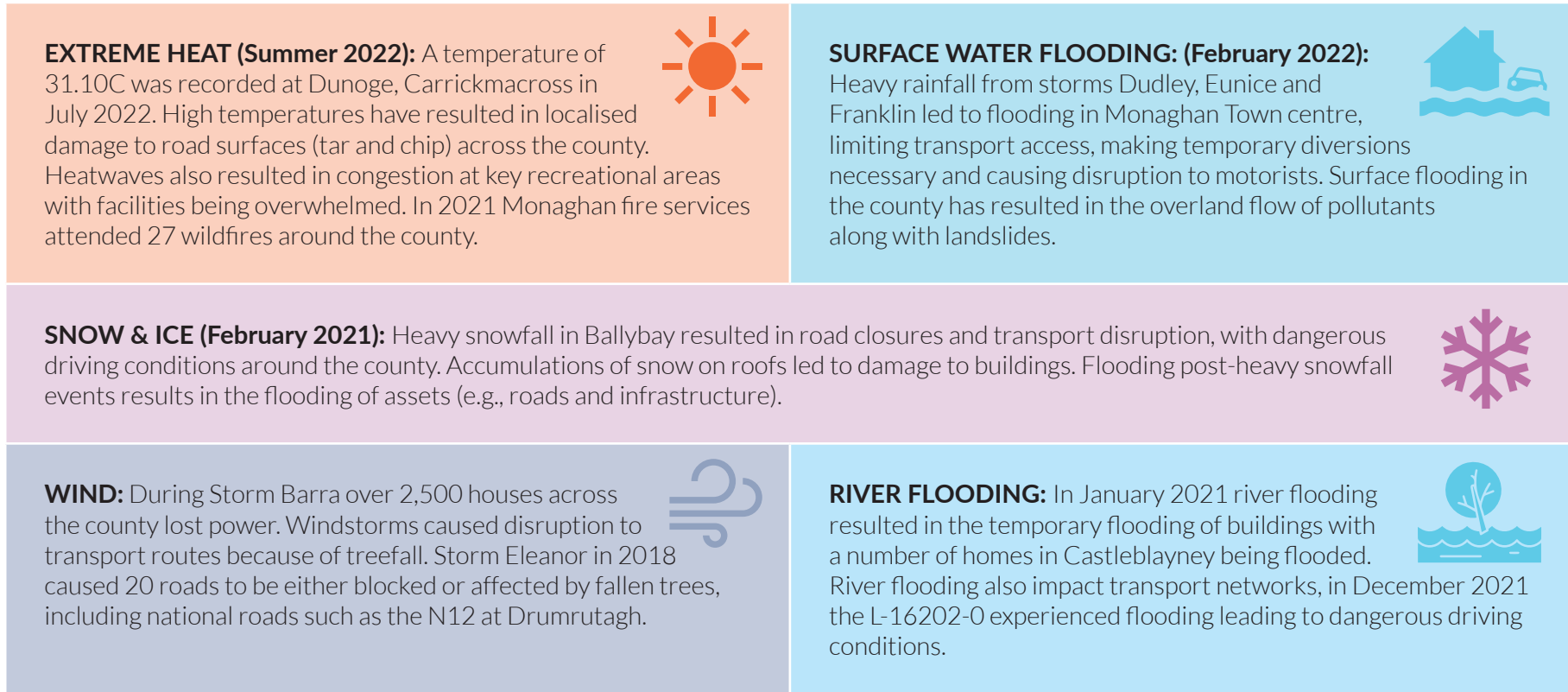


Figure 11 – Examples of impacts from severe weather events in County Monaghan.



### 2.2.2 CCRA Key findings (Projected)

In line with global and national projections of climate change, the climate of Co. Monaghan is projected to change. The frequency of heatwaves, droughts and flooding are expected to increase while projections indicate a decrease in the frequency of cold spells and heavy snowfall.

As a result of climate change, the frequency of extreme weather events is projected to change. For Co. Monaghan, this means that some hazards may occur more often while others may reduce. Below is an overview of projected changes in the frequency of climate hazards for Co. Monaghan by 2050.













HAZARD PROJECTED CHANGE IN FREQUENCY	CLIMATE PROJECTIONS
<b>Heatwaves</b> <i>Increase</i>  	Projections indicate an overall increase in average temperature of between 1.2 and 1.6°C for County Monaghan relative to the 1981- 2000 period. Under a high emission scenario, projections indicate that heatwaves will become more frequent by mid- century.
<b>Droughts</b> <i>Increase</i>  	Summer rainfall is expected to reduce by between 5 and 11% in the future when compared with the baseline period of 1981 to 2000, contributing to a potential increase in frequency of drought conditions.
<b>Cold Spell</b> <i>Decrease</i>  	Because of the increasing temperatures, a decrease in the number of frost days and ice days is projected for the period from 2041-2060 when compared with the baseline period of 1981 to 2000.
<b>Heavy Snowfall</b> <i>Decrease</i>  	The annual snowfall in the region is projected to decrease substantially by the middle of the century.
<b>Severe Wind-storms</b> <i>No Change</i>  	Projections of storms are subject to a high level of uncertainty. By mid-century, projections indicate that average wind speed will remain like those currently experienced. However, some projections indicate an increase in the frequency of the most intense storms which are currently rare events.
<b>Flooding</b> <i>Increase</i>  	Projections indicate an increase in the frequency of heavy rainfall days (days with precipitation >30mm) for County Monaghan with some areas projected to see increases of up to 89%. This will likely result in an increased frequency of associated river and surface water flooding.

Table 3 – Projected change in frequency of climate hazards for Monaghan County by 2050.



### 2.2.3 Future Climate Risks

In determining future climate risks for Co. Monaghan, projected changes in the frequency of climate hazards are assessed in combination with projected changes in socio-economic development and population change.

The population of Co. Monaghan is expected to continue to grow into the future. As a result, an increasing population will be exposed to climate hazards resulting in a growing level of impact on Co. Monaghan both in terms of people affected and the economic value of damage caused.

**Co. Monaghan population is expected to increase to about 70,000 by 2031 with an expected population increase for Monaghan Town of 1,700 by 2025 compared to 2016. An additional 3,056 housing units will be required by 2028.**

As a result, projections of future climate risk, projected changes in the frequency and severity of climate hazards are considered in combination with projected changes in population and socio-economic development.

Climate Risks			
Flooding	Heatwaves/Drought	Windstorms	Cold/Snow
The risk of existing hazards such as river, surface water is likely to increase as hazard events occur more frequently and increased number of assets are exposed to these events. The future impact and frequency of groundwater flooding is also unchanged, meaning the future risk remains low.	Expected to occur more frequently and with potential for a greater impact on Co. Monaghan than experienced currently, as an increasing proportion of the population will be elderly, they will be less able to cope with heatwave and drought conditions.	Although the frequency and impact of severe windstorms is thought to be unchanged in the future, these events will remain a risk for Co. Monaghan.	The impact of heavy snowfall and cold spells on Co. Monaghan remains constant, however, due to the potential decrease in hazard frequency, the overall risk of these hazards is likely to reduce in the future, resulting in less risk.

Table 4 – Projected future Climate Risks in County Monaghan



## 2.2.4 Building Resilience through Adaptation

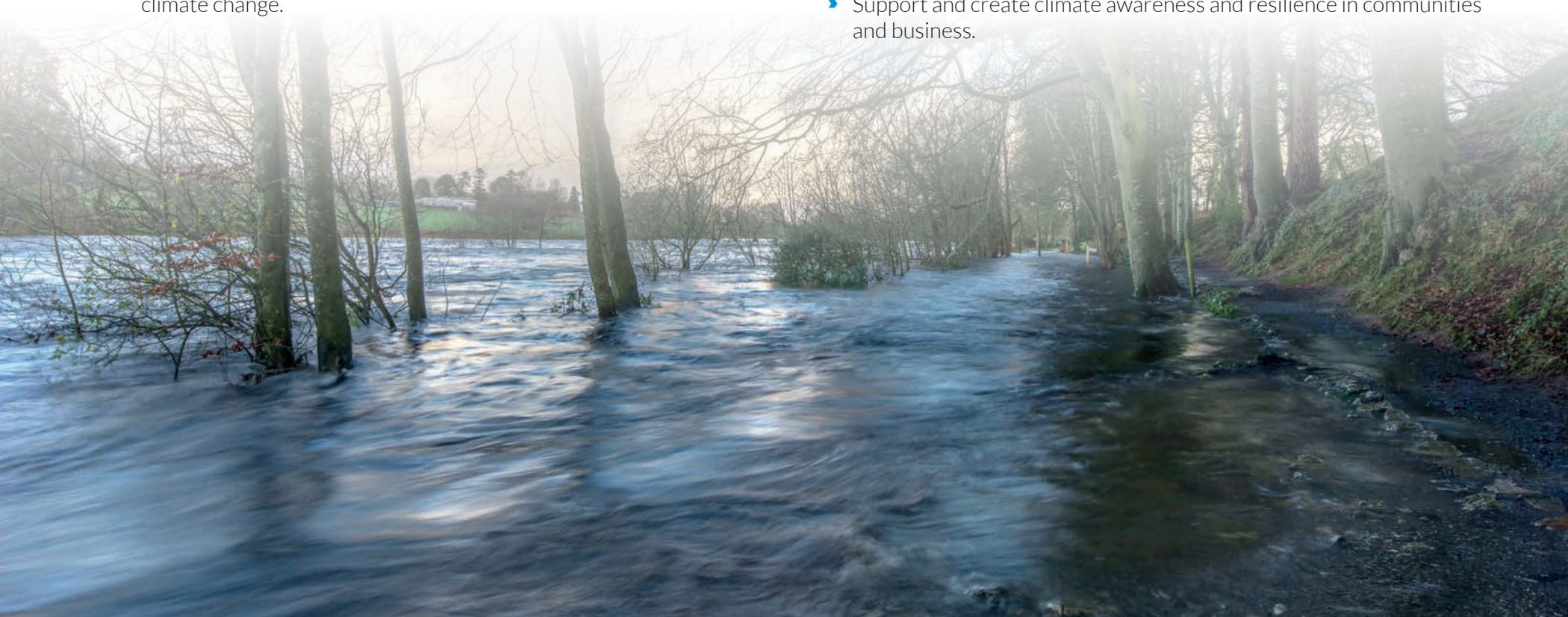
Co. Monaghan and Monaghan County Council are already experiencing a range of climate impacts, including extremes in heat waves/drought and flooding, but in the future, these are expected to become more frequent and severe, alongside the likely consequences which include water shortages and impacts to water quality, damage to property and infrastructure and impacts of degradation on the natural environment, habitats, and biodiversity.

Building resilience through adaptation measures is especially important when acting against future climate change and must be considered alongside actions to reduce carbon emissions across the county.

Our aim is to give priority focus to appropriate adaptation measures that will help ensure Monaghan County Councils services remain resilient and that communities can be protected from the negative impacts of climate change.

### Adaptation Measures

- ▶ Ensure sustained services delivery by all core Council functions by incorporating climate considerations and preparedness into emergency and service delivery planning.
- ▶ Ensure all core Council services are adaptable to a changing climate.
- ▶ Ensure adaptation to climate change is mainstreamed and has a strong foundation in local level policies of Monaghan County Council.
- ▶ Manage and reduce risk of flooding to properties and infrastructure around the county.
- ▶ Understand by way of continuous review of data and information, the current and future impacts of extreme weather events and climate change.
- ▶ Promote natural and nature-based solutions to help build resilience.
- ▶ Support and create climate awareness and resilience in communities and business.





## 2.3 Co. Monaghan Emissions Profile

It is important that this climate action plan plays a role in promoting emission reductions across the broader geographical area of Co. Monaghan. To effectively influence, coordinate, facilitate and advocate climate mitigation and support the delivery of emission reductions across the various sectors, an effective evidence-base is required.

The Baseline Emission Inventory for Co. Monaghan was developed using the methodology set out in *Technical Annex C- Climate Mitigation Assessment: Baseline Energy Inventory of the Local Authority Climate Action Plan Guidelines 2023*. The guidelines require that all Local Authorities develop an emissions inventory for the 2018 baseline year as standard in line with the baseline year for the national emissions reduction objective.

Baseline emissions inventories were prepared for the following sectors residential, commercial and industrial, agriculture, transport, waste and wastewater, and land use, and land use change and forestry (LULUCF).

The total emissions generated from all analysed sectors equates to 2,158,769 tCO<sub>2</sub>-eq for the baseline year. In 2018, the top three sectors contributing to GHG emissions were Commercial and Industrial, Agriculture and Transport, producing 35%, 31% and 16% of tCO<sub>2</sub>-eq respectively. From this analysis, these sectors should be the main targets of energy and emission initiatives. The actions in this plan will be targeted to prioritise these sectors, as appropriate, to ensure that the required levels of decarbonisation will be reached in line with national budgets and sectoral emissions targets and the ambition of the plan. A percentage breakdown of sectoral GHG emissions in Co. Monaghan for the baseline year is provided in the figure 12 and table 5 below:

For more information on the baseline emissions inventory for the county please refer to Annex B County Baseline Emissions Inventory, accompanying this plan for further detail.

### 2.3.1 Co. Monaghan BEI – Key findings

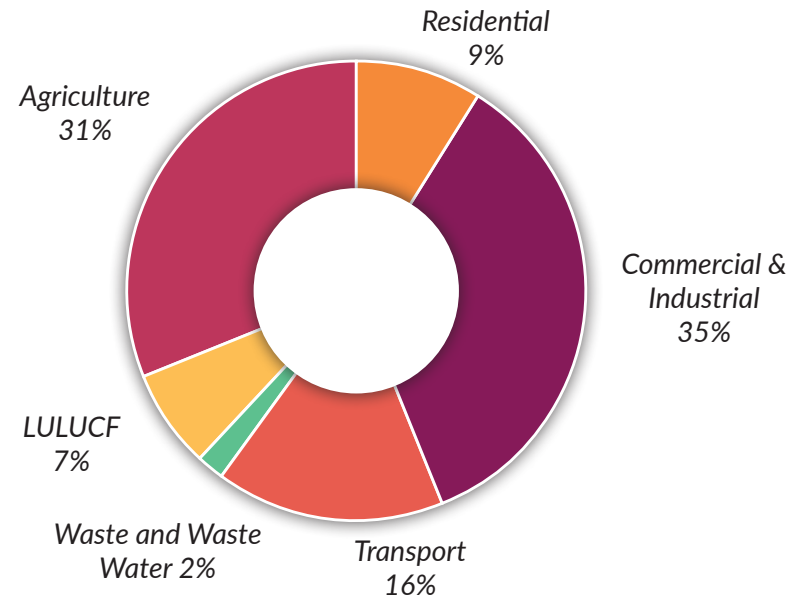


Figure 12 – Percentage of Total Carbon Emissions Per Sector

Sector	Carbon Emissions (tCO <sub>2</sub> e)
Commercial & Industrial	753,442 [35%]
Agriculture	666,254 [31%]
Transport	348,603 [16%]
Residential	192,361 [9%]
LULUCF	158,266 [7%]
Waste & Waste Water	39,842 [2%]
<b>Total Carbon Emissions</b>	<b>2,158,769</b>

Table 5 – Emissions Per Sector



### 2.3.2 Emission sources by sector

**Commercial and Industry:** The Commercial and Industrial sectors are accountable for 35% of carbon emissions within the Monaghan County area. This sector covers Manufacturing Combustion as well as space heating, water heating, cooking and laundry involved in Commercial Services. Generally, it covers GHG emissions from electricity use and combustion sources. It also covers GHG emissions from Industrial Processes.

This sector also covers GHG emissions from the Institutional sector (i.e., emissions associated with local and central government, schools, hospitals etc.), which is defined as a sub-sector of the commercial sector in the EPA National Emission inventory 2021. 'Industrial Uses' is the category generates the highest CO2 with 544,928 tCO2/year, followed by the 'Fuel/Depot' category which generates 180,668 tCO2/year. Combined, both these categories represent 96% of all Commercial and Industrial emissions in the county.

#### Commercial and Industrial Emissions (tCO2e)

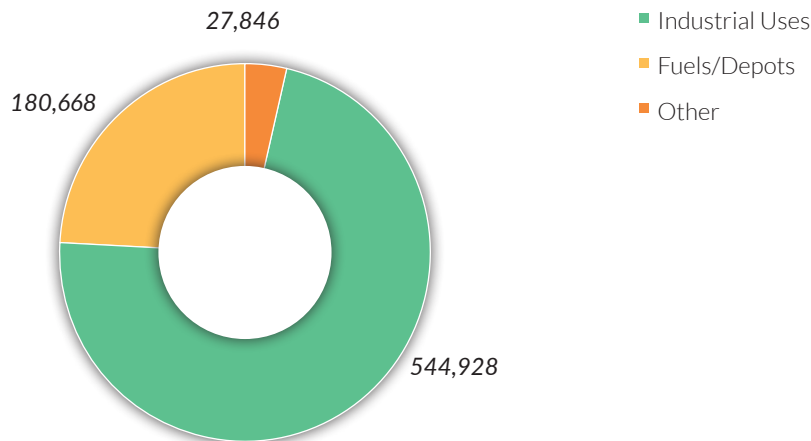


Figure 13 – Commercial and Industrial Emissions.

### Agriculture:

The second highest sector for emissions is Agriculture, accounting for 31% of the emissions in the county. Emissions from cattle (beef and dairy cows) combined contribute the most in terms of livestock related emissions by far, accounting for 78% of CO2-eq emissions from agriculture in the county. Cattle produce much more methane emissions than poultry, and due to the higher global warming potential of methane, their impact is much larger on the environment.

#### Livestock Emissions in the County (%)

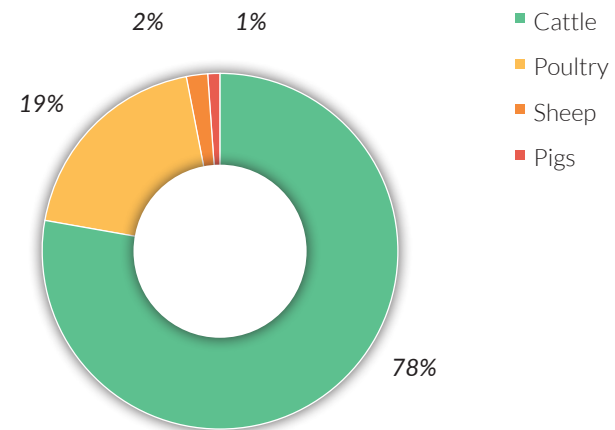


Figure 14 – Livestock Emissions in the County.

Emissions associated with sheep and pig farming are relatively low, yet still significant. Emissions from poultry are relatively significant given the relatively high number of poultry in the county compared to national poultry numbers. The county is well known for having a large poultry sector in a national context.



## Transport:

Transport is the third highest sector for emissions within the county at 16%. Over half of these emissions can be attributed to goods vehicles at 52%. Private cars then account for 44% of emissions. Only 0.75 % of carbon emissions are associated with public transport. These results reflect the transport modes used within the county and the dependency on the use of the private car.

Private cars account for most of the mileage travelled in the county, followed by goods vehicles and tractors and machinery. This reflects the rural nature of the county, the lack of public transportation and the size of the haulage industry in the county. There is a relatively small public transport sector in the county. This is due to the county being rural in nature and having a sparse, dispersed population, compared to counties that have a higher population density and more urban settlement.

### Transport Emissions by Vehicle Type (%)

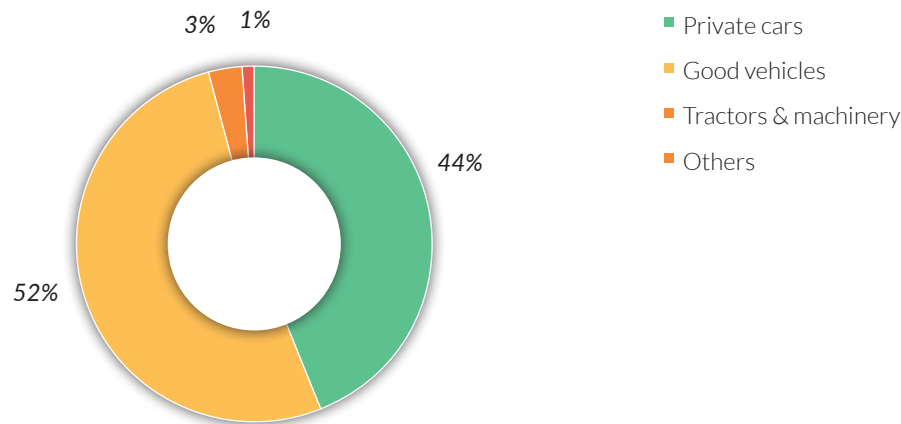


Figure 15 – Transport Emissions by Vehicle Type (%)

The National Sustainability Mobility Policy cites the Avoid-Shift-Improve principle as shown in figure 16 as central to reducing emissions by moving to more sustainable modes of transport.

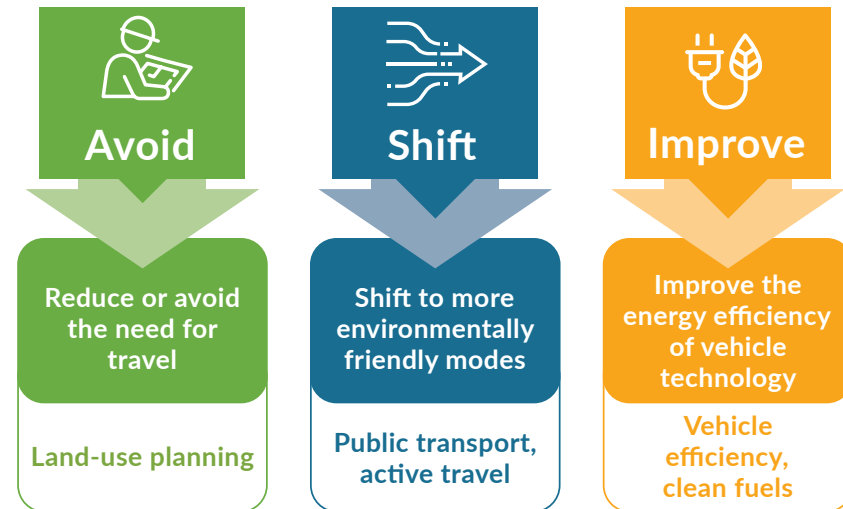


Figure 16 – Avoid-Shift-Improve Policy



### Residential:

A total of 21,282 dwellings were recorded in Co. Monaghan accounting for 9% of the county’s total emissions. The types of dwelling are detached (13,858) semi-detached (4,213) terraced (2,285) and apartments (926). The prevalence of detached housing reflects the level of one-off housing in rural parts of the county. These tend to be larger than average dwellings with higher level of space heating requirements and heat loss associated.

The results show that oil and gas use accounted for 72% and 12% of emissions respectively within residential properties. Electric heating accounts for 11% of emissions. A total of 3% of residential emissions originate from coal and peat use. LPG at 2% represents the lowest fuel use for main space heating in the county.

*In summary:*

- Heating oil is the primary source of main space heating fuel in the county at 72% (heating oil generates a higher level of emissions per unit of energy compared to the combustion of many other heating fuels such as gas).
- 12% of dwellings use natural gas as a main heating fuel mainly in semi-detached and terraced dwellings. This reflects parts of the county having access to the mains gas network.
- Electricity at 11% is the primary source of main space heating fuel in the county for apartments.

### Total Emissions Vs Dwelling Type

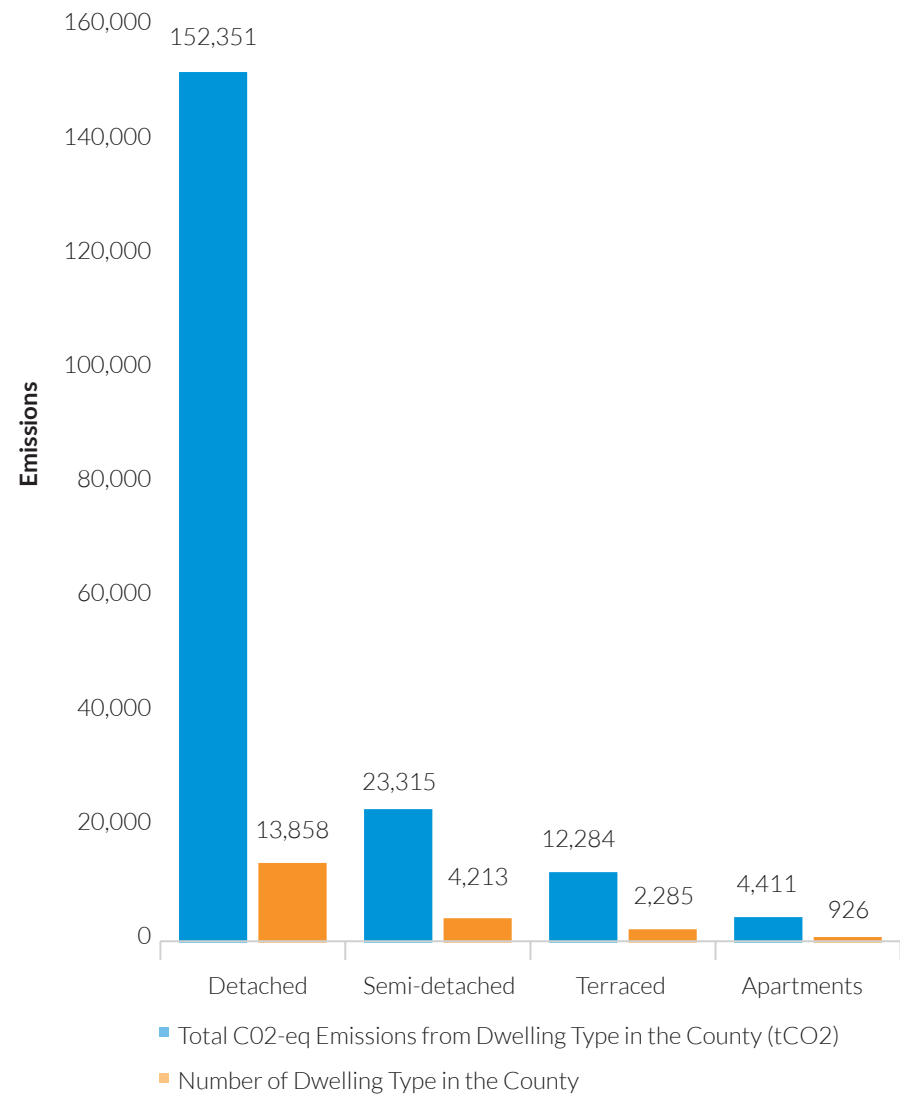


Figure 17 – Emissions per dwelling type.



### Land Use, Land Use Change and Forestry (LULUCF):

This sector is responsible for emissions as well as removals, related to land use, land use change and forestry. Land Use, Land Use Change, and Forestry amounts to 7% of the emissions in the county. Grassland is the most dominant land use type cover spanning 1110.55 km<sup>2</sup> across the county. This is followed by cropland covering 108.74 km<sup>2</sup>, forestland at 30 km<sup>2</sup> and then wetland at 24.76 km<sup>2</sup>.

#### Land use type in Co. Monaghan (km<sup>2</sup>)

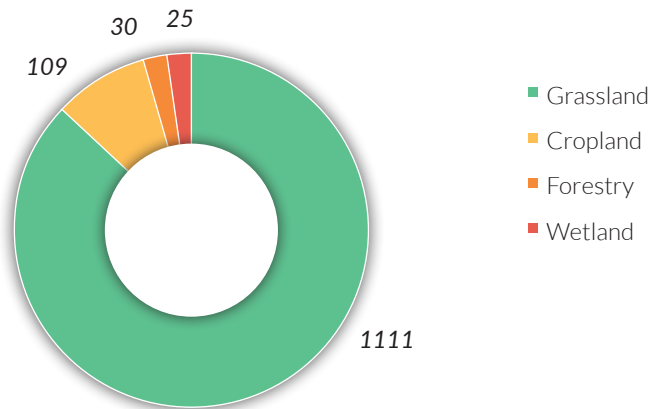


Figure 18 – Land use type in Co. Monaghan (km<sup>2</sup>)

Grassland in the county is the land use type that contributes most in terms of emissions at 180,762 tCO<sub>2</sub>-e. This is followed by Wetland at 5,061 t CO<sub>2</sub>-e. Wetlands refer to unmanaged wetlands and managed peatlands, which are those wetland areas drained for the purpose of commercial exploitation and harvesting of peat. Unmanaged wetlands include peatlands not commercially exploited, inland marshes, salt marshes, moors and heathland and intertidal flats. Forestland and Cropland serve to absorb CO<sub>2</sub> considering both CO<sub>2</sub> gains and losses overall. These land use types generally absorb more carbon (e.g., through vegetative photosynthesis) than they release (e.g., through deforestation or harvesting).

### Waste and Wastewater:

This sector is responsible for the emissions from the handling of waste, incineration of waste (without energy utilization), composting, and wastewater handling. Waste and Wastewater emissions account for 2% of the emissions in the county. The vast majority of these emissions come from the 6 managed and historical waste disposal facilities in the county.





## 2.4 Monaghan County Council Emissions Profile

Monaghan County Council is responsible for, and has control over, the types of energy used in the buildings occupied for service delivery and performance of functions, Local Authority fleet, as well as the public lighting within the administrative area.

Monaghan County Council Energy consumption for the baseline year 2018 is summarised in Figure 19, with Building Electricity and Heating use the largest energy consumer at 39%, Public lighting accounts for 30% and Transport is responsible for 31%.

The carbon emissions produced by Monaghan County Council are summarised in Figure 20, with electricity use the largest source of carbon emissions 61%, transport 24%, and Thermal and heating of buildings is responsible for 15%. The Council will take the actions required to reduce emissions from these sources to support the national climate objective and show leadership within the community on climate action.

2018 - MCC Energy Consumption (%)

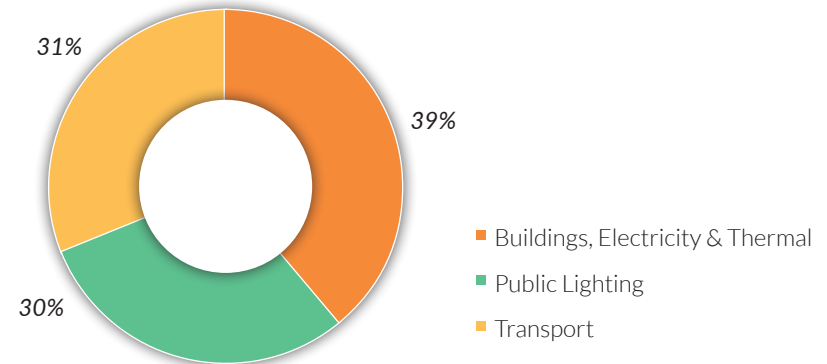


Figure 19 – 2018 MCC Energy Consumption

MCC - 2018 Energy Related Emissions (kg/CO2)

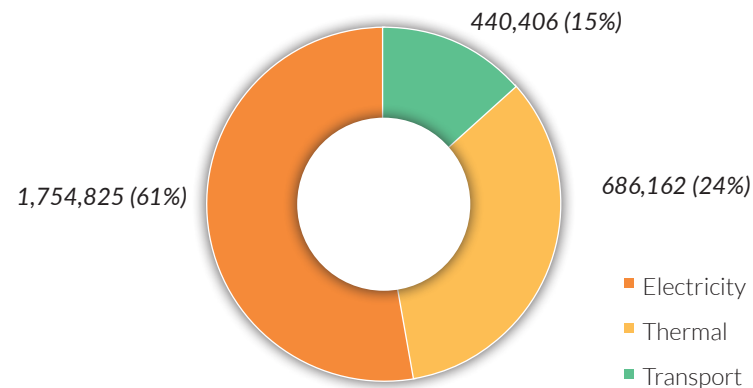


Figure 20 – 2018 MCC Energy Related Emissions



### 2.4.1 Progress to date on Council Emissions

Monaghan County Council has already made significant progress in reducing the emissions from its own operations since the baseline of 2016-2018, with an annual update provided through the monitoring and reporting system. Monaghan County Council must report on three types of emissions, Electricity, Thermal and Transport. Since the baseline Monaghan County Council has reduced its Electricity emissions by 55%. This is due to several innovative projects, the main one being the completion of the public lighting LED retrofit project, this project reduced the energy usage on public lighting by over 50%.

Other projects have helped reduce electricity-based emissions such as solar panels being fitted to three of our buildings to help reduce the buildings carbon footprint. Several buildings have had their lights upgraded to LED's also to reduce electricity consumption.

All this work has led to Monaghan County Council reducing its overall energy consumption by 52% as of the end of 2022. Thermal and Transport based emissions have reduced by a combined 12%. This is due to several projects, such as the introduction of three new electric vans to the fleet along with the addition of fully electric street sweepers. Thermal emissions have reduced due to the continued phasing out of fossil fuel heating systems. All new builds must be heated by a renewable energy source to help reduce thermal emissions. Figure 21 shows Monaghan County Councils emissions reduction since the baseline year.

Total GHG Targets (kg/CO<sup>2</sup>) - Monaghan County Council

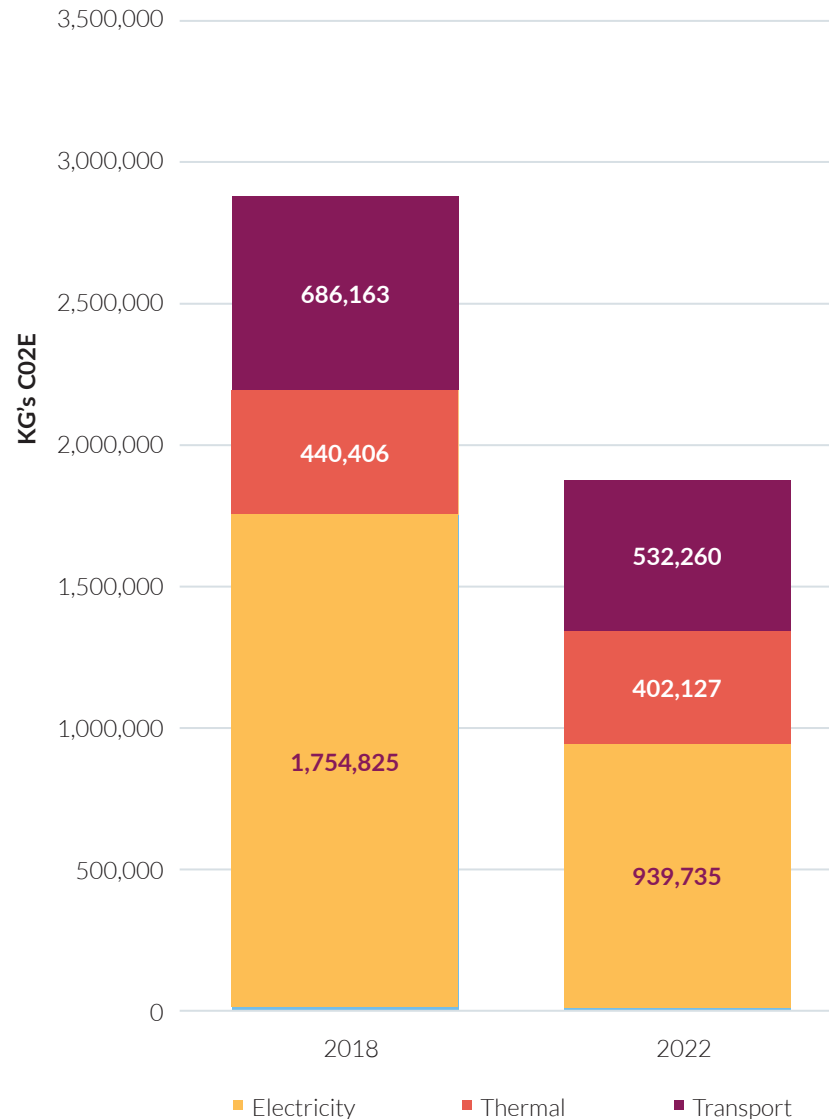





Figure 21 - MCC Overall Emissions 2018 vs 2022

## 2.5 Emission reduction opportunities

The mitigation assessment provides valuable information to inform relevant and targeted actions by Monaghan County Council to reduce emissions within the Council and across the county. Opportunities to support emissions reductions are identified in Table 6 below.

<p><b>BUILDINGS</b></p> 	<ul style="list-style-type: none"> <li>• Support the retrofitting of public and private buildings.</li> <li>• Encourage a switch to green energy sources within the social housing stock, for which Monaghan County Council is responsible.</li> <li>• Leverage the Council’s leadership role within the community to influence residents to switch to lower greenhouse gas emitting energy sources within their homes.</li> <li>• Promote and enabling micro renewables, including uptake of rooftop Solar PV.</li> <li>• Raise awareness amongst the community of greener energy sources and funding streams available.</li> </ul>
<p><b>ROAD TRANSPORT</b></p> 	<ul style="list-style-type: none"> <li>• Improve modal switch options, thereby reducing the amount of private car use by improving availability and access to public transport options.</li> <li>• Increase the use of active travel, such as walking and cycling, by providing suitable infrastructure.</li> <li>• Enable and facilitate EV infrastructure required to support electrification of vehicles.</li> <li>• Raise awareness and incentivise alternative modes of transport.</li> <li>• Facilitate and develop remote working hubs/centres to reduce commuting patterns.</li> </ul>
<p><b>GREEN INFRASTRUCTURE</b></p> 	<ul style="list-style-type: none"> <li>• Enhance biodiversity, ecosystems and habitats.</li> <li>• Plan, design, develop and integrate high quality green spaces.</li> <li>• Plant and maintain trees in urban areas.</li> <li>• Promote, protect and restore carbon rich habitats.</li> <li>• Ensure Green procurement is a focus for all departments within council.</li> </ul>





<p><b>JUST TRANSITION</b></p> 	<ul style="list-style-type: none"> <li>• Ensure all decarbonisation activities include all residents and businesses equitably.</li> <li>• Harness the co-benefits of decarbonising activities for communities.</li> <li>• Target energy poverty to promote fuel switching initiatives.</li> <li>• Raise awareness of grants available, smart metering, energy saving measures.</li> <li>• Provide for accessible infrastructure and systems for all.</li> </ul>
<p><b>COUNCIL ACTIONS</b></p> 	<ul style="list-style-type: none"> <li>• Decarbonising Monaghan County Council’s own assets and activities through retrofitting, switching fossil fuel heating sources to heat pumps.</li> <li>• Decarbonise Monaghan County Council’s own fleet to electric and alternative fuels as appropriate.</li> <li>• Engage with digitalisation and new technologies.</li> <li>• Work with neighbouring local authorities to advance projects to funding and delivery.</li> <li>• Develop implementation plans and strategies for finance.</li> </ul>

Table 6 – Emission Reduction Opportunities for Monaghan County Council & the overall county.

## 2.6 Stakeholder Engagement



Figure 22 – MCC Survey.

To inform the development of this plan, the Council engaged in an extensive series of collaborations with all stakeholders to gather views on risks, barriers, and opportunities to implement climate action in Monaghan. A summary of the groups engaged in this consultation are listed as follows:

- Pre-draft public consultation, survey and public meeting to inform the plan;
- Extensive engagement with the various departments of the Council to understand core operations and inform the development of this Plan;
- Engagement with the Elected Members to ensure support for the actions proposed;
- Engagement with neighbouring Local Authorities through both direct engagement and the CARO organised events to collaborate on plan development;

### 2.6.1 Pre-draft stakeholder engagement

The pre-draft stakeholder engagement to shape the LACAP for the county ran from the 12th of June to the 14th of July 2023. The public were invited to have their say by taking part in an online survey or sending in a written submission by email/post. A total of 107 members of the public took part in the online survey while 10 detailed written submissions were received over the consultation period. This valuable feedback informed the Climate Action Plan.

There were 4 events carried out as part of this pre-draft consultation period along with an advertisement in the Northern Standard and social media posts on the Council’s social media channels,

- An introductory presentation was given on the 29th of May to the Climate & Environment Strategic Policy Committee including a summary of the baseline evidence for the climate plan.
- An overview presentation from the Climate Action Unit was given to the Full Council meeting on the 12th of June.
- A public & community workshop was held on the 20th of June in the Hillgrove Hotel. The workshop gave attendees the opportunity to help shape the actions in the county’s new Climate Action Plan and to learn about Monaghan’s Community Climate Action Programme to support communities to take climate action at a local level.



Figure 23 – Image of the Public & Community Climate Action Workshop

- An internal workshop to develop sectoral actions for the new climate action plan was held on the 19th of July. The workshop was facilitated by Breda Maher, Regional Coordinator with the Eastern & Midlands Climate Action Regional Office (CARO). The workshop was well attended and worked well to elicit the key actions and strategic priorities from the wider council climate action team and senior management.

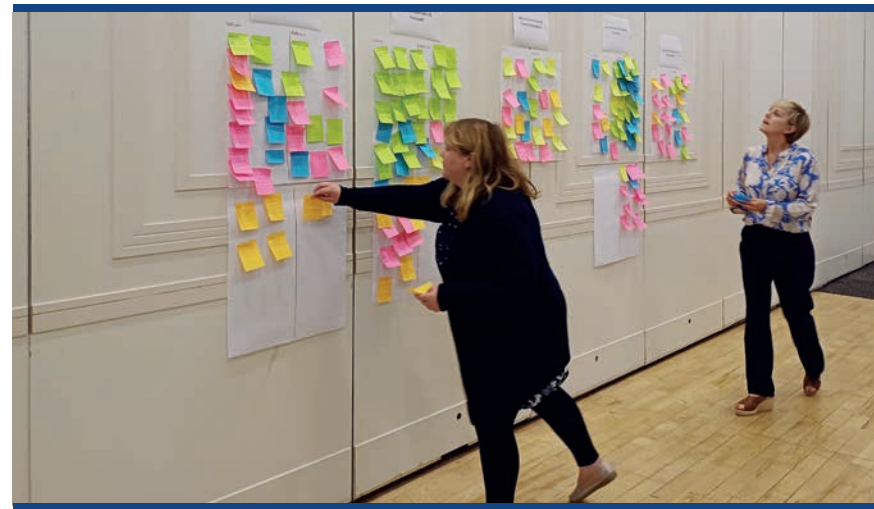


Figure 24 - Image of the Internal staff Climate Action workshop.





## 2.6.2 Press & Media

An advertisement was placed in the Northern Standard which highlighted the importance of the LACAP for Co. Monaghan. The advertisement also highlighted the main stages of the development of the LACAP. Finally, the advertisement outlined how members of the public would be able to make submissions for the LACAP as outlined above.

During the public consultation period social media posts were sent out on the various council social media channels, including Facebook and LinkedIn asking the public to have their say.

# The Northern Standard

**Monaghan County Council is preparing a Local Authority Climate Action Plan**

**THURSDAY, 29th June, 2023**

We're looking for your input into our Local Authority Climate Action Plan LA-CAP. Help us shape appropriate actions to facilitate and enable effective climate action at a local and community level. Our Plan is currently in draft, and the final version will be adopted by our Elected Members before February 2024.

Local authorities are key drivers in advancing climate policy at the local level and our LA-CAP aims to strengthen the alignment between national climate policy and local circumstances with the prioritisation and acceleration of evidence-based measures, to assist in the delivery of the climate neutrality objectives for Monaghan.

Monaghan County Council will use its LA-CAP in planning how it will reduce greenhouse gas emissions from across its own assets and infrastructure, whilst also taking on a broader role to influence, facilitate and co-ordinate the climate actions of communities and other stakeholders and what it will do to advocate for climate action in Monaghan.

In order to ensure that our LA-CAP is centred around a strong understanding of the role and remit of Monaghan County Council on climate action, the Plan is being developed through the following framework:

- **Full accountability:** Targeted actions for areas where Monaghan County Council has full accountability for climate action within their own operations.
- **Influence:** Actions for where Monaghan County Council can influence businesses, communities, and individuals in the delivery of local climate action through the functions and services they provide.
- **Coordination:** Actions for where Monaghan County Council can coordinate and facilitate local and community action bringing together stakeholders in partnership to achieve climate action related projects.
- **Advocate:** Actions aligned to Monaghan County Council role as advocate on climate action through raising awareness, communicating, informing, and engaging in open dialogue on the topic.

While the Climate Action Plan will be ambitious to reflect the leadership role of Monaghan County Council on climate action, the Plan will not include actions whereby their implementation and achievement fall outside our role, remit, and governance. The development of the Climate Action Plan will follow a number of steps as explained in the graphic below:

<b>1. Building the Evidence Base</b> (April - June 2023)	<b>2. Plan Making Phase</b> (July to September 2023)	<b>3. Climate Action Plan adopted</b> (October 2023 to February 2024)
<ul style="list-style-type: none"> <li>Baseline Emission Inventory</li> <li>Climate Change Risk Assessment</li> <li>Stakeholder Engagement Planning</li> <li>Policy Mapping</li> </ul>	<ul style="list-style-type: none"> <li>Pre-draft engagement</li> <li>Developing the vision, objectives, actions, and key performance indicators</li> <li>SEA/AA Reports</li> <li>Public Consultation on draft LA-CAP</li> </ul>	<ul style="list-style-type: none"> <li>Consideration of submissions</li> <li>Finalising LA-CAP</li> <li>Adoption of LA-CAP by Elected Members</li> </ul>

**Purpose of the Plan:**

- To deliver on national obligations to achieve the National Climate Objective of becoming a Climate Resilient, Biodiversity Rich, Environmentally Sustainable and Carbon Neutral Economy by no later than the end of 2050.
- To deliver and promote evidence-based and integrated climate action by way of adaptation and mitigation measures, centred around a strong understanding of the role and remit of the local authority on climate action.

**Adaptation** means anticipating the adverse effects of climate change and taking appropriate action to prevent or minimise the damage they can cause, and / or taking advantage of opportunities that may arise.  
**Examples:** flooding defences; green infrastructure & ecosystem services; sustainable land use & urban planning; biodiversity management; water use efficiency.

**Mitigation** means making the impacts of climate change less severe by preventing or reducing the emissions of greenhouse gases (GHG) into the atmosphere.  
**Examples:** energy use & GHG emission reduction activities; energy efficient buildings; increase use of renewable energy sources (solar, wind); sustainable transport; carbon sequestration; carbon capture with utilisation; waste reduction.

**Changing Climate**  
 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 drought, storms, heavy rainfall, and stronger winds resulting in higher vulnerability and risk to the impacts of climate change within the local authority area. To tackle climate change, the level of greenhouse gases entering and already in our atmosphere need to be reduced and removed. In addition, we must further increase our resilience to current and future climate change impacts. As part of global and national efforts, we must meet the National Climate Objective 2050. Our Climate Action Plan will set out how the local authority aims to achieve its role within the National Climate Objective over the next 5 years and beyond toward 2050. It will act as a key instrument that strengthens the links between national and international climate policy and the delivery of effective climate action at local and community levels, through place-based climate action.

**Themes for action measures will include, but not limited to:**

**Transportation**

- ✓ Greener Economy
- ✓ Agriculture & land use
- ✓ Home energy
- ✓ Biodiversity and natural based solutions
- ✓ Food & waste
- ✓ Shopping/recycling/resource management

**How to Make a Submission**  
 In order to ensure that local based information is included, Monaghan County Council are requesting your views, observations and recommendations for consideration in the preparation of the draft Climate Action Plan.

There are three ways you can have your say to help us shape the actions in the new Climate Action Plan.

1. Complete the short online survey on our dedicated Climate Website:  
<https://monaghan.ie/environment/local-authority-climate-action-plan-survey/>
2. Email your submission to [climateaction@monaghancoco.ie](mailto:climateaction@monaghancoco.ie)
3. Post your submission to: Climate Action Section, Environment Department, Monaghan County Council, MTK 1 Building, Knockanorey, Monaghan.

Completed surveys and submissions can be made up until 12 noon on 14th July 2023. Everyone is welcome to make a submission (including youth groups, children and those representing children) at each public consultation stage of the Monaghan County Council Climate Action Plan.

**How to Write a Helpful Submission**  
 Please write submissions that:

- Are short and to the point
- Are focused on one or more of the key climate themes of interest to you
- Include your name and address. (You contact details will not be published)

The content of your submission may be published as part of the plan-making process. At all times Monaghan County Council will comply with GDPR Guidelines.

**Stay Informed**  
 You can keep updated on the progress of the Climate Action Plan through:

- <https://monaghan.ie/environment/climate-action/>
- <https://www.facebook.com/Monaghancoco/>
- Monaghan County Council (@MonaghanCoCo) / Twitter

Figure 25 – Image of the Advertisement placed in the Northern Standard.

### High level outcomes from Public Engagement

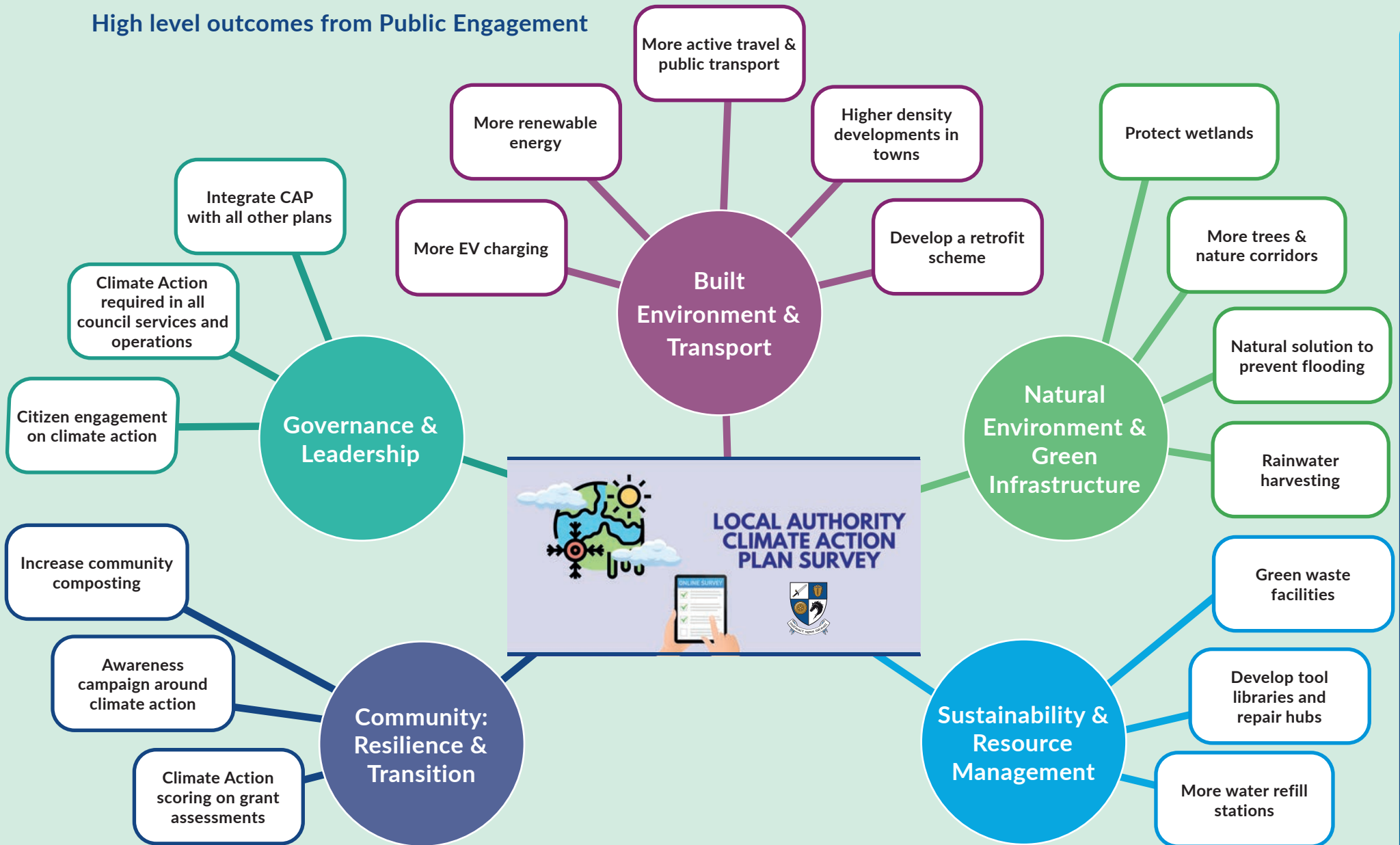


Figure 26 – High Level Outcomes of Public Engagement

### 2.6.3 Statutory Public consultation phase of the Draft Climate Action Plan (2024-2029)



*Figure 27 – Climate action clinics at Monaghan Library*

The Draft Monaghan County Council Climate Action Plan (2024-29) was published on the 19th of October for public consultation. The proposed plan was informed by the extensive pre-draft consultation stage held over the summer and outlined the Council’s objective to secure a sustainable future for the people of Monaghan and to create a low carbon and more climate resilient county.

During the 6-week statutory consultation period which closed on the 4th of December the Council actively sought the views of the public to help shape and enable effective climate action at a local and community level. A dedicated Climate Action Consultation web page was developed for the public to view the plan and make a submission. A consultation survey was developed as a more streamlined option for people to have their say on the proposed plan.

The plan was also made available in hard copy at each of the libraries in the county. Stakeholder engagement and outreach activities included the following:

- Statutory Notice, press release and advertisement placed in Northern Standard to encourage people to have their say on say on Monaghan’s draft Climate Action Plan.
- Formal notice given to all elected members and Climate & Environment SPC members on publication of the draft Climate Action Plan, where to see the plan and how to make a submission.
- Extensive posts on the Council’s social media channels to raise awareness and invite the views of the public.
- Presentation & discussion on the Draft Plan and consultation process delivered to the November Climate & Environment SPC
- Comhairle na nÓg, National Youth Council of Ireland and all secondary schools in the county were invited to make a submission to ensure that young people had an opportunity to feed into the plan making process.

Members of the public were encouraged to attend public consultation drop-in clinics which were held in Carrickmacross, Castleblayney, Clones, Monaghan and Ballybay Libraries. These two-hour sessions were hosted by the Climate Action Unit to provide guidance on the draft plan and on the consultation process.

A total of 23 submissions were received within the consultation period. All submissions received were considered in the preparation of the final Climate Action Plan that was proposed for adoption.





**Monaghan County Council**  
**Draft Climate Action Plan 2024 - 2029**





Public Consultation drop in clinics facilitated by the Climate Action Unit will be held at the following Libraries:

- Wed :Carrickmacross Library:  
 1st Nov 5-7pm
- Fri 3rd :Castleblayney Library:  
 Nov 2-4pm
- Mon :Clones Library: 5-7pm  
 6th Nov
- Wed :Monaghan Library:  
 8th Nov 5-7pm
- Thurs :Ballybay Library:  
 16th Nov 2-4pm

Figure 28 – Flyer to advertise consultation clinics

**Monaghan County Council**  
 October 24, 2023 · 🌐

#Monaghan County Council is seeking the views of the public on the draft Climate Action Plan to help shape and enable effective climate action at a local and community level. 🌱👥

The proposed climate actions have been informed by the pre-draft consultation held this summer and aim to influence how we can move towards a greener future and net-zero carbon emissions across the wider County.

Take a look at the draft plan and have your say using the link below: <https://monaghan.ie/.../the-draft-monaghan-county.../> 📄🖨️

#YourCouncil #ClimateAction #LiveWorkVisitMonaghan



Figure 29. Social Media Post to invite the public to have their say.





**3**

# FRAMEWORK OF CLIMATE ACTIONS





### 3.1 Overview

Actions of this plan will be delivered within and as part of a framework to ensure their effective and successful delivery. Actions prioritised as part of this framework will work to reduce emissions from Monaghan 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 community level.

The framework configures the arrangement of climate actions within a defined structure ensuring alignment between potential on the ground actions and the overarching vision that the plan aspires to deliver.


Figure 30 identifies the framework from plan vision to actions.



Figure 30 – Framework of climate actions in Monaghan climate action plan.

### 3.2 Plan Vision & Mission


The plan vision reflects the shared perspective of a climate resilient and climate neutral future for Co. Monaghan.



**CLIMATE ACTION VISION FOR MONAGHAN**

**That Monaghan County Council will be an exemplar organisation that leads, supports and inspires actions to achieve a Climate Resilient, Biodiversity Rich, Environmentally Sustainable County and Climate Neutral Local Economy.**

While Monaghan County Council’s vision statement defines where it would like to lead the county, its mission statement speaks to its grounded purpose in delivering and mainstreaming effective climate action across all services and functions.



**CLIMATE ACTION MISSION FOR MONAGHAN**

**To deliver transformative change and measurable climate action across our county and within our own organisation, through leadership, example, and mobilising action at a local level.**

This action-oriented mission statement helps guide representatives and stakeholders of Monaghan County Council in coordinating their work towards the defined vision.



### 3.3 Plan Goals, Objectives, and Actions

#### Strategic Goals Overview



Figure 31 – Thematic Areas for CAP Implementation.

Strategic goals set the context for mitigation and adaptation actions in service of Monaghan County Council’s climate vision and mission. The identification and development of such goals establishes a structured approach to the arrangement of climate actions to be addressed.

The Climate Action Regional Office have supplied guidance on the framing of climate action under this plan to allow for a consistent approach across all Local Authority plans. Five key themes have been identified as the strategic goals to be adopted in this plan and these are shown in Figure 31. These strategic goals have been used to devise the suite of objectives and actions under this plan and the format of the information presented for each strategic goal is aligned with the Local Authority Climate Action Plan Guidelines 2023.

The objectives and actions are presented in a tabular fashion for each of the Strategic Goals as follows:

- **SG 1: Actions for Governance & Leadership**
- **SG 2: Actions for Built Environment and Transport**
- **SG 3: Actions for Natural Environment & Green Infrastructure**
- **SG 4: Actions for Communities: Resilience and Transition**
- **SG 5: Actions for Sustainability & Resource Management**

## 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: A stakeholder is anyone who impacts on, or is impacted by an action. 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 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., a feasibility study may be required prior the installation of renewable technologies.





## Environmental Governance Principles:

The following environmental governance principles and considerations will under-pin proposed Climate Actions. All activities and development supported by the defined climate actions shall be undertaken or influenced by the Local Authority, as appropriate, in accordance with these Environmental Governance Principles. Mitigation has also been achieved by the integration of environmental considerations into the defined LACAP climate actions which the Council commits to take account of during the plan implementation phase.

Ref	Measure
<b>EG1</b>	Promote climate action projects that support and maximize environmental co-benefits, such as biodiversity protection and enhancement; improved air, water or soil quality; or enhanced recreation, amenity and cultural heritage value, to ensure win-win benefits are gained.
<b>EG2</b>	Support or facilitate climate action related projects and initiatives which seek to make improvements in soil structure, management and health by increasing soil organic carbon - which will create the environmental co-benefits of improving flood resilience by enhancing water holding capacity of soils and increasing the level of GHG sequestration associated with land use functions.
<b>EG3</b>	Ensure all development underpinned or supported by climate action is planned and implemented in a manner that appropriately considers the potential for environmental co-benefits, potential environmental impacts and environmental protection requirements. No climate action related development project that is likely to have significant negative effects on the receiving environment shall be supported.
<b>EG4</b>	Flood projects, or related maintenance works, shall be carried out in a manner that promotes climate action-biodiversity related co-benefits, and shall have due regard for the protection and enhancement of rare, protected or important habitats and species.
<b>EG5</b>	Ensure climate action related projects are carried out in a manner that promotes climate action-cultural heritage co-benefits, and do not result in unauthorized physical damage to cultural, archaeological or architectural features, or unauthorized or inappropriate alteration of the context of sensitive cultural heritage features.
<b>EG6</b>	Ensure climate action related projects are carried out in a manner that promotes climate action water quality co-benefits, and align with the provisions of the Water Framework Directive and relevant River Basin Management Plan.
<b>EG7</b>	Promote climate action projects that support protected trees, hedgerows and other habitats such as wetlands, flood zones which contribute to green infrastructure.
<b>EG8</b>	Support opportunities to improve ecological connectivity of non-designated habitats and sites to improve overall ecosystem resilience and functioning while supporting climate action within the county.
<b>EG9</b>	Ensure all projects supported by the council have taken the necessary precautions to identify and manage invasives species, particularly with regard to Schedule III species. No climate action related development project that is likely to cause the spread of invasives species listed in Schedule III shall be supported.

Table 7 – Environmental Governance Principles





### 3.4 Governance & Leadership

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 the action plan is the collective responsibility of many stakeholders, beyond Monaghan County Council. However, a critical success factor is that Monaghan County Council is committed to providing strong governance and leadership to deliver this plan.

In this context Monaghan 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, influencing and enabling others to meet their own climate obligations.

Actions set out as part of the strategic goal of Governance and Leadership will ensure that Monaghan 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:** Activation 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:** Engaging with relevant government departments, agencies and stakeholders and establishing partnerships to find solutions to implement actions.

**Mainstreaming:** Ensure that all strategies, policies, plans, and projects developed by the Council are compatible with the climate action plan and that priority actions are funded.

**Communications and engagement:** Raise public awareness to support the implementation of the climate action plan.

**Monitoring and reporting:** Establish a system to track progress towards achieving actions and ensure transparent reporting.





**Governance & Leadership**

**SG1. Develop and Implement climate action across all council activities and operations.**

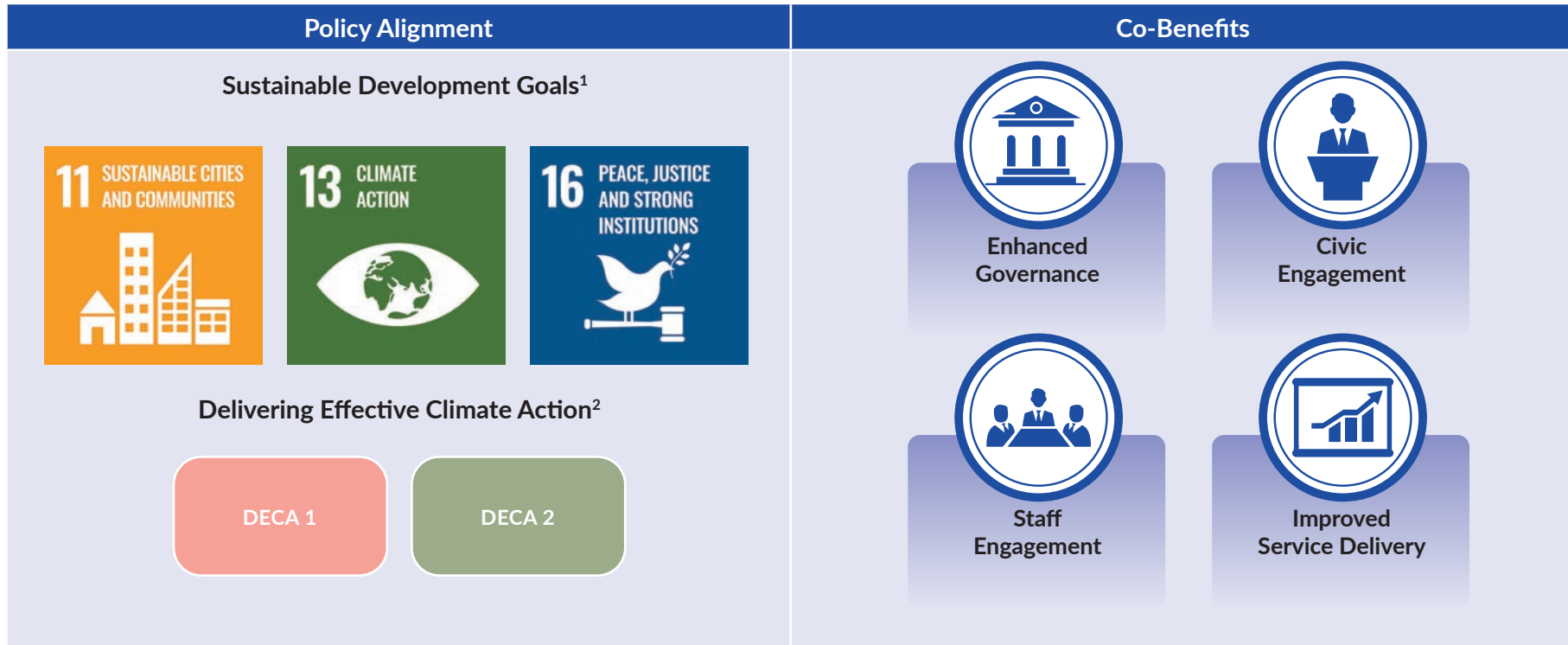
**Objectives**

**Objective G&L 1:**

Embed climate action into all our decision-making and increase our capacity to respond to the challenges of climate change.

**Objective G&L 2:**


Work and collaborate with other sectors and agencies to deliver programmes that support climate action.



<sup>1</sup> For more information on SDG Alignment see Section 1.7 Alignment with policy/commitments.


<sup>2</sup> For an overview of the Delivering Effective Climate Action 2030 (DECA) Goals see Section 1.7 Alignment with policy/commitments.




 <b>Governance &amp; Leadership</b>		SG1: Develop and Implement climate action across all council activities and operations.				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
GL 1	Embed Climate Action into all Council plans, policies and strategies including the County Development Plan, Corporate Plan, Annual Service Delivery Plan, Team Operational plans, individual Personal Development Plans, and section risk registers to ensure the delivery of climate actions across all departments.	Combined	Number of KPI's in policies and plans that mention Climate Action.	Senior Management Team, Corporate Services,	All Council Sections, Climate Action Unit	Annually
GL 2	Ensure that Climate Action is listed as a standing item each quarter on the agenda of the Management Team meetings.	Combined	Meetings include Climate Action as agenda item.	Senior Management Team, Corporate Services	Climate Action Unit	Annually
GL 3	Support the activities of the Council wide Climate Action Team & Steering Group including ensuring participation from staff representatives from across all key departments of MCC to ensure the successful implementation of the actions of this Climate Action Plan and to report on progress.	Combined	Number of actions started, ongoing, complete.	Senior Management Team		Annually
GL 4	Join SEAI Public Sector Decarbonisation Partnership Programme.	Mitigation	Annual review of MCC energy-related critical success factors.	Capital Projects (Energy Officer)	Climate Action Unit	1 year
GL 5	Prepare a Green Public Procurement strategy for MCC to ensure Green Public Procurement is considered in all tenders.	Mitigation	Completion of Green Public Procurement strategy.	Procurement Section	All council sections, Office of Government Procurement	2 years





 <b>Governance &amp; Leadership</b>		SG1: Develop and Implement climate action across all council activities and operations.				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
GL 6	Provide clear and coordinated communications campaigns to help raise public awareness and engagement on Climate Action and delivery of MCC’s Climate Action Plan.	Combined	Number of press releases/ events that include Climate Action and / or progress on MCC’s Climate Action Plan.	Communications team / Corporate Services, Climate Action Unit		Annually
GL 7	Ensure MCC commits the required budget, and human resources for climate action, to implement the Climate Action Plan.	Combined	Budget and resources allocated to implement climate action in each core function.	Senior Management Team	All section leads	Annually
GL 8	Build expertise and capacity within MCC to deliver on climate action targets through targeted and training programmes on Climate Action.	Combined	Number or percentage of staff that have completed climate action training.	Finance, Human Resources, Climate Action Unit	All Council sections, CARO	Annually
GL 9	Roll out online council platform that will help MCC meet the target of 90% online services by 2030.	Combined	Adoption & implementation of digital strategy.	Information Technology	All Council sections	4 years
GL 10	Review the major emergency plan & flood plan to ensure incorporation of future climate risk.	Adaptation	Review of each plan annually.	Fire and building control, Climate Action Unit	Roads, Municipal Districts, Senior Management Team	Annually



 <b>Governance &amp; Leadership</b>		SG1: Develop and Implement climate action across all council activities and operations.				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
GL11	Recruit dedicated staff member to be responsible for coordination of flood risk and flood alleviation works.	Combined	Successful recruitment of dedicated staff member.	Senior Management Team	Human Resources	3 years
GL12	Include dedicated Climate Action unit as permanent core function on workforce plan to lead, support and report on Climate action measures, awareness campaigns, and manage funding for local climate change action projects.	Combined	Climate Action Coordinator, Climate Action Officer and Community Climate Action Officer included on work force plan.	Human Resources, Finance	Environment & Climate Action Department.	3 years
GL 13	Identify and draw down funding from all available sources for climate action.	Combined	Amount of funding secured.	Climate Action Unit	All council sections	Annually
GL 14	Develop a digital dashboard to report on climate action progress.	Combined	Dashboard in place to track number of Climate Actions started, ongoing, completed.	Information Technology	Climate Action Unit	Year 2
GL15	Encourage virtual meetings and effective journey management to reduce business mileage.  Comply with blended working policy.	Mitigation	Number of days employees worked from home.  Total mileage each quarter.	Human Resources	Senior Management Team, Climate Action Unit	Annually



### 3.5 Built Environment & Transport

The built environment includes buildings of domestic, public, industrial, and commercial nature across the Co. Monaghan as well as critical infrastructure like roads, bridges, drainage network, 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.

Transport emissions in Co. Monaghan reflect the high level of private car dependency. Action is needed to reduce car journeys, increase cycling and walking, improve public transport, and increase the number of low emission vehicles. Through this, better air quality, mobility and health for citizens can be achieved.



Launch Of Greenway.

Electric Vehicles (EVs) are becoming more popular across the country, in line with the shift away from fossil fuel-powered vehicles. To support this trend MCC aims to play a proactive role in facilitating the technological transition by working with service providers to roll out the infrastructure required to meet the demand for accessible charging.







**Built Environment & Transport**

**SG2. To pursue climate actions to increase climate resilience of the built environment and transport and achieve emission reductions in line with national targets.**

**Objectives**

**Objective 1 Built Environment & Transport:**

Increase our energy efficiency, reduce our reliance on fossil-based fuels, and positively influence the actions of others within our community.

**Objective 2 Built Environment & Transport:**

To enhance the resilience of transport infrastructure, council assets and housing stock.

**Policy Alignment**

**Sustainable Development Goals<sup>1</sup>**



**Delivering Effective Climate Action<sup>2</sup>**



**Co-Benefits**



**Job Creation**



**Local Development**



**Greater Resilience**




**Reduced Costs**


<sup>1</sup> For more information on SDG Alignment see Section 1.7 Alignment with policy/commitments.

<sup>2</sup> For an overview of the Delivering Effective Climate Action 2030 (DECA) Goals see Section 1.7 Alignment with policy/commitments.




 <b>Built Environment &amp; Transport</b>		<b>SG2: To pursue climate actions to increase climate resilience of the built environment and transport and achieve emission reductions in line with national targets.</b>				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
<b>Built Environment</b>						
BE 1	<b>Improve the energy efficiency of Council buildings to help deliver carbon reduction targets, maximising the use of renewable energy sources where possible</b> , having due regard to local human receptors, protected species, biodiversity, European sites and the need to appropriately conserve protected structures.	Mitigation	Percentage reduction of thermal and electricity-based emissions annually on M&R system.	Corporate Assets, Housing.	SEAI, Climate Action Unit	5 years
BE 2	<b>Continue retrofitting council owned social housing to improve BER ratings</b> ; having due regard to local human receptors, protected species, biodiversity, European sites, and the need to appropriately conserve protected structures.	Mitigation	Percentage of social housing with a BER rating of B2 and above.	Housing	Finance	Annually
BE 3	<b>Ensure all new council buildings where possible are built to at least NZEB standards</b> ; having due regard to the need to ensure renewable energy development supported by this action will not have any significant negative environmental effect.	Mitigation	Number of new buildings built to NZEB standards.	Capital Projects	Client Department	2 years.
BE 4	<b>Undertake a climate risk assessment of MCC owned heritage assets (natural and built), following best practice guidance.</b>	Adaptation	Climate risk assessment complete.	Heritage & Biodiversity Section	Climate Action Unit Planning Unit	2 years.




 <b>Built Environment &amp; Transport</b>		<b>SG2: To pursue climate actions to increase climate resilience of the built environment and transport and achieve emission reductions in line with national targets.</b>				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
<b>Built Environment</b>						
BE 5	<b>Continue to complete BER reports/ Energy audits on Council owned public buildings to generate a building asset register.</b>	Mitigation	Number of BER reports/ Energy audits completed each year.	Corporate Assets	Climate Action Unit	2 years
BE 6	<b>Identify all local council-owned archives and collections in relation to heritage or built environment and implement disaster management plans as appropriate, plan and carry out review to develop climate resilience (using exemplars and pilot studies).</b>	Adaptation	Audit of assets complete, management plans in place and programme of inspection commenced.	Museum section	Libraries, Heritage Section	3 years
BE 7	<b>Promote adaptive reuse of historic structures in the county e.g., retrofitting projects and using carbon budgets to demonstrate climate value;</b> having due regard to protected species, biodiversity, European sites, and the need to appropriately conserve protected structures.	Mitigation	Number of case study projects selected and delivered.	Planning, Heritage Section	Regeneration Section	5 years.






 <b>Built Environment &amp; Transport</b>		<b>SG2: To pursue climate actions to increase climate resilience of the built environment and transport and achieve emission reductions in line with national targets.</b>				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
<b>Built Environment</b>						
<b>BE 8</b>	<b>Increase housing stock units and reduce vacancy and dereliction by administering the vacant property refurbishment grant (Croi Conaithe);</b> having due regard to protected species, biodiversity, European sites and the need to appropriately conserve protected structures.	Mitigation	Number of grants approved annually.	Housing	Dept of Housing, Local Government and Heritage.	Annually
<b>BE 9</b>	<b>Participate in study on Reducing emissions through Compact Urban Growth in Ireland (RE-CUGI) (SEAI funded).</b>	Mitigation	Study completed and key findings used to inform policy.	Regeneration section	UCD Centre for Irish Towns (LEAD), UCD, Irish Green Building Council, Monaghan County Council as collaborator – Monaghan and Castleblayney as case study towns	2023 - 2025




 <b>Built Environment &amp; Transport</b>		<b>SG2: To pursue climate actions to increase climate resilience of the built environment and transport and achieve emission reductions in line with national targets.</b>				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
<b>Built Environment</b>						
BE 10	<b>Participate in study on Revitalisation through the Integration of Vacant Buildings into the Circular Economy TREBUChEt (EPA funded).</b>	Mitigation	Study completed and key findings used to inform policy.	Regeneration section	EPA (LEAD), NUI Galway ICHEC, UCD, Heritage Council, Monaghan County Council as collaborator – Monaghan Town as case study	2023-2025
BE 11	<b>Migrate IT workload from council premises to council IT cloud.</b> Steps will be taken to ensure the cloud provider chosen has sustainability and carbon goals that align with the overall objective	Combined	Progress on integrating the cloud-based resource.	Information Technology		3 years.
BE 12	<b>Benchmark and track progress in reducing council emissions by continuing to report annually on M&amp;R system.</b>	Combined	Percentage reduction on each emission type annually.	Energy Officer, Climate Action Unit	Roads, Corporate Assets	Annually
BE 13	<b>Liaise with the EPA regarding National Emissions inventory reporting to ensure alignment with future climate actions.</b>	Combined	Report on progress	Climate Action Unit, Energy Officer	Environmental Protection Agency	4 Years
BE 14	<b>Complete a Town Centre First Plan for all major towns within the county and implement recommendations.</b> Having due regard to protected species, biodiversity, European sites and the need to appropriately conserve protected structures.	Combined	Completion of plan and recommendations implemented.	Regeneration Section		3 Years



 <b>Built Environment &amp; Transport</b>		<b>SG2: To pursue climate actions to increase climate resilience of the built environment and transport and achieve emission reductions in line with national targets.</b>				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
<b>Transport</b>						
<b>T1</b>	<b>Complete a Feasibility Study for Alternative Fuels for Council HGVs to identify viable low and no carbon vehicle fleet options and implement recommendations from this study.</b>	Mitigation	Feasibility study completed. Recommendations implemented.	Roads	Environment, Climate Action unit	1 year
<b>T2</b>	<b>Develop &amp; implement a fleet decarbonisation roadmap as per guidelines within <i>Local Authority Fleet – Strategy to Decarbonisation</i>. Whilst ensuring alternative energy/fuel used to power local authority vehicles is sustainably sourced, and appropriate end-of-life management practices are in place for Electric Vehicles.</b>	Mitigation	Roadmap completed. Percentage reduction of fleet emissions yearly on the M&R system.	Roads	Climate Action Unit, Environment	2 years.
<b>T3</b>	<b>Expand pilot study on alternative “low carbon” pavement material for use on road network, with a focus on implementation of the resulting recommendations. Low Energy Bound Materials (LEBM) using Reclaimed Asphalt Pavement (RAP) Pilot Project.</b>	Mitigation	Report on pilot scheme progress. Report on percentage tonnes/kms of low carbon pavement material used.	Roads	Transport Infrastructure of Ireland, Department of Transport	4 years






 <b>Built Environment &amp; Transport</b>		<b>SG2: To pursue climate actions to increase climate resilience of the built environment and transport and achieve emission reductions in line with national targets.</b>				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
<b>Transport</b>						
<b>T4</b>	<b>Participate in Rehabilitation of roads over peat working group to determine most environmentally appropriate intervention techniques;</b> while ensuring rehabilitation projects have due regard to peat, water levels, flood risk, biodiversity, and European sites.	Combined	Review outcomes of working group to inform future management decisions.	Roads	Inter County working group.	5 years.
<b>T5</b>	<b>Develop an EV charging strategy and implementation plan to support the roll out of EV charging,</b> having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, and local air quality.	Combined	Completion of EV strategy. Number of EV charging points delivered.	Roads	Zero Emission Vehicles Ireland, Adjoining local authorities	2 years
<b>T6</b>	<b>Provide shared council EV for staff to use for work related travel;</b> having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, and local air quality.	Mitigation	Number of km’s travelled/ Number of users each year.	Roads	Senior Management Team, Finance.	Annual
<b>T7</b>	<b>Implement County Walking &amp; Cycling Strategy (2021-2026);</b> having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites local air quality, cultural heritage.	Combined	Yearly progress of strategy.	Active Travel, Roads	Community	Annually




 <b>Built Environment &amp; Transport</b>		<b>SG2: To pursue climate actions to increase climate resilience of the built environment and transport and achieve emission reductions in line with national targets.</b>				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
<b>Transport</b>						
<b>T8</b>	<b>Deliver active travel and greenway projects to achieve transport modal shift by encouraging cycling, walking, and running as an alternative to travel by car;</b> having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites local air quality.	Combined	Number of projects being delivered. Kms of active travel infrastructure delivered. Amount of spend on active travel projects/ Amount of funding secured from granting authorities. Percentage of budget allocated which has been used.	Roads, Active travel	National Transport Authority, Planning, Transport Infrastructure Ireland	Annually
<b>T9</b>	<b>Promote transport modal shift and increase awareness of Smarter Travel programme to encourage local employers and communities to participate.</b>	Adaptation	Number of employers/ businesses participating. Number of safe cycle training events. Number of walking weeks of step challenge events. Number of public awareness campaigns. Bike weeks events delivered.	Active Travel, Sports Partnership.	Transport for Ireland, Climate Action Unit, Local Enterprise Office. Healthy Monaghan.	Annually




 <b>Built Environment &amp; Transport</b>		<b>SG2: To pursue climate actions to increase climate resilience of the built environment and transport and achieve emission reductions in line with national targets.</b>				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
<b>Transport</b>						
<b>T10</b>	<b>Deliver Safe Route to School Programme to encourage students and staff, to engage in active travel</b> having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites local air quality, cultural heritage etc.	Combined	Report on progress of programme. Number of schools participating in programme.	Active Travel	An Taisce, National Transport Authority, All schools within Monaghan.	Annually
<b>T11</b>	<b>Protect and maintain active travel infrastructure in accordance with National Sustainable Mobility Policy;</b> having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites local air quality, and cultural heritage	Combined	Km’s of active travel resurfacing completed. Number of Maintenance operations conducted.	Roads, Active Travel	Department of Transport, National Transport of Ireland, Transport Infrastructure Ireland	Annually
<b>T12</b>	<b>Continue Internal and external engagement to promote modal shift to active travel;</b> whilst advocating and exerting influence to ensure due regard is had to environmental sensitivities such as the receiving water environment, biodiversity, European sites local air quality, and cultural heritage.	Combined	Number of Cycling & Walking forum meetings held. Number of internal departmental working group meetings held.	Active Travel, Human Resources, Sports Partnerships, Healthy Monaghan	Internal Working Group, Climate Action Unit	Annually






 <b>Built Environment &amp; Transport</b>		<b>SG2: To pursue climate actions to increase climate resilience of the built environment and transport and achieve emission reductions in line with national targets.</b>				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
<b>Transport</b>						
<b>T13</b>	<b>Examine feasibility of a Park and Stride system at different locations in towns across the county;</b> ensuring such a study has appropriate regard to all relevant planning and environmental protection considerations.	Combined	Feasibility study completed. Number of park and stride locations within the county.	Municipal Districts	An Taisce Active Travel	3 years.
<b>T14</b>	<b>Develop and Raise awareness of online booking system for use of Council owned E-bikes to encourage staff usage.</b>	Combined	Number of times E-bikes are used in each area.	Active Travel, Information Technology		2 years
<b>T15</b>	<b>Continue to complete National Catchment -based Flood Risk Assessment and Management (CFRAM) programme within Monaghan to ensure all current and future flood risks are identified with a focus on implementation of the resulting recommendations;</b> having due regard to the need to promote nature-based solutions and Sustainable Drainage Systems, and environmental sensitivities at these locations, including water quality, biodiversity, European sites, riparian corridors and aquatic ecology.	Mitigation	Number of CFRAM assessments completed.	Planning	Office of Public Works	Annually



 <b>Built Environment &amp; Transport</b>		<b>SG2: To pursue climate actions to increase climate resilience of the built environment and transport and achieve emission reductions in line with national targets.</b>				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
<b>Transport</b>						
<b>T16</b>	<b>Resolve local flooding issues utilising OPW and Department of transport funding. (Climate Adaptation &amp; Resilience works, OPW Minor works scheme.)</b> Maintain transport network and other assets by removing blockages to reduce the risk of surface water floods; having due regard to the need to promote nature-based solutions and Sustainable Drainage Systems, and environmental sensitivities at these locations, including water quality, biodiversity, European sites, riparian corridors and aquatic ecology, visual amenity and recreation and amenity value.	Adaptation	Number of projects completed, and total spend. Amount of funding secured.	Roads	Office of Public Works	Annually
<b>T17</b>	<b>Maintain transport network to take account of risk of surface water floods;</b> having due regard to the need to protect the environment, including European site and Biodiversity during the carrying out of maintenance works.	Adaptation	Maintenance operations conducted.	Roads, Municipal Districts		Annually



 <b>Built Environment &amp; Transport</b>		<b>SG2: To pursue climate actions to increase climate resilience of the built environment and transport and achieve emission reductions in line with national targets.</b>				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
<b>Transport</b>						
<b>T18</b>	<b>Develop and implement a Sustainable Drainage Strategy for the county;</b> having due regard to the need to promote nature-based solutions and Sustainable Drainage Systems, and environmental sensitivities, including water quality, biodiversity, European sites, riparian corridors and aquatic ecology, visual amenity and recreation and amenity value.	Combined	Sustainable Drainage strategy completed.	Planning	Roads, Climate Action Unit.	3 years
<b>T19</b>	<b>Advocate for and support the reconnection of rail services to the county in accordance with The All-Island Strategic Rail Review. (AISRR);</b> whilst advocating and exerting influence to ensure due regard is had to environmental sensitivities such as the receiving water environment, biodiversity, European sites local air quality, and cultural heritage.	Mitigation	Report on progress.	Senior Management Team	Department of Transport in Ireland. Department for Infrastructure in Northern Ireland.	5 years.



### 3.6 Natural Environment & Green Infrastructure

Monaghan is predominantly a rural county renowned for its drumlins, lakes and river systems. Agriculture is the prevailing land use and plays an important role in the economic and sustainable growth of Co. Monaghan.

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

Monaghan County Councils vision is to ensure that the natural environment of Co. Monaghan 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 in urban areas, increasing wildlife and biodiversity and contributing to health and wellbeing.





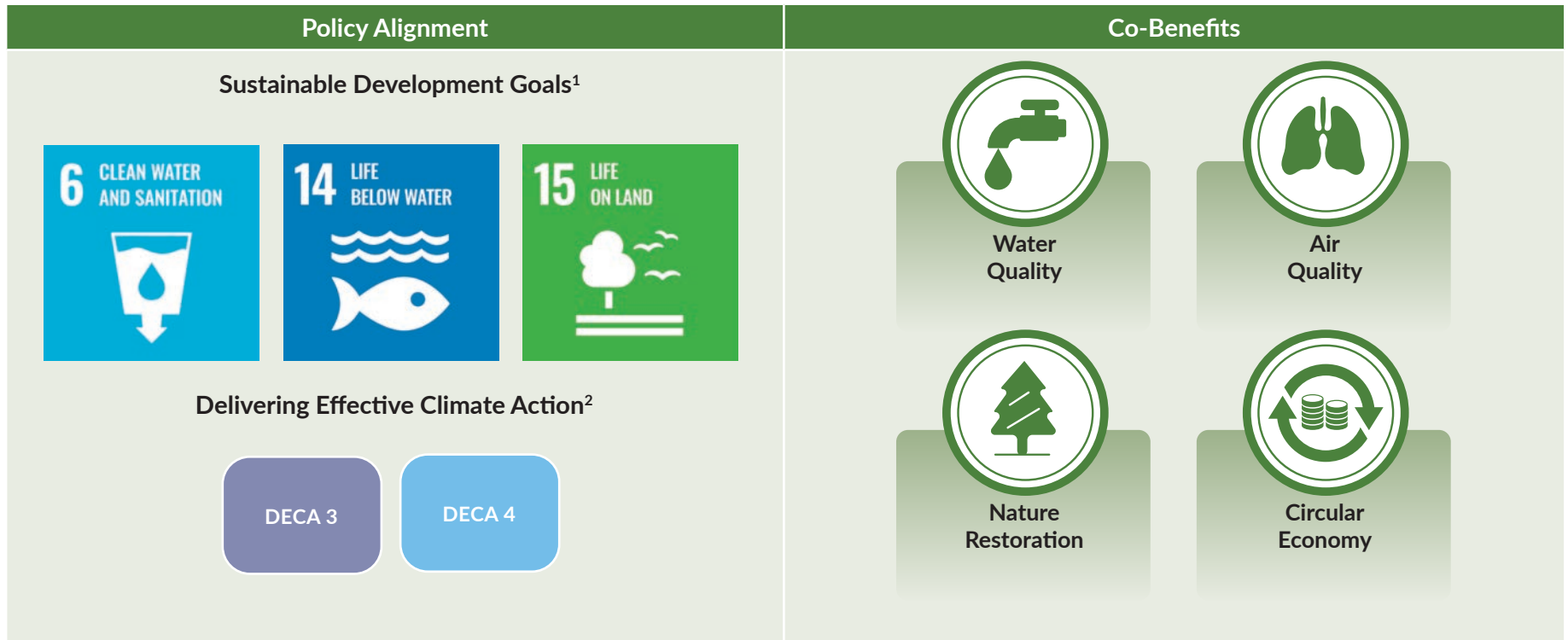


**Natural Environment & Green Infrastructure**

**SG 3: To enhance the Natural environment of County Monaghan and support nature-based solutions for climate resilience and emission reductions whilst promoting enriched biodiversity.**

**Objectives**


<p><b>Objective NEGI 1:</b></p> <p>To harness County Monaghan’s natural assets to contribute to resilience and low carbon.</p>	<p><b>Objective NEGI 2:</b></p> <p>Sustain, increase, and enhance a green infrastructural network to build resilience of species and habitats.</p>	<p><b>Objective NEGI 3:</b></p> <p>To protect and enhance the natural assets of County Monaghan.</p>
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<sup>1</sup> For more information on SDG Alignment see Section 1.7 Alignment with policy/commitments.

<sup>2</sup> For an overview of the Delivering Effective Climate Action 2030 (DECA) Goals see Section 1.7 Alignment with policy/commitments.




 <b>Natural Environment &amp; Green Infrastructure</b>		<b>SG3: To enhance the Natural environment of County Monaghan and support nature-based solutions for climate resilience and emission reductions whilst promoting enriched biodiversity.</b>				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
NEGI 1	<b>Develop a Green Infrastructure Plan at county and major urban area level, incorporating ecology, climate change mitigation and adaptation, and environmental protection considerations, to increase climate resilience, deliver a wide range of ecosystem services, while also enhancing biodiversity.</b>	Combined	Green infrastructure plan developed and adopted as part of County Development Plan or Local Area Plan Process as appropriate.	Planning	Climate Action Unit, Biodiversity Officer, Heritage Section, Active Travel, LAWPRO, Capital Projects.	3 years
NEGI 2	<b>Develop a Tree and Woodland Plan to increase tree cover on Council-owned land, using appropriate native species to store carbon, support nature, improve soils and water quality, and aid flood protection and urban design. Aim to increase areas of public land under forestry through schemes such as “Forest Creation on Public Lands”.</b>	Combined	No. trees planted on Council land. No. trees planted on community and other public land through MCC support. M2/Hectares of land covered. No. of community planting events.	Biodiversity Officer	Horticultural section, Municipal Districts, Climate Action Unit, Environment Department	3 years




 <b>Natural Environment &amp; Green Infrastructure</b>		<b>SG3: To enhance the Natural environment of County Monaghan and support nature-based solutions for climate resilience and emission reductions whilst promoting enriched biodiversity.</b>				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
NEGI 3	<b>Develop a Biodiversity Action Plan for the county to protect and increase biodiversity on Council land.</b>	Combined	Completion of Plan. Number of biodiversity actions achieved annually. Increase in area of land or of sites managed for biodiversity. Number of events held or attended. Number or increase in biodiversity reach through social media.	Biodiversity Officer	Biodiversity Forum	2 years




 <b>Natural Environment &amp; Green Infrastructure</b>		<b>SG3: To enhance the Natural environment of County Monaghan and support nature-based solutions for climate resilience and emission reductions whilst promoting enriched biodiversity.</b>				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
NEGI 4	<p><b>Develop and implement a pesticide reduction policy for Monaghan County Council, using Monaghan Municipal Districts pilot programme of significantly reduced use of glyphosate and trials of scuffing machine, to meet or exceed Irelands target of 50% reduction by 2030;</b> whilst ensuring these substances are only used to a degree and an extent that does not cause significant effects on the receiving environment, such as the receiving water environment, biodiversity or European sites.</p>	Combined	Policy complete. Percentage reduction of glyphosate.	Biodiversity Officer, Municipal Districts	Horticulture Section	3 years
NEGI 5	<p><b>Expand the sustainable management of ‘taken in-charge’ areas and the public realm, parks &amp; green spaces by:</b></p> <ul style="list-style-type: none"> <li>• <b>Increasing areas managed as meadow/wildflowers.</b></li> <li>• <b>Planting pollinator friendly trees and shrubs in accordance with the national pollinator plan.</b></li> <li>• <b>Supporting community groups to carry out related projects.</b></li> <li>• <b>Decarbonise machinery used to manage areas within the public realm, parks and green spaces when feasible and practical to do so. Subject to cost expand the use of low impact fuel where appropriate.</b></li> </ul>	Combined	Area managed as meadow. Number of trees/ shrubs planted. Number of community projects supported. Progress report on decarbonisation of machinery	Municipal Districts, Horticulture Section	Biodiversity Officer	Annually






 <b>Natural Environment &amp; Green Infrastructure</b>		<b>SG3: To enhance the Natural environment of County Monaghan and support nature-based solutions for climate resilience and emission reductions whilst promoting enriched biodiversity.</b>				
<b>Action No:</b>	<b>Action</b>	<b>Adaptation or Mitigation or Combined</b>	<b>KPI</b>	<b>LA Lead</b>	<b>Partners</b>	<b>Timeframe</b>
<b>NEGI 6</b>	<b>Implement the Conservation Management Plan for Sliabh Beagh, to include management of fires &amp; peat extraction, implementation of water management, control dumping and invasive species, promotion and education initiatives.</b>	Combined	Number of actions implemented.	Biodiversity officer.  Heritage section/ Peatlands Officer	Climate Action Unit, RSPB, National Parks and Wildlife Services, NI Water, Butterfly Conservation Ireland, River Blackwater catchment trust, Birdwatch Ireland, Lough Neagh Partnership, An Taisce, NIEA, FDC, SBEMC, IFA, DARD, FSNI, DAEF, Local Communities	5 years
<b>NEGI 7</b>	<b>Ensure proposals for Sustainable Drainage Systems are included in all development proposals, where practicable.</b>	Adaptation	Number of planning permissions granted which include Sustainable Drainage Systems measures.	Planning Department	Capital Projects	Annually



 <b>Natural Environment &amp; Green Infrastructure</b>		<b>SG3: To enhance the Natural environment of County Monaghan and support nature-based solutions for climate resilience and emission reductions whilst promoting enriched biodiversity.</b>				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
NEGI 8	<b>Implement Monaghan’s Wetland Action Plan 2020. Protect and conserve floodplains and wetlands, with a view to protecting biodiversity and ameliorating flooding.</b>	Combined	Number of actions implemented.	Biodiversity Officer	NPWS, Planning Dep, Monaghan Wetlands Forum, IFA, TEAGASC, NIEA, NI Water, Local Communities	3 years
NEGI 9	<b>Develop and implement a Heritage Plan to record, conserve, and raise awareness of all aspects of built, natural and cultural heritage in the County;</b> having due regard to the need to appropriately protect, conserve and enhance important habitats and species and European sites, support the maintenance and improvement of water quality in line with the aims of the Water Framework Directive, and conserve protected structures.	Adaptation	Local Heritage Plan adopted every five years and actions implemented.	Heritage section	Heritage Council, Heritage Forum, Libraries - Creative Ireland	3 years
NEGI 10	<b>Campaigns to promote locally produced and organic food and beverage produce highlighting the carbon intensity and food miles of imported food vs. locally produced food.</b>	Combined	Number of campaigns run	Tourism section	Communication	Annually



 <b>Natural Environment &amp; Green Infrastructure</b>		<b>SG3: To enhance the Natural environment of County Monaghan and support nature-based solutions for climate resilience and emission reductions whilst promoting enriched biodiversity.</b>				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
NEGI 11	Promote specific talks or workshops for farmers on High Nature Value farming practices to enable practical skills to be shared.	Combined	Number of events held.	Biodiversity Officer	Teagasc, Communications, IFA	Annually
NEGI 12	Explore opportunities for deeper engagement with the Agriculture Sector on Environmental and Climate issues and potential local interventions to protect and/or improve water quality, biodiversity, and other environmental assets.	Combined	Report on progress (Representation on the Biodiversity Forum)	Biodiversity Officer	National Parks and Wildlife Services, An Taisce, IFA, Local Authorities Waters Programme, Climate Action Unit	Annually
NEGI 13	Promote implementation of biodiversity and source protection projects by Group Water Schemes	Combined	Number of successful funding bids under multi annual water plan	Rural Water	Group water schemes, National Federation of Group Water Schemes, Biodiversity Officer, Community Groups	3 years
NEGI 14	Prepare a Blue Dot protection plan and raise awareness around Monaghan’s Blue Dot (High status) Waterbodies.	Combined	Completion of plan. Number of awareness campaigns run.	Environmental Services	Heritage section, Biodiversity Officer, Climate Action Unit	3 years



### 3.7 Communities: Resilience & Transition

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 in the uptake in active travel and use of public transport, switch to low carbon heat or fuel sources, enhancing the natural environment and

maintaining general awareness of climate change, its impacts and its opportunities.

Encouraging ongoing dialogue with the diverse range of communities 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 Co. Monaghan to create genuinely sustainable local solutions that work. The Council is committed to working with these groups to enable them to fulfil their ambitions.

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







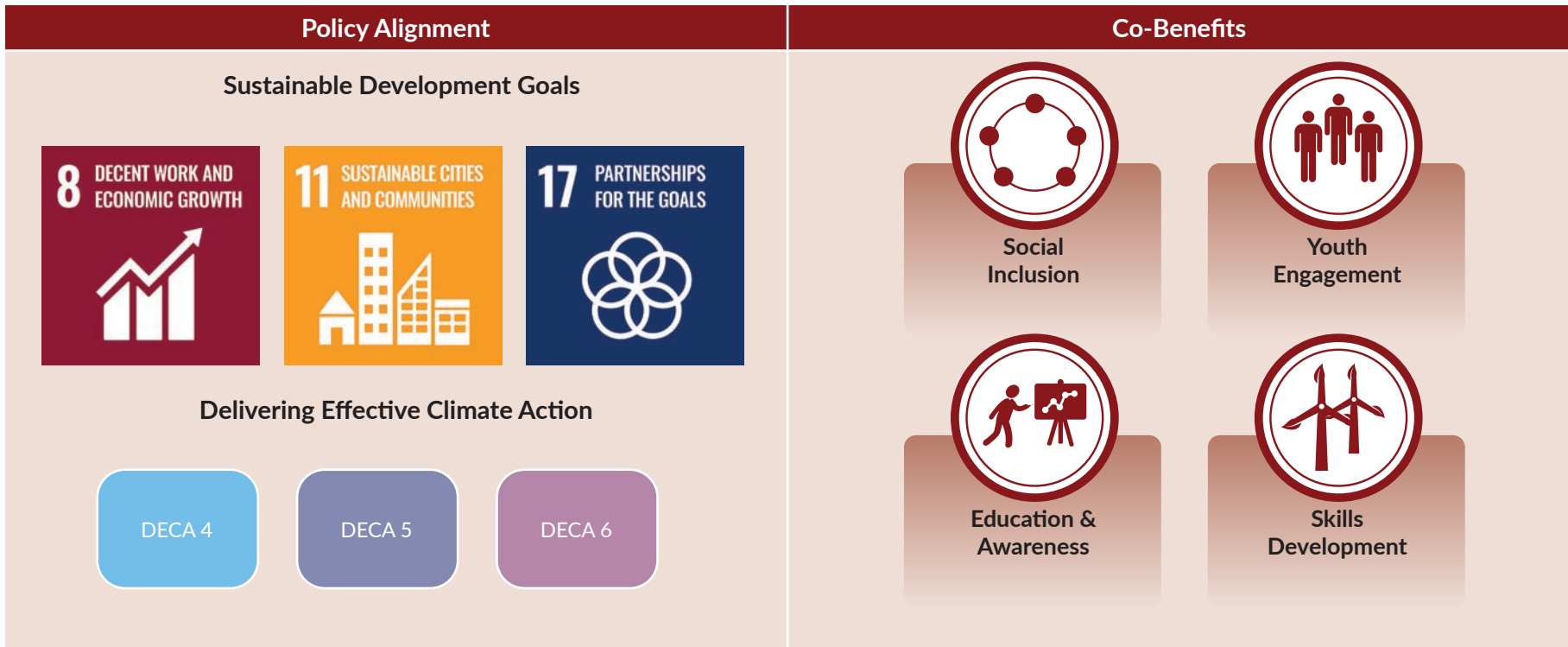
**Communities:  
Resilience & Transition**

**SG 4: To support and empower communities to achieve local climate actions to enhance sustainability and resilience.**

**Objectives**

**Objective CRT 1:**  
Inform and create awareness about effective climate action measures.


**Objective CRT 2:**  
Motivate and create demand for climate action through capacity building programmes, policy/ financial instruments and local development and wellbeing programmes.






 <b>Communities: Resilience &amp; Transition</b>		<b>SG4: To support and empower communities to achieve local climate actions to enhance sustainability and resilience</b>				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
CRT 1	<b>Include sustainability &amp; climate action sections for event management plans to reduce the environmental impact of Council events, including but not limited to: removing single use plastic where possible, proper segregation of waste along with water stations and compostable cups. Ensure event management plans are required to demonstrate compliance with current best practice policy in terms of Green/Sustainable festivals &amp; events.</b>	Mitigation	Number of event management plans that successfully address sustainability & climate action	Municipal Districts	Climate Action Unit, Tourism section	Annually
CRT 2	<b>Devise and implement policies, procedures, and communications to promote sustainable tourism.</b>	Mitigation	Number or percentage of policies and plans that have embedded Climate Action.	Tourism section	Climate Action Unit	2 years




 <b>Communities: Resilience &amp; Transition</b>		<b>SG4: To support and empower communities to achieve local climate actions to enhance sustainability and resilience</b>				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
<b>CRT 3</b>	<b>Support communities to access funding for environmentally sustainable projects or action on climate change.</b>	Combined	Number of successful funding applications submitted for interventions. Amount of funding secured for community projects.	Community	Climate Action Unit	Annually
<b>CRT 4</b>	<b>Include Climate Action scoring on grant assessments to ensure that community groups incorporate Climate Action in all their grant funded activities.</b>		Number of grant schemes that have Climate Action as an essential criterion.	Community, Cultural Section	Climate Action Unit, Municipal Districts	1 year
<b>CRT 5</b>	<b>Through the Green Club Programme support Gaelic Games clubs in taking simple and effective sustainability action in their grounds and activities.</b>	Combined	Number of engagements with Green clubs.	Environmental Services, Climate Action Unit	CARO, GAA LGFA Camogie Association	Annually
<b>CRT 6</b>	<b>Develop community allotment strategy.</b>	Mitigation	Strategy completed.	Community	Biodiversity Officer, Climate Action Unit, Horticulture section, Municipal Districts	3 years



 <b>Communities: Resilience &amp; Transition</b>		<b>SG4: To support and empower communities to achieve local climate actions to enhance sustainability and resilience</b>				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
<b>CRT 7</b>	<b>Support the roll out of Creative Ireland climate action funding to incorporate the arts into climate action community engagement.</b>	Combined	Number of climate action creative Ireland projects annually.	Libraries	Climate Action Unit	Annually
<b>CRT 8</b>	<b>Support the development and ongoing work of Sustainable Energy Communities (SECs),</b> whilst advocating and exerting influence to ensure supported development does not contravene relevant environmental protection criteria or cause significant negative environmental effects.	Mitigation	Support provided to community	Climate Action Unit, Energy Officer	SEAI	Annually
<b>CRT 9</b>	<b>Promote Remote Working/Digihub campaign to assist the stimulation of balanced regional sustainable development.</b>	Combined	Number of impressions on social media	Local Enterprise Office	Ctek, Monaghan Digihub, Castleblayney Enterprise centre, Newbliss hub, The Station House	1 year
<b>CRT 10</b>	<b>Use the Green Efficiency Grant to empower businesses to implement green technology solutions,</b> whilst advocating and exerting influence to ensure supported renewable energy development does not contravene relevant environmental protection criteria or cause significant negative environmental effects.	Adaption	Number of successful grant applications	Local Enterprise Office	Department of Enterprise, Trade and Employment,	Annually





 <b>Communities: Resilience &amp; Transition</b>		<b>SG4: To support and empower communities to achieve local climate actions to enhance sustainability and resilience</b>				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
CRT 11	Expand the Green Business support scheme enabling businesses to measure their existing carbon footprint and obtain recommendations.	Combined	Number of successful grant applications.	Local Enterprise Office	Department of Enterprise, Trade and Employment,	Annually
CRT 12	Develop and deliver environmental sustainability programmes for the Local Enterprise Office client/portfolio base with a particular focus on circular economy, the green agenda and/or carbon reduction.	Adaption	Number of programmes per year.	Local Enterprise Office	Credit Technology Gateway, DkIT, CARO, LEADER	Annually
CRT 13	Include Climate Action as a theme during Enterprise Week.	Combined	Number of businesses attending.	Local Enterprise Office	SEAI, Credit Technology Gateway/LEADER, Climate Action Unit	Annual
CRT 14	Raise Awareness of Corporate Sustainability Reporting Directive reporting requirements for companies.	Combined	Number of companies reporting on CSRD	Climate Action Unit, Local Enterprise Office		Annually
CRT 15	Empower the public to increase energy efficiency by enabling access to information & resources via the library service to support home energy saving awareness and assessment.	Combined	Number of energy saving kits borrowed.	Libraries	Climate Action Unit	Annually
CRT 16	Empower communities to achieve their sustainability and climate goals through climate-related educational and awareness programmes to include information events, communication campaigns and guidance documentation.	Combined	Number of events held.	Climate Action Unit, PPN	Biodiversity Officer, Community Environmental Services	Annually



### 3.8 Sustainability & Resource Management

It is difficult to comprehend the true impact of our material footprint that stems from our consumption habits. Consumption is extremely diverse and comes from everything to do with 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.

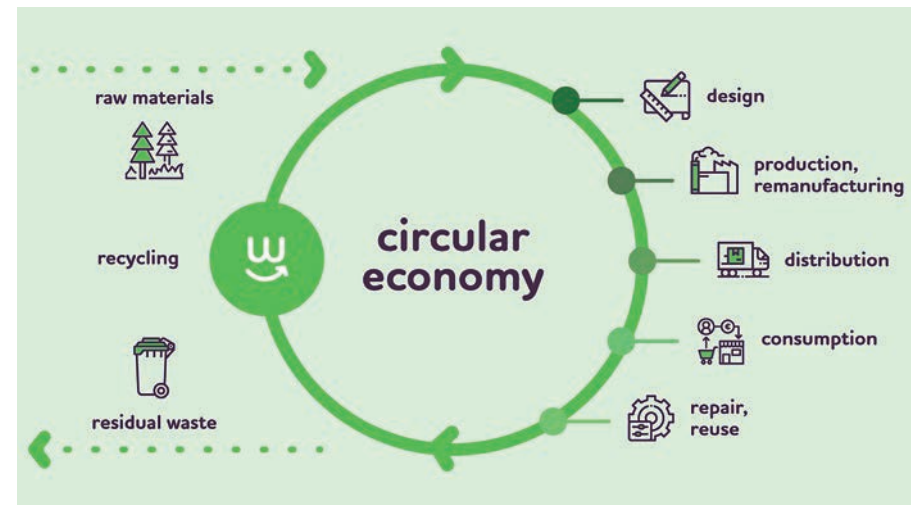
Our consumption of the natural resources we depend on threatens the ability of future generations to access and sustainably use those natural resources. However as with reducing waste, there are a number of ways to address this material footprint by reducing non-essential consumption; reusing, repairing and sharing existing goods; finding local producers, and using more ethical or sustainable options.

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

In this regard the Monaghan County Council will focus on opportunities such as:

- ▶ Promotion of green procurement and supply chains in tendering processes.
- ▶ Assisting businesses and enterprise to “Go Green”, grow the county’s low carbon economy and increase the supply of low carbon goods and services.
- ▶ Reducing our production of waste, non-essential goods, single use products, energy and use of water.
- ▶ Promoting the circular economy including sustainable use and end of life management of natural resources.
- ▶ Working with communities to tackle over consumption and building knowledge and awareness around reducing, recycling, conserving, and repairing where possible.

#### MyWaste.ie





**Sustainability & Resource Management**

**SG 5: Create a sustainable and circular economy culture within Monaghan County Councils own organisation and support our communities in achieving the same.**

**Objectives**

**Objective SRM 1:**

Monaghan County Council will implement and monitor a range of policies and practices to reduce our environmental impact, enhance resource efficiency, and create long term environmental and economic benefits.

**Objective SRM 2:**

Monaghan County Council will lead by example by reducing the councils production of waste, use of non-essential goods, single use products, energy, and water.

**Policy Alignment**

**Sustainable Development Goals**



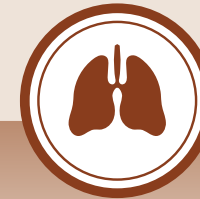
**Delivering Effective Climate Action**



**Co-Benefits**



**Public Health & Wellbeing**



**Better Air Quality**




**Sustainable Tourism**




**Education & Awareness**




 <b>Sustainability &amp; Resource Management</b>		<b>SG5: Create a sustainable and circular economy culture within Monaghan County Councils own organisation and support our communities in achieving the same.</b>				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
<b>SRM 1</b>	<b>Implement environmental, climate and water conservation education activities, promotional campaigns, and environmental improvement initiatives in the community.</b>	Combined	Number of campaigns/events held.	Environmental services.	Libraries, Local Authority Waters Programme, Community Section, Public Participation Network, Climate Action Unit, Uisce Eireann.	2 years
<b>SRM 2</b>	<b>Support National Waste Management plan for the reduction of waste and other initiatives that promote the transition to a circular economy and as per the objectives of the new national waste management plan.</b>	Combined	Progress report	Environmental services.	Connacht Ulster Waste Region, Waste Enforcement Regional Lead Authorities, Department of the Environment, Climate and Communications.	1 year






 <b>Sustainability &amp; Resource Management</b>		<b>SG5: Create a sustainable and circular economy culture within Monaghan County Councils own organisation and support our communities in achieving the same.</b>				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
SRM 3	<b>Support the development of biomethane potential within the county to generate sustainable energy and reduce the impact of organic manures on the environment.</b> Whilst also advocating and exerting influence to ensure anaerobic digestion related development and activities promote climate action co-benefits and do not contravene relevant environmental protection criteria or cause significant negative environmental effects.	Combined	Report on completion of study.	Environmental services, Climate Action unit.	Department of Agriculture, Food and Marine, Department of the Environment, Climate and Communications, Department of Rural and Community Development.	2 years
SRM 4	<b>Develop and implement internal Council initiatives to ensure that waste is being reduced, reused, and recycled, also to eliminate the use of single use plastics.</b>	Combined	Development and Implementation of policy.	Environmental services	Climate action unit, Corporate services	3 years.
SRM 5	<b>Increase awareness of <i>repairmystuff</i> website to reduce waste and promote the circular economy throughout the county.</b>	Combined	Number of hits on the website annually.	Environmental services	Climate Action unit, Communications, Corporate	1 year




 <b>Sustainability &amp; Resource Management</b>		<b>SG5: Create a sustainable and circular economy culture within Monaghan County Councils own organisation and support our communities in achieving the same.</b>				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
SRM 6	<b>Expand composting facilities to all Council depots to deal with green waste arising from Council operations;</b> ensuring such facilities continue to operate in accordance with best practice and the provisions of the Waste Management Act, and do not cause negative environmental effects.	Combined	Number of composting facilities successfully installed.	Municipal Districts	Environmental services, Biodiversity Officer.	1 year
SRM 7	<b>Install rainwater harvesting facilities in all Council depots as appropriate, to reduce demand on mains network and reduce use of treated water.</b> Ensure due regard is given to the need to environmental sensitivities, including water quality, biodiversity, European sites, riparian corridors, and aquatic ecology.	Combined	Number of rainwater harvesting facilities successfully installed.	Municipal Districts	Environmental services, Biodiversity Officer.	1 year
SRM 8	<b>Promote upgrading of existing watermain networks by group water schemes to minimize leakage of treated water.</b> Ensure due regard is given to the need to environmental sensitivities, including water quality, biodiversity, European sites, riparian corridors, and aquatic ecology.	Combined	Number of successful funding bids under multi annual water plan.	Rural Water	Group water schemes	3 years



 <b>Sustainability &amp; Resource Management</b>		<b>SG5: Create a sustainable and circular economy culture within Monaghan County Councils own organisation and support our communities in achieving the same.</b>				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
SRM 9	<b>Complete inspections on Domestic Wastewater treatment systems to increase water quality status, through consultation with the Environmental Protection Agency.</b>	Mitigation	Number of assigned inspections completed annually.	Rural Water and Environmental Services	Environmental Protection Agency	Annually
SRM 10	<b>Expand the number of drinking water bottle refilling stations in main towns throughout county.</b>	Combined	Number of units installed.	Municipal Districts	Planning, Climate Action Unit, Environment	1 year
SRM 11	<b>Transition from non-recycled to recycled paper. Review printing resources with the aim to reduce on an incremental basis.</b>	Mitigation	Roll out of recycled paper use in offices. Amount of resources spent on printing.	Corporate Services, Senior Management Team	All Sections	1 year
SRM 12	<b>Progress the authorisation and subsequent of remediation of historical landfill sites previously controlled by Monaghan County Council.</b> Ensure the works have appropriate regard to planning, waste management and environmental requirements, considerations and constraints.	Mitigation	Progress update/ Remediation work carried out.	Environmental services	Department of Environment, Climate and Communications, Environmental Protection Agency	Annually



 <b>Sustainability &amp; Resource Management</b>		<b>SG5: Create a sustainable and circular economy culture within Monaghan County Councils own organisation and support our communities in achieving the same.</b>				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
SRM 13	<b>Ensure enforcement of Recommended Minimum Criteria for Environmental Inspections (RMCEI) including waste, water, and air.</b>	Combined	Progress update annually	Environmental services	Department of Environment, Climate and Communications	Annually
SRM 14	<b>Continue environmental awareness programmes such as the “Anti-Dumping initiatives” Bulky waste collections” and “hazardous waste collections”.</b>	Mitigation	Number of awareness programmes run annually.	Environmental services	Waste Enforcement, Regional Lead Authorities, Irish Farmers Association IFA	Annually
SRM 15	<b>Enable improvement in air quality through enforcement of air related legislation, particularly;</b> <ul style="list-style-type: none"> <li>• The Air Pollution Act.</li> <li>• The Solid Fuels Regulations.</li> <li>• The Deco Paints Regulations.</li> <li>• The Solvent Regulations.</li> <li>• The Petroleum Vapour Regulations.</li> </ul>	Mitigation	Number of RMCEI inspections annually.	Environmental Services, Fire Services		Annually



4

# MONAGHAN TOWN DECARBONISING ZONE





**A Decarbonisation Zone (DZ) is a spatial area, identified by each local authority in Ireland, in which a range of measures are selected to increase energy efficiency, decrease greenhouse gas emissions, and enhance climate resilience and biodiversity to contribute to reaching wider national climate action targets.**

Monaghan Town has been selected as the DZ for Co. Monaghan as it offers the Local Authority the opportunity to maximise its impact across the town through the delivery of actions across its own assets and staff and due to the wide range of stakeholder groups and potential opportunities associated with decarbonisation. The town area contains many buildings, properties and infrastructure that are under the ownership / control of the Local Authority and other government departments and agencies providing substantial opportunities for decarbonising initiatives.











Monaghan Town DZ Area features		
	Critical Population level	
	Wide range of stakeholder groups	
	Properties & infrastructure under control of MCC= decarbonising opportunities	
	Wide spectrum of activity e.g., business, residential, education and health	
	Opportunities for Active Travel initiatives	

Figure 32 - Monaghan Town DZ Area Features



### VISION FOR MONAGHAN TOWN DZ

**To work in partnership with the entire Monaghan Town community to deliver effective climate action by developing and showcasing the opportunities for decarbonisation and sustainable living in our county.**

The DZ also provides opportunities to identify carbon saving initiatives across a wide spectrum of activity including industry, retail, leisure, residential, education and health. Additionally, the area provides a range of opportunities for Active Travel initiatives, greenways, urban cycleways, and footpaths.

DZ's are a demonstration and testbed of what is possible for decarbonisation and climate action at a local and community level. Through a feedback loop of experimentation and evaluation, the DZ enables a flexible, incremental, and community-driven approach to ensure that its objectives are delivered.

The Monaghan Town DZ has a total land area of approximately 16.6 km<sup>2</sup>. It includes 3 Electoral Divisions as shown in the red line boundary in Figure 33.



Figure 33 – Monaghan Town DZ Area

## 4.1 Monaghan Town DZ: An Overview of assets and services

DZ classifications provide the opportunity for communities, the Local Authority and public sector to lead by example and build on existing assets and services to implement innovative decarbonisation and sustainability initiatives. In addition to its socio economic and environmental characteristics, Monaghan Town DZ has a strong foundation of existing assets and services within the DZ which provide site-specific strengths and opportunities to further build on. These include the following elements:

### Schools, social housing, and public sector buildings:

The County Hospital, Courthouse, Garda Headquarters, and County Council offices are all located within the town. In addition, Monaghan Town has five secondary and five national schools. These schools and public sector buildings within the DZ are already subject to 51% energy reduction targets by 2030, along with social housing units within the area. Monaghan County Council’s social housing units within the DZ can lead the way on decarbonisation and make a significant contribution to the decarbonisation of the residential sector. It will require the installation of measures to improve BERs (including solar PV installation and low-carbon fuel options) to meet this target. More broadly, the Climate Action Plan (2023) aims to increase the share of renewable electricity to 80% by 2030 from a baseline of 38% (2018).

### Businesses, Local Enterprise, and Tourism:

There are several retailers (e.g., Lidl and Supervalu) with carbon reduction and sustainability targets that align with the DZ’s ambitions and timelines. Several key industries in the DZ have already begun their decarbonisation journeys, including Kingspan Century Homes, Mallon’s Sausages, Combi-Lift Ltd. and the Hillgrove Hotel. Harnessing the sustainability actions of the private sector presents significant opportunities to decarbonise, create green jobs, and increase the resilience of the built environment to climate change.



### Green transport and Active Travel networks:

Commuting patterns in the DZ area show a ~65% reliance on private cars with ~28% of commuting journeys using public transport, cycling, or walking. Further improving sustainable transport modes (bus, cycling and walking) will be key to reducing emissions. Monaghan County Council adopted its first Walking & Cycling Strategy in 2021. The strategy covers the period 2021 to 2026 and provides a strategic framework for present and future active travel projects in the DZ including enhanced and safer active travel infrastructure. To support further opportunities to reduce transport emissions in the DZ, an increased provision of EV charging infrastructure will enhance the uptake of private EVs. In addition, other opportunities include innovating LGVs and Public Transport to operate via electricity or low carbon-fuels.

### Natural and built heritage:

There is a rich and diverse range of natural and built heritage across the DZ, which is intersected by the Blackwater River. Other key pieces of

green infrastructure include the Ulster Canal Greenway, Peter's Lake, Convent Lake, and surrounding environments. These areas play an important role in conserving the town's biodiversity and are home to a range of fauna and flora from kestrels to otters. St. Macartan's Cathedral and the County Museum are sites of historical significance within the DZ. Leveraging the area's natural and built heritage to attract visitors presents a tourism opportunity for the DZ, in addition to conserving and protecting the natural and built heritage assets of the DZ, boosting the local economy, and the potential use of green infrastructure for urban cooling and carbon storage.

### Enhancing Awareness among the Community:

There is currently one Sustainable Energy Community within the DZ (Station View) highlighting the existing interest of the local community in sustainability and promoting decarbonisation. Such communities are important examples of best practice and can provide key learning opportunities for other residential areas within the DZ and beyond.







## 4.2 Key Findings from Decarbonisation Zone Baseline Emissions Inventory (BEI)

To support the development of the Monaghan Town DZ and in accordance with the LACAP guidance, a BEI was developed for Monaghan Town. 2018 is used as the baseline year for the BEI assessment. This year has been purposefully chosen to align with Ireland's national targets which are set against a 2018 baseline year.

The BEI determined the level of emissions of five sectors (Residential, Commercial & Public sector, Transport, Waste and Agriculture) across the Monaghan Town DZ. The results of the BEI for Monaghan Town DZ are presented in the Figure 34 and Table 8. Total carbon emissions for the DZ equate to approximately 86,354 tCO<sub>2</sub>e (tonnes of carbon dioxide equivalent). This translates to 10.32 tCO<sub>2</sub>e per capita based on 2016 census population data. In 2018, Ireland's national carbon emissions equated to approximately 12.6 tCO<sub>2</sub>e per capita. While the DZ's carbon emissions per capita is lower than the national equivalent, Ireland is higher than the EU average of 8.2 tCO<sub>2</sub>e per capita. The BEI results were used to help identify areas where actions were needed within the DZ area to help reduce emissions.

Percentage of Total Carbon Emissions (tCO<sub>2</sub>e)

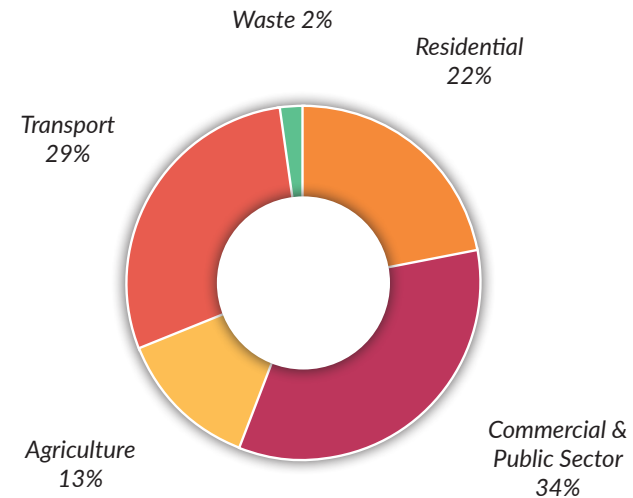


Figure 34 - DZ Breakdown of Emissions

Sector	Carbon Emissions (tCO <sub>2</sub> e)
Commercial & Public Sector	29,601 [34%]
Transport	25,173 [29%]
Residential	19,075 [22%]
Agriculture	10,748 [13%]
Waste	1,757 [2%]
<b>Total Carbon Emissions</b>	<b>86,354</b>

Table 8 – Emissions in DZ Per Sector

### 4.3 Emissions by Sector

#### Commercial and Public Sector:

The sector with the highest emissions within the DZ area is the commercial and public sector which accounts for 34% of the emissions. In total there were 195 commercial and public sector buildings examined with the associated carbon emissions equating to 29,601 tCO<sub>2</sub>e. Commercial buildings accounted for 26,082 tCO<sub>2</sub>e which equates to 88% of the total commercial and public sector emissions within the DZ area. Electricity accounts for 57% of all emissions in the Commercial and Public sector based on fuel type used to power these buildings. Optimising the energy efficiency of existing commercial and public sector buildings is key to meeting national carbon targets.

#### Commercial & Public Sector Emissions (tCO<sub>2</sub>e)

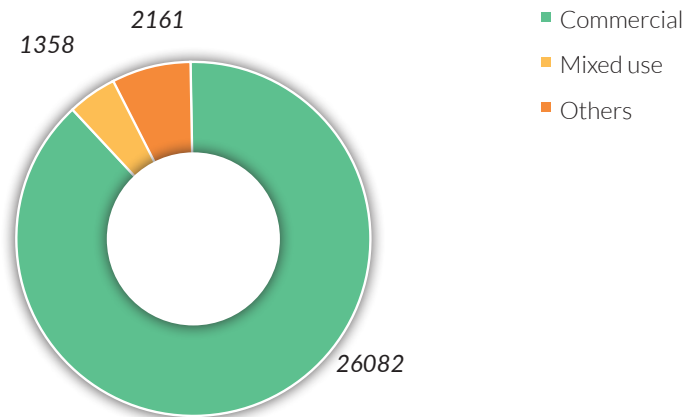


Figure 35 - Commercial & Public Sector Emissions.

#### Transport:

Transport accounted for 29% of the total emissions within the DZ area. The total emissions for transport were estimated to be 25,172 tCO<sub>2</sub>e. Road freight accounted 47% of these emissions, followed by private car use which was 40%. This highlights the need to improve public transport options within the area. Petrol and Diesel was the major fuel type used for all modes of transport within the area accounting for over 95% of the fuel used. A shift to active travel and increased uptake of public transport is key to the achievement of Ireland’s national carbon targets.

#### Transport Sector Emissions (%)

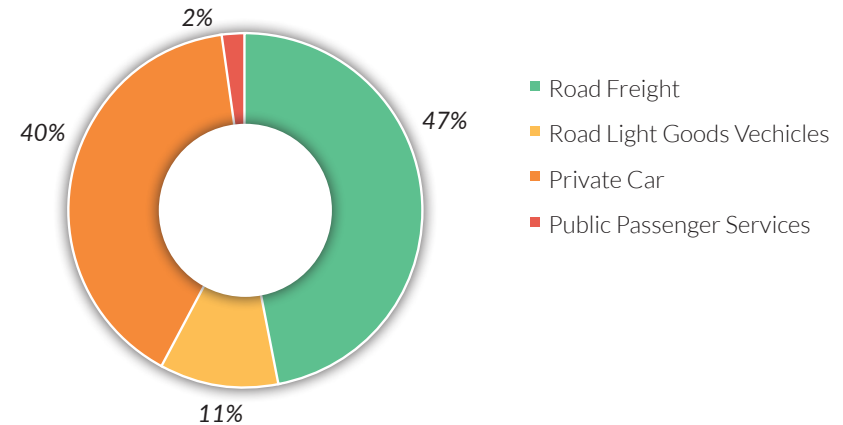


Figure 36 - Transport Sector Emissions.



**Residential:**

The residential sector was the third highest emitter (22%) within the DZ area. Its emissions equated to 19,075 tCO<sub>2</sub>e. Houses account for most of the emissions within the residential sector accounting for 93% of the total emissions. The fuel type used by most of the houses/apartments within the residential sector was oil, which accounted for almost 72% of the emissions from fuel related heating. Achieving a low carbon housing stock is an important part of the DZ area successfully achieving national carbon reduction targets.

**Residential Sector Emissions (tCO<sub>2</sub>e)**

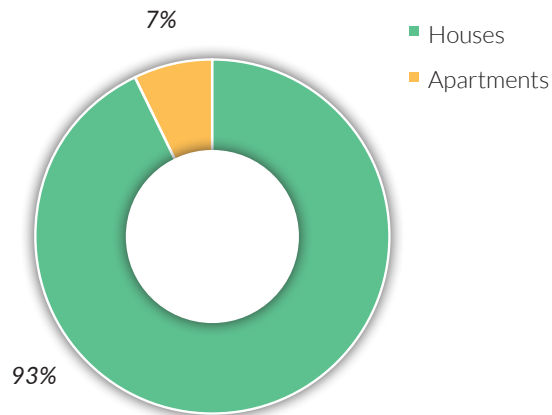


Figure 37 - Residential Sector Emissions

**Agriculture:**

Agricultural activities in the DZ area accounted for 13% of the DZ area’s total carbon emissions. The associated carbon emissions of the sector equate to approximately 10,748 tCO<sub>2</sub>e. Beef and dairy farming are the most common types of farming within the DZ area and account for over 90% of the emissions within the agricultural sector. CAP 23 and Teagasc have called out a range of key measures for farmers and the agricultural sector to implement in order to effectively reduce emissions, including reducing chemical fertiliser use, reducing calving age and improved animal feeding.

**Livestock emissions (%)**

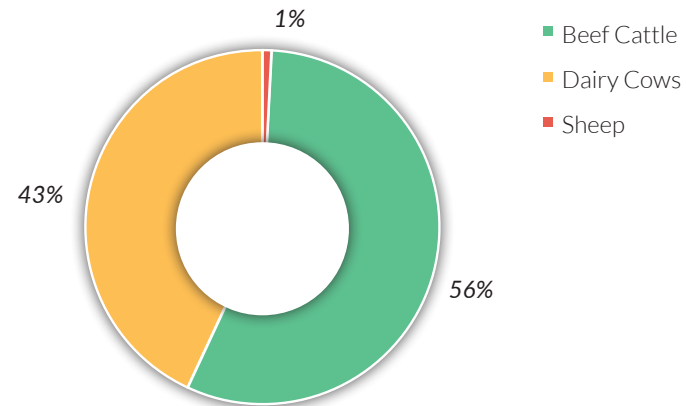


Figure 38 - Livestock Emissions

**Waste:**

The estimated waste related carbon emissions are approximately 1,757 tCO<sub>2</sub>e. The waste sector accounts for just 2% of the total emissions within the DZ area. Although this is a small percentage it is still significant. This highlights the need to minimising waste and embracing circular economy principles within the DZ.

## 4.4 Register of Opportunities

*The register of opportunities identifies and compiles a portfolio of projects, actions, technologies, and interventions including mitigation, adaptation, and biodiversity measures, to deliver the targets set for energy and emission reductions across the DZ.*

A register of opportunities has been developed for Monaghan Town with each of the opportunities for carbon reduction potential quantified in terms of its contribution to reducing carbon emissions across the DZ. Potential carbon reductions have been assessed against the national target of a 51% reduction by 2030. The register of opportunities has been used to inform action and implementation of plan development.

To develop the register of opportunities for the Monaghan DZ, a series of actions have been undertaken:

**Evidence Base** –a review of the BEI developed for Monaghan Town DZ was conducted to provide a detailed analysis of sources of emissions. A review of national and regional policy was undertaken to understand the national and regional policy context, aims and objectives.

**Best practice review** –A review of existing actions being undertaken by Local Authorities both in Ireland and across Europe was undertaken to identify the actions being used to increase energy efficiency and reduce carbon emissions to support identification and prioritisation of potential measures.

**Stakeholder Engagement** –A stakeholder workshop was held with representatives from across the service areas of Monaghan County Council to identify and assess the feasibility of potential opportunities, actions and the responsible parties that will be involved in delivery of actions



Figure 39 – DZ Staff workshop.





## 4.5 DZ Register of Opportunities Matrix

The Monaghan Town DZ BEI for 2018 was calculated as 86,354 tCO<sub>2</sub>e. Table 9 below shows the required reduction for each of the sectors to achieve the 51% reduction target and the projected emission reductions based on the opportunities outlined in this report. The opportunities outlined below include those for which Monaghan County Council has direct responsibility and those that Monaghan County Council can influence and support.

Sector	2018 BEI (tCO <sub>2</sub> e)	2018 Reduction Target (tCO <sub>2</sub> e)	2030 Reduction Target (% of 2018 BEI)	Projected Reduction 2030 (tCO <sub>2</sub> e)	Projected (Reduction 2030 (% of 2018 BEI)	Based on the Following Opportunities
Private Residential	16,415	8,372	-51%	-10,710	-65%	This reduction is based on <b>improving BER of 60%</b> of all private residential housing units to B2 (minimum) and <b>the installation of Solar PV on 60%</b> of all properties
Social Housing	2,660	1,357	-51%	-1,438	-54%	This reduction is based on <b>improving the BER of 75%</b> of social housing units under Monaghan County Council's control to B2 (minimum) and <b>the installation of Solar PV on 75%</b> of the properties
Commercial & Public Sector	29,330	14,958	-51%	-21,890	-75%	Improving <b>energy efficiency</b> of 75% of buildings, installing <b>solar PV</b> and swapping 75% fossil fuel consumption (gas and kerosene) for <b>low carbon fuel</b> in the DZ
Transport	25,173	12,838	-51%	-9,413	-37%	<b>Active travel opportunities and enhanced zero emissions public transport decreases the total km travelled by private car</b> in the DZ by 20%. <b>Electrification</b> of 30% of private cars and <b>HVO</b> is used by 50% of freight in the DZ
Municipal (electricity supply")	271	138	-51%	-271	-100%	Electricity supply for all LA buildings in DZ is procured via <b>renewables sources</b>
Agriculture	10,748	5,481	-51%	-3,328	-31%	<b>Support and enable diversification options</b> for farmers to reduce livestock emissions. <b>Alternative fuel sources</b> for farm machinery (e.g. HVO) will allow for a reduction in agricultural related emissions
Waste	1,757	896	-51%	-439	-25%	Improved <b>composting rates</b> reduce waste emissions
<b>Total</b>	<b>86,354</b>	<b>44,041</b>	<b>-51%</b>	<b>47,489</b>	<b>-55%</b>	

Table 9 – DZ Register of Opportunities Matrix



## 4.6 Enabling Opportunities

As illustrated in the graph in figure 40, the register of opportunities developed for the Monaghan Town DZ provides for the potential to exceed the 51% emissions reduction target and for an overall emissions reduction of ~55% (47,489 tCO<sub>2</sub>) by 2030. In addition to the technical opportunities that will have a quantifiable impact on carbon emissions (as identified in the Register of Opportunities), a number of ‘enabling’ opportunities have also been identified for the Monaghan Town DZ. These less tangible opportunities listed below which promote home retrofit, active travel and sustainability will have a significant impact in enabling the decarbonisation of the Monaghan Town DZ.

- Establishment of an **SEAI Sustainable Energy Community (SEC)** would increase awareness of energy efficiency and decarbonisation, provide for the development of a community energy masterplan, and highlight funding supports.
- A **Community Energy Hub** would increase awareness amongst the community of energy efficiency, decarbonisation and associated environmental and financial benefits.
- Development of a centralised web-based **Public Transport Information Hub or Portal** would promote a modal shift from private to public transport through the provision of comprehensive and up-to-date information on public transport options within the Monaghan Town DZ.

- The establishment of **Car Sharing Clubs** would support carpooling amongst the community, reducing car journeys in Monaghan Town DZ.
- Establishment of a **Cycle Bus Scheme** for schools would reduce car journeys and provide co-benefits in terms of improved health and enhanced air quality.
- Businesses within Monaghan Town are already taking substantial action around sustainability, **Increasing Awareness of Business actions** would highlight and promote sustainability across the Monaghan Town DZ.
- Engage the creative sector through an **Arts Campaign** to highlight the ambitions and objectives for the DZ.

In addition to the technical actions provided through the Register of Opportunities, the enabling actions identified above have been included in the DZ action plan.



Projected emissions reductions across the Monaghan Town DZ based on the register of opportunities

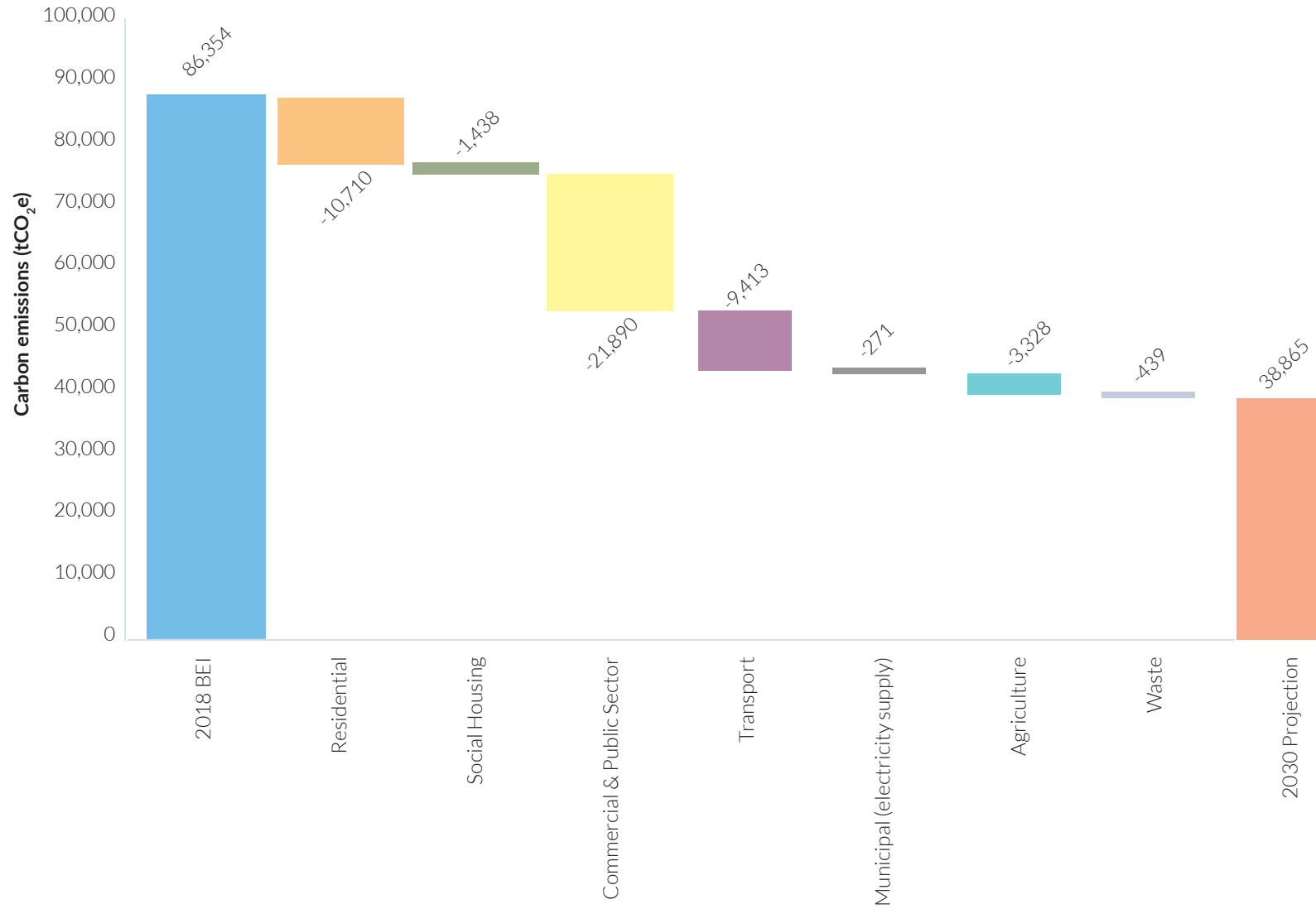


Figure 40 - Projected Emissions reductions across the Monaghan Town DZ.



## 4.7 Decarbonising Zone Priority Areas, Objectives & Actions

The more ambitious suite of actions devised for the DZ have been devised following an analogous approach to that presented for the CAP in this Plan. The framework for actions included the following elements:

- A set of five Strategic Priority Areas which have been adopted as the five Strategic Goals for the CAP in **Section 3.3**;
- A set of high-level Objectives that support the delivery of the Strategic Priority Areas whilst framing the appropriate emphasis of the actions; and
- A suite of individual Actions that are specific, action-focused, time-bound, and measurable reflecting a scaling up of ambitious local level climate action.

The framework of Objectives and Actions for the Decarbonising Zone are presented in the following tables with each one devised for a Strategic Priority Area:


- **Table 4-8:** Actions for Governance & Leadership;
- **Table 4-9:** Actions for Built Environment and Transport;
- **Table 4-10:** Actions for Natural Environment & Green Infrastructure;
- **Table 4-11:** Actions for Communities: Resilience & Transition; and
- **Table 4-12:** Actions for Sustainability & Resource Management.

The layout of the tables in relation to Strategic Priority Areas, Objectives, Actions, and the assigned responsibility are analogous to that presented for the CAP actions in **Section 3.3**.






## 4.8 DZ Actions - Governance and Leadership

 <b>Governance &amp; Leadership</b>		<b>DZ Objectives:</b> 1. Ensure suitable governance exists to deliver the Monaghan Town DZ Actions. 2. Ensure adequate funding is in place to deliver the Monaghan Town DZ Actions. 3. Ensure Monaghan County Council is a leader in implementing climate and biodiversity measures.				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
DZ GL 1	<b>Implement a monitoring and reporting programme on the implementation of the Monaghan Town DZ actions.</b>	Combined	Number of annual reports.	Climate Action Unit	Information Technology	Annually
DZ GL 2	<b>Identify possible funding options available for the actions identified in the Monaghan Town DZ plan.</b>	Combined	Number of options identified.	Climate Action Unit	All Sections	1 year
DZ GL 3	<b>Commit the required budget to fund the actions listed in the Monaghan Town DZ Plan.</b>	Combined	Total annual spend.	Senior Management Team	Finance	Annually
DZ GL 4	<b>Support the development of formal links between community, business, and education bodies (inc. Monaghan Institute) to facilitate collaborative climate action.</b>	Combined	Number of links established.	Climate Action Unit, LEO, PPN	Town Team, Monaghan Institute, Chamber of Commerce.	2 Years


Actions in **blue** indicate where MCC has direct control of implementation.



 <b>Governance &amp; Leadership</b>		<b>DZ Objectives:</b> 1. Ensure suitable governance exists to deliver the Monaghan Town DZ Actions. 2. Ensure adequate funding is in place to deliver the Monaghan Town DZ Actions. 3. Ensure Monaghan County Council is a leader in implementing climate and biodiversity measures.				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
DZ GL 5	Ensure Council spending in the Monaghan Town DZ is fully aligned with green procurement practices.	Combined	Percentage of Green Public Procurement Spend.	Procurement		Annually
DZ GL 6	Promote best practice climate action case studies.	Combined	Number of case studies done.	Climate Action Unit		Annually
DZ GL 7	Establish a cross departmental DZ Taskforce to lead & drive the DZ implementation Plan.	Combined	Number of meetings held annually. Representation from key stakeholders. Traffic Light Quarterly Progress Report (Red/Amber/Green).	Climate Action Unit	All Key council Departments within DZ.	Annually


Actions in **blue** indicate where MCC has direct control of implementation.

## 4.9 DZ Actions - Built Environment & Transport

 <b>Built Environment &amp; Transport</b>		<b>DZ Objectives:</b> 1. Retrofit local authority buildings across the Monaghan Town DZ. 2. Promote the retrofit of private buildings across the Monaghan Town DZ and ensure all new MCC buildings are built to at least NZEB standards. 3. Enhance the resilience of the built environment to climate impacts.				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
<b>DZ BE. 1</b>	<b>Retrofit social housing and local authority buildings in the Monaghan Town DZ to achieve a minimum Building Energy Rating of B2</b> , having due regard to local human receptors, protected species, biodiversity, European site, and heritage considerations.	Mitigation	Number of social housing units and local authority buildings with a BER of B2 or better.	Housing, Corporate Assets.	Finance, SEAI.	Annually
<b>DZ BE. 2</b>	<b>Assess the feasibility and install rooftop solar PV on social housing and local authority property across the Monaghan Town DZ</b> , having due regard to local human receptors, protected species, biodiversity, European sites, and the need to appropriately conserve protected structures.	Mitigation	Number of PV projects implemented.	Housing, Corporate Assets.		Annually

Actions in **blue** indicate where MCC has direct control of implementation.




 <b>Built Environment &amp; Transport</b>		<b>DZ Objectives:</b> 1. Retrofit local authority buildings across the Monaghan Town DZ. 2. Promote the retrofit of private buildings across the Monaghan Town DZ and ensure all new MCC buildings are built to at least NZEB standards. 3. Enhance the resilience of the built environment to climate impacts.				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
DZ BE. 3	<b>Promote retrofit to Building Energy Rating B2 for private and commercial properties across the Monaghan Town DZ</b> , having due regard to local human receptors, protected species, biodiversity, European sites, and the need to appropriately conserve protected structures	Mitigation	Number of engagement events held.	Community, Local Enterprise Office	SEAI	Annually
DZ BE. 4	<b>Undertake a study to identify vacant buildings in the DZ in support of the Town Centre First Policy.</b>	Mitigation	Study Conducted	Regeneration	Housing	1 Year
DZ BE. 5	<b>Conduct a Monaghan Town Centre Health Check and compare findings with the 2019 study.</b>	Mitigation	Survey Conducted	Regeneration	The Heritage Council	1 year
DZ BE. 6	<b>Promote the use of nature-based solutions (NBS) to reduce the impact of flooding where possible</b> , having due regard to environmental sensitivities including sensitive human receptors, water quality, biodiversity, European sites, riparian corridors and aquatic ecology.	Adaptation	Number of NBS implemented.	Planning		Annually


Actions in **blue** indicate where MCC has direct control of implementation.






 <b>Built Environment &amp; Transport</b>		<b>DZ Objectives:</b> 1. Retrofit local authority buildings across the Monaghan Town DZ. 2. Promote the retrofit of private buildings across the Monaghan Town DZ and ensure all new MCC buildings are built to at least NZEB standards. 3. Enhance the resilience of the built environment to climate impacts.				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
DZ BE. 7	<b>Implement the WIRE App to record and monitor the impacts of weather events in Monaghan Town DZ.</b>	Adaptation	Implementation of App.	Climate Action Unit & Information Technology	Roads, Housing	Annually
DZ BE. 8	<b>Undertake a feasibility study of the potential for district heating for Monaghan Town,</b> whilst advocating and exerting influence to ensure that all associated development has due regard to the need to protect sensitive aspects of the receiving environment, such as water bodies, biodiversity, flora and fauna, European sites, and local population.	Mitigation	Feasibility study conducted.	Climate Action Unit	Corporate Assets, Uisce Eireann	1 year
DZ BE. 9	<b>Complete a Town Centre First Plan for Monaghan town and implement recommendations.</b> Having due regard to protected species, biodiversity, European sites and the need to appropriately conserve protected structures.	Both	Completion of plan and recommendations implemented.	Regeneration		2 years

Actions in **blue** indicate where MCC has direct control of implementation.

 <b>Built Environment &amp; Transport</b>		<b>DZ Objectives:</b> 1. Promote a modal shift from private to public transport in the Monaghan Town DZ. 2. Support the development of active travel infrastructure, cycling and walking initiatives. 3. Promote and enable the transition of vehicles within the Monaghan Town DZ to electric or other low-carbon transport options.				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
<b>DZ T. 1</b>	<b>Implement the decarbonisation of the local authority vehicular fleet as appropriate</b> , having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, and local air quality.	Mitigation	Amount of Emissions reduced annually.	Roads	SEAI	5 years
<b>DZ T. 2</b>	<b>Undertake an Active Travel study to identify and prioritise the most effective measures.</b>	Mitigation	Study conducted.	Active Travel	Climate Action Unit	2 Years
<b>DZ T. 3</b>	<b>Implement a pilot project for a bike rental / electric bike scheme in the Monaghan Town DZ.</b>	Mitigation	Pilot scheme implemented.	Roads	SEAI	2 years
<b>DZ T. 4</b>	<b>Implement a pilot project for a car share scheme in the Monaghan Town DZ.</b>	Mitigation	Pilot scheme implemented.	Roads		2 years
<b>DZ T. 5</b>	<b>Complete a local transport plan for Monaghan town. Investigate feasibility of free public transport options to increase the number of journeys made by public transport.</b>	Mitigation	Transport plan completed. Feasibility assessed.	Active Travel, Roads	Climate Action Unit, Department of Transport, NTA	3 years


Actions in **blue** indicate where MCC has direct control of implementation.



 <b>Built Environment &amp; Transport</b>		<b>DZ Objectives:</b> 1. Promote a modal shift from private to public transport in the Monaghan Town DZ. 2. Support the development of active travel infrastructure, cycling and walking initiatives. 3. Promote and enable the transition of vehicles within the Monaghan Town DZ to electric or other low-carbon transport options.				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
DZ T. 6	<b>Identify suitable locations for EV charging points across the Monaghan Town DZ</b> , having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, and local air quality.	Mitigation	Number of charging installations facilitated.	Roads	Planning, Climate Action Unit	2 years
DZ T. 7	<b>Work with businesses to promote climate friendly transport, e.g., last kilometre delivery.</b>	Mitigation	Percentage reduction in road traffic Monaghan Town Centre.	Local Enterprise Office	Community	Annually
DZ T. 8	<b>Engage with the relevant authorities to support the electrification of Local Link</b> , whilst advocating and exerting influence to ensure sustainability and environmental protection considerations are embedded into the project.	Mitigation	Number of meetings held with TFI.	Roads	TFI	5 years
DZ T. 9	<b>Promote, support &amp; incentivise cycling/walking bus for schools within DZ area.</b>	Combined	Awareness Campaign delivered.	Active Travel, Sports Partnership	Schools, An Taisce	2 years.

Actions in **blue** indicate where MCC has direct control of implementation.




 <b>Built Environment &amp; Transport</b>		<b>DZ Objectives:</b> 1. Promote a modal shift from private to public transport in the Monaghan Town DZ. 2. Support the development of active travel infrastructure, cycling and walking initiatives. 3. Promote and enable the transition of vehicles within the Monaghan Town DZ to electric or other low-carbon transport options.				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
<b>DZ T. 10</b>	<b>Increase pedestrianised space in Monaghan Town</b> , having appropriate regard to environmental sensitivities such as traffic and transport constraints and aspects, the receiving water environment, biodiversity, European sites, local air quality and cultural heritage.	Combined	Number of active travel measures implemented.	Planning and Municipal District.	Roads	Annually
<b>DZ T. 11</b>	<b>Develop a web-based public transport information hub in the DZ area (e.g. real-time information technology).</b>	Mitigation	Public transport information hub developed.	Information Technology	Community, LEO, Bus Eireann, Local Link, Ulster Bus.	1 year
<b>DZ T. 12</b>	<b>Engage with local businesses in the DZ to participate in the Park and Stride programme.</b>	Mitigation	Number of participating businesses.	Active Travel	Schools, An Taisce	1 year
<b>DZ T. 13</b>	<b>Utilise low-carbon pavement material within works on the DZ's road network.</b>	Mitigation	Percentage of low-carbon pavement material utilised.	Roads		

Actions in **blue** indicate where MCC has direct control of implementation.





 <b>Built Environment &amp; Transport</b>		<b>DZ Objectives:</b> 1. Promote a modal shift from private to public transport in the Monaghan Town DZ. 2. Support the development of active travel infrastructure, cycling and walking initiatives. 3. Promote and enable the transition of vehicles within the Monaghan Town DZ to electric or other low-carbon transport options.				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
<b>DZ T. 14</b>	<b>Complete pilot project for smarter travel programme within one of Monaghan County Council’s offices.</b>	Mitigation	Pilot project complete	Active Travel	TFI, Climate Action Unit	2 years
<b>DZ T. 15</b>	<b>Pilot a scheme for Car Free Zones around schools.</b>	Mitigation	Pilot scheme implemented.	Active Travel		2 years
<b>DZ T. 16</b>	<b>Complete Urban Mobility Plan for Monaghan Town.</b>	Mitigation	Plan completed.	Active Travel, Roads	Department of Transport, NTA	4 years
<b>DZ T. 17</b>	<b>Promote and support the Safe Routes to School Programme to encourage staff and students in primary and post-primary schools within the DZ to walk and cycle.</b> Having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites local air quality, and cultural heritage.	Combined	Delivery of walking and cycling infrastructure on key access routes to schools.	Active Travel	Department of Transport, NTA	Annually


Actions in **blue** indicate where MCC has direct control of implementation.

## 4.10 DZ Actions - Natural Environment and Green Infrastructure

 <b>Natural Environment &amp; Green Infrastructure</b>		<b>DZ Objectives:</b> 1. Enhance and protect the natural environment and biodiversity of the Monaghan Town DZ. 2. Support nature-based solutions for climate resilience and emission reductions whilst promoting enriched biodiversity. 3. Create vibrant green spaces for the community.				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
<b>DZ NGI. 1</b>	<b>Develop a green infrastructure masterplan for Monaghan Town to coordinate planning for the enhancement of the natural environment and to connect public green space and greenways within the DZ</b> , having due regard for environmental protection considerations and opportunities for climate action co-benefits.	Combined	Plan Developed.	Planning	Biodiversity Officer, Active Travel and Heritage.	2 years
<b>DZ NGI. 2</b>	<b>Promote biodiversity gain and carbon sequestration in Monaghan Town through strategic planting of native species for all new developments.</b>	Combined	Number of Native Trees/ Plants Planted.	Biodiversity Officer and Planning	Municipal Districts, Horticulturist	2 Years
<b>DZ NGI. 3</b>	<b>Support the creation of public and connected green spaces in Monaghan Town to enhance health and wellbeing and biodiversity.</b>	Combined	Hectares of Green Space	Biodiversity Officer, Planning	Horticulturist	3 years


Actions in **blue** indicate where MCC has direct control of implementation.



 <b>Natural Environment &amp; Green Infrastructure</b>		<b>DZ Objectives:</b> 1. Enhance and protect the natural environment and biodiversity of the Monaghan Town DZ. 2. Support nature-based solutions for climate resilience and emission reductions whilst promoting enriched biodiversity. 3. Create vibrant green spaces for the community.				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
<b>DZ NGI. 4</b>	<b>Support green infrastructure and nature-based solutions such as sustainable urban drainage systems to improve climate resilience</b> , having due regard to environmental sensitivities including water quality, biodiversity, European sites, riparian corridors and aquatic ecology, visual amenity and recreation and amenity value.	Adaptation	Percentage of Hectares served by Sustainable Drainage Schemes.	Planning	Climate Action Unit	5 years
<b>DZ NGI. 5</b>	<b>Promote rainwater harvesting, reuse of grey water and green roofs and walls</b> , having due regard to environmental sensitivities including water quality, biodiversity, European sites, visual amenity and recreation and amenity value.	Adaptation	Number of projects	Planning	Municipal Districts	Annual
<b>DZ NGI. 6</b>	<b>Pilot a community composting project to manage food waste in the DZ.</b>	Mitigation	Municipal District	Climate Action and Environment		2 years

Actions in **blue** indicate where MCC has direct control of implementation.




 <b>Natural Environment &amp; Green Infrastructure</b>		<b>DZ Objectives:</b> 1. Enhance and protect the natural environment and biodiversity of the Monaghan Town DZ. 2. Support nature-based solutions for climate resilience and emission reductions whilst promoting enriched biodiversity. 3. Create vibrant green spaces for the community.				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
DZ NGI. 7	Support the transition of the agricultural sector to more sustainable farming techniques through programmes such as Teagasc’s Signpost programme.	Combined	Report on engagement / events.	Biodiversity Officer	Environment	1 Year
DZ NGI. 8	Reduce the use of Glyphosate over the tenure of this plan. Aim to be Glyphosate free by 2028.	Mitigation	Reduction annually in glyphosate use.	Municipal District,	Horticulturist	5 years


Actions in *blue* indicate where MCC has direct control of implementation.



## 4.11 DZ Actions - Communities: Resilience/Transition

 <b>Communities: Resilience &amp; Transition</b>		<b>DZ Objectives:</b> 1. To engage and support communities and citizens to deliver local climate actions to enhance sustainability and resilience. 2. Empower community and business climate champions to lead by example. 3. Promote energy efficiency, retrofitting and climate action amongst the community.				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
DZ CRT. 1	Develop an annual communications plan to raise awareness of the DZ and engage citizens in climate action.	Combined	Plan Developed.	Community	Corporate Services	Annual
DZ CRT. 2	Develop a range of informational material to provide citizens with knowledge to understand and implement the climate transition in their own lives.	Combined	Number of information supports developed.	Community		1 Year
DZ CRT. 3	Identify, train, and resource ‘Sustainability Champions’ who can act as ambassadors for their sectors to encourage other companies within the DZ.	Combined	Number of champions trained.	LEO	Climate Action Unit	2 years
DZ CRT. 4	Facilitate the distribution of Energy Saving Kits to the public through local libraries.	Mitigation	Number of kits distributed.	Libraries		Annually

Actions in **blue** indicate where MCC has direct control of implementation.


 <b>Communities: Resilience &amp; Transition</b>		<b>DZ Objectives:</b> 1. To engage and support communities and citizens to deliver local climate actions to enhance sustainability and resilience. 2. Empower community and business climate champions to lead by example. 3. Promote energy efficiency, retrofitting and climate action amongst the community.				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
DZ CRT. 5	Support the development of a Sustainable Energy Community (SEC) within the Monaghan Town DZ.	Mitigation	SEC established.	Community	Local Enterprise Office	2 Years
DZ CRT. 6	Hold an annual one-stop-shop event to promote retrofitting of private buildings and increase community understanding of climate action.	Combined	One-stop event held.	Community		Annually
DZ CRT. 7	Promote and raise awareness of the successful climate action initiatives undertaken by local businesses.	Combined	Number of climate action related activities promoted.	Town Teams and Business Support Section.		2 Years
DZ CRT. 8	Host two 'Sustainable' sector specific business events within the DZ.	Mitigation	Number of events held.	Climate Action Unit, Environment	Local Enterprise Office	Annually
DZ CRT. 9	Undertake a feasibility study to determine the need for a 'Green Accreditation' scheme for micro and small businesses.	Combined	Feasibility study undertaken.	Planning	Local Enterprise Office	2 Years

Actions in **blue** indicate where MCC has direct control of implementation.

 <b>Communities: Resilience &amp; Transition</b>		<b>DZ Objectives:</b> 1. To engage and support communities and citizens to deliver local climate actions to enhance sustainability and resilience. 2. Empower community and business climate champions to lead by example. 3. Promote energy efficiency, retrofitting and climate action amongst the community.				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
<b>DZ CRT. 10</b>	<b>Engage the creative sector through an Arts Campaign to highlight the ambitions and objectives of the Decarbonisation Zone.</b>	Mitigation	Arts Campaign held.	Climate Action Unit	Climate Action Unit, Libraries, Museum, Heritage Office, Arts Office and Creative Ireland.	2 Years
<b>DZ CRT. 11</b>	<b>Investigate an incentive scheme for businesses to support and award them for positive climate action.</b>	Combined	Feasibility Study conducted.	LEO	Senior Management Team	Annually
<b>DZ CRT. 12</b>	<b>Investigate bringing the infrastructure needed to bring renewable gas to the DZ area.</b>	Mitigation	Feasibility study conducted.	Planning	Environment	2 Years

Actions in *blue* indicate where MCC has direct control of implementation.


## 4.12 DZ Actions - Sustainability & Resource Management

 <b>Sustainability &amp; Resource Management</b>		<b>DZ Objectives:</b> 1. Ensure that Monaghan County Council creates a sustainable, low carbon and circular economy within its own organisation. 2. Promote and support communities in delivering actions in support of a sustainable economy.				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
DZ SRM. 1	<b>Upgrade all public lighting in Monaghan to LED lights to improve energy efficiency.</b>	Mitigation	Percentage of public lighting upgraded.	Corporate Assets	Roads	Complete
DZ SRM. 2	<b>Move towards 100% renewable electricity.</b>	Mitigation	Percentage of renewable electricity procured.	Corporate Services	Procurement	5 Years
DZ SRM. 3	<b>Ensure MCC is aligned with the circular economy (e.g. no single use products).</b>	Mitigation	No single use products procured.	Procurement	Corporate Services	1 year
DZ SRM. 4	<b>Develop informational supports to promote the concept of share, reuse, and repair amongst communities.</b>	Combined	Number of supports developed.	Environment	Climate Action Unit	1 Year
DZ SRM. 5	<b>Advocate for the removal of all single use plastic within areas of the DZ.</b>	Mitigation	Number of stakeholders engaged. Quantity reduction in single use plastics.	Environment	Climate Action Unit	1 Year

Actions in **blue** indicate where MCC has direct control of implementation.





 Sustainability & Resource Management		DZ Objectives: 1. Ensure that Monaghan County Council creates a sustainable, low carbon and circular economy within its own organisation. 2. Promote and support communities in delivering actions in support of a sustainable economy.				
Action No:	Action	Adaptation or Mitigation or Combined	KPI	LA Lead	Partners	Timeframe
DZ SRM. 6	To enhance and encourage active travel, install bike repair facilities on popular cycle routes.	Mitigation	Number of bike repair facilities installed.	Active Travel	Climate Action Unit	Annually
DZ SRM. 7	Install solar compactor bins with smart collection facility.	Mitigation	Number of solar compactor bins installed.	Municipal District	Environment	Annually

Actions in *blue* indicate where MCC has direct control of implementation.





**5**

# IMPLEMENTATION AND REPORTING





## 5.1 Planning for implementation

This climate action plan will be implemented by Monaghan County Council. Whilst the plan requires a whole-of-Council approach, the ownership of the Plan is held within the Climate Action and Environment Directorate.

The implementation and reporting phase will commence immediately upon adoption and publication of the final Plan and the key phases for implementation are presented in Figure 41 and summarised in the following sections.

Planning for Implementation	Tracking progress through Key Performance Indicators	Reporting requirements
<ul style="list-style-type: none"> <li>Outline commitment to implementation in climate action plan</li> <li>Activate governance and co-ordination structure(s) to support implementation</li> </ul>	<ul style="list-style-type: none"> <li>Devise plan level KPIs</li> <li>Incorporate considerations around sectoral KPIs when available</li> </ul>	<ul style="list-style-type: none"> <li>Internal reporting</li> <li>M&amp;R reporting</li> <li>Local authority climate action plan reporting</li> <li>Local government sectoral performance reporting</li> </ul>

Figure 41 - Implementing and Reporting Process.

A Climate Action Core Team was established in Monaghan County Council in 2023. This team includes a Climate Action Coordinator, Climate Action Officer, and Community Climate Action Officer. The role of this team is to mainstream climate action into the activities of Monaghan County Council, monitor the implementation of the actions and to coordinate the reporting and evaluation of the plan, following its adoption by the Elected Members. The core Climate Action unit is supported by the wider climate action teams across the organisation, that have ownership of particular actions within the Plan. These include the following Directorates.

- Corporate Services & Innovation
- Economic Development, Planning & Capital Projects
- Transportation, community, and rural development.
- Finance, Housing and culture.
- Climate Action, Environment and Water Services.

These Directorates operate several relevant service areas including Library Services, Fire Services, Community & Enterprise, Roads & Transportation, Environmental Services, Planning, Heritage and Biodiversity, Local Enterprise Office, Finance, Housing, Economic Development, Municipal Districts, Human Resources, Capital Projects, Corporate Services, Information Technology and Tourism.

Monaghan County Council will work collaboratively and in partnership with a range of key stakeholders to support the delivery of this Plan. These stakeholders include but are not limited to the following – the neighbouring local authorities of **Cavan County Council, Louth County Council and Meath County Council** the Eastern and Midlands Climate Action Regional Office, SEAI, the Local Authority Services National Training Group, Eastern and Midlands Regional Assembly, Local Government Management Agency, County and City Management Association, Public Participation Network, Age Friendly Ireland and Comhairle na nOg. These partnerships can provide opportunities for collaboration on projects, shared learnings, technical support and leveraging of funding opportunities during the implementation of actions in the Plan.

It is also clear that climate change is a transboundary challenge; it does not stop at political and geographical borders. As such, a regional approach has been agreed by the local authorities in the Eastern and Midlands Climate Action Regional Office whereby they can collaborate closely on the implementation of the Climate Action Plans.

## 5.2 Funding and Partnerships

To lead by example and drive the transition to a climate neutral society, Monaghan County Council will need access to adequate funding for climate action projects towards achieving its 2030 and 2050 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. Monaghan County 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.

Four examples of successful Climate Action projects that have already received external funding are listed below.

### Sliabh Beagh - Collaborative Action for the Natura Network (CANN) project

This project was a cross border environment project with Sliabh Beagh being a priority site. The aim of the project was to improve the condition of protected habitats and to support priority species. This was done through a range of conservation measures including drain blocking, invasive species removal, fire prevention etc which essentially rewet the blanket bog. Conservation action plans and a fire management plan were developed for the future protection and conservation of Sliabh Beagh. Blanket bogs are an extremely valuable resource in terms of climate action as they store carbon through carbon sequestration. The CANN project has helped conserve over 1,000 hectares of blanket bog in the Slieve Beagh area.



Figure 42 - Sliabh Beagh Project.



### The Border Region Energy unit

The Border Region Energy unit was set up to avail of pathfinder funding from the SEAI. Three Local authorities Monaghan County Council, Cavan County Council and Leitrim County Council came together to help address their combined climate mitigation goals. Through this programme Local authorities can avail of matched funding from SEAI to increase the energy efficiency of their buildings and reduce the carbon footprint also.

### Public Lighting LED Retrofit Project:

At the end of 2021 MCC have retrofitted 100% of its public lighting to LED's. Before the project started, energy consumption for street lighting accounted for 3.26GWh, since the completion of the project this has been reduced by over 50% to 1.44GWh which has reduced our energy bills substantially. MCC was the first local authority to retrofit all its streetlighting, highlighting the innovative decision making by the council. Over the lifetime of the project, over 530,000kg of CO<sub>2</sub> emissions has been offset along with significant energy cost savings.



Figure 43 - MCC Public Lighting Retrofitted with LED's.

### Low Energy Bound Materials (LEBM) using Reclaimed Asphalt Pavement (RAP) Pilot Project

Monaghan County Council is currently working with the Department of Transport and Transport Infrastructure Ireland in the development of a low energy bound material for roads. This is an ongoing project which has been trialled in several areas. It has the potential to reduce emissions by an estimated 44 tonnes of CO<sub>2</sub> per Km of material laid compared to the standard road mix.



Figure 44 - LEBM & RAP Project.

Partnerships are also a key ingredient towards realising low carbon solutions for the sector. The private sector is already playing a role towards achieving the National Climate Objective and this type of collaboration can enhance the capabilities of the sector even further in achieving reductions in Ireland's greenhouse gases by 51% by 2030 and becoming climate neutral by no later than 2050.



There are also benefits for the local government sector in partnering with the Third Level sector. The Third Level sector can provide research and development expertise to help local authorities and implement innovative solutions to reduce greenhouse gas emissions and adapt to climate change. These partnerships can also help local authorities access funding opportunities for climate action projects and initiatives. Monaghan County Council will encourage and facilitate collaboration with the private sector and Third Level sector where possible.

### 5.3 Tracking Progress of climate actions

Performance by Monaghan County Council on the delivery of energy efficiency and emission reductions relating to the Council's infrastructure and assets, as prescribed by national climate obligations, will continue to be tracked through the established Monitoring and Reporting (M&R) system managed by the Sustainable Energy Authority of Ireland (SEAI).

For actions outside of this, one of the reporting avenues that Monaghan County Council engages with to communicate progress on the delivery of actions is through Sectoral Key Performance Indicators (KPIs). This informs the performance of the local government sector on climate action.

Strengthened climate action policy at national level inspired a determined response and commitment by local government, as a sector. This commitment is set out in the County and City Management Association (CCMA) published strategy on behalf of local government entitled [Delivering Effective Climate Action 2030 \(DECA 2021\)](#).

A key consideration for the local government sector on this strengthened role on climate action 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 levels. In this regard, KPIs will continue to play a significant role.

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 for local authority staff and elected members;
- Actions delivered;
- Enterprise support in area of climate action;
- Energy efficiency;
- Emission reductions;
- Active travel measures; and
- Severe weather response.

KPIs will continue to be added as necessary by the sector and Monaghan County Council will contribute relevant information as required, to assist in highlighting the progress of the local government sector on climate action.



## 5.4 Reporting Requirements and Arrangements

### 5.4.1 Internal Reporting

To ensure that delivery is timely, the implementation of the Climate Action Plan will be monitored via an in-house monitoring system. The local authority will also facilitate reporting to elected members on an annual basis.

### 5.4.2 Monitoring and Reporting System (M&R)

Monaghan County Council will continue to report on their energy performance and emission targets annually to the SEAI.

### 5.4.3 Sectoral Performance

Monaghan County Council will report annually on their 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.

### 5.4.4 National Climate Action Plan

Monaghan County Council will in accordance with part 3(w) of the Local Authority Climate Action Charter, report quarterly/annually to the Department of the Environment, Climate and Communications (DECC) and elected members on progress on climate action at local level as part of the delivery of the national climate objective. Progress on all actions will be reported via a reporting tool developed by CARO.

### 5.4.5 Sustainable Development Goals

Monaghan County Council is working to advance the SDGs, including through:

- the incorporation of the SDGs into their Corporate and County Development Plans;

- joining/establishing local and/or international partnerships;
- development of a mapping tool to map SDG-related actions in the Council area
- the provision of training and;
- holding information events with external groups including universities, PPNs, Tidy Towns and Creative Ireland.

### 5.4.6 Oversight

While the Council will implement and monitor the Plan, oversight of this implementation will be via several parties through a number of existing mechanisms such as:

- SEAI seek ongoing information on energy and emissions from the Council and this will continue through Plan implementation;
- Similarly, the CARO will seek annual data and information from the Council to inform the national emissions inventory; and
- DECC will have oversight of the Plan implementation and may issue guidelines in respect of the Plan with which the Council must comply.

### 5.4.7 Collaboration

As noted in this Plan, the Council will take the actions required to reduce emissions from its core operations and service delivery areas. There is also a need for collaborative community action from within the county to ensure that the plan actions are delivered to help achieve national targets.

The Council will support all citizens in transitioning Monaghan into a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy.



## Appendix A: Glossary

**Biodiversity:** This refers to the variety of plant and animal life in an area and how they interact within habitats and ecosystems (like lakes and native forests).

**Biomethane:** Biogenic methane is methane produced and released from living organisms like plants and animals. Methane significantly contributes to global warming (see definition of methane).

**Building Energy Rating:** BER stands for Building Energy Rating. A BER certificate shows you the energy performance of your home. It is a good indicator of how much you will spend on energy (like heat and light) and how much carbon you will produce to heat your home to a comfortable level. The BER rating goes from A to G. A-rated homes are the most energy efficient, comfortable and typically have the lowest energy bills. G-rated homes are the least energy efficient and require a lot of energy to heat the home.

**Built Environment:** This refers to structures we build and their surrounding environment such as bridges, roads and paths.

**Carbon Budgets:** A carbon budget is how some countries set a limit in policy or law on how much greenhouse gases they emit over a fixed time. In Ireland, the carbon budget will be set by law. The Climate Action and Low Carbon Development (Amendment) Bill sets out how carbon budgets will be set in Ireland. Government will put the carbon budget in place with advice from the Climate Change Advisory Council. A series of carbon budgets will be made and each one covers five years.

**Carbon Dioxide:** Carbon dioxide is a powerful greenhouse gas. It is naturally part of the air we breathe. However, human activities like burning of fossil fuels and deforestation have led to an increase in CO<sub>2</sub> in the air that contributes to climate change.

**Carbon Emissions:** Carbon emissions are created when particular gases are released into the air from activities like burning fossil fuels for energy. It includes gases like carbon dioxide and methane. This is because they both contain carbon. ‘Carbon emissions’ is sometimes used as a shorthand to describe all greenhouse gases.

**Carbon Footprint:** Carbon footprint measures the carbon emissions linked to a particular activity or product. It includes emissions involved in all stages of making and using a product or carrying out an activity.

**Carbon Neutral:** This means that the amount of greenhouse gas released into the air equals the amount removed from the air.

**Circular Economy:** This type of economy uses a more efficient and low-carbon approach. It makes sure that we reduce and reuse products and materials so that less waste is produced.

**Climate:** Climate means the average weather conditions in a region over a long time – usually 30 years or more. The big difference between climate and weather is the length of time involved. Weather can change from minute-to-minute, day-to-day, but climate is the average of weather over a longer time in a specific area.

**Climate Action and Low Carbon Development (Amendment) Bill:** This is a new law being developed that sets a target for Ireland to be a climate resilient and climate neutral economy by 2050. We call this the ‘national 2050 climate objective’. It requires Government to set a series of carbon budgets and gives a new role to the Climate Change Advisory Council to help develop these budgets. It also sets out the processes for how we develop our climate plans and policies to help us meet our climate objectives. For example, the Climate Action Plan must be updated each year.

**Climate Change:** This is a change in long-term weather patterns due to natural forces, or human activity, or both.





**Climate Resilience:** The ability to cope with the negative impacts of climate change in a way that reduces these impacts on people and the environment and takes advantage of any positive opportunities.

**Decarbonisation:** This happens when we stop using fossil fuels throughout the whole country.

**Emissions Projections:** These are the expected estimates (projections) of the amount of greenhouse gases released every year up to 2040. The EPA prepares the official emissions projections for Ireland. The projections are based on current and planned Government policy, and they help us see how we are doing in terms of reducing greenhouse gas emissions.

**Exposure:** Refers to the presence of assets, infrastructure, property, people, livelihoods, species or ecosystems, environmental functions, services and resources in places or settings that could be affected by extreme weather events.

**Fossil Fuels:** Fuels – such as coal, gas, peat and oil – that are formed in the ground over many thousands or millions of years from dead plants and animals and are used up once they are burned for energy.

**Global Warming Potential:** A measure of how much heat a greenhouse gas traps in the atmosphere (called ‘radiative forcing’) over certain time periods. Governments have agreed to use this measure to add up the impact of emissions of different gases and how they contribute to global warming.

**Green Economy:** A green economy is low-carbon, resource efficient and socially inclusive.

**Greenhouse Gas Emissions:** Gases that trap heat from the Earth’s surface causing warming in the lower atmosphere and slowing down loss of energy from Earth. The major greenhouse gases that cause climate change are carbon dioxide, methane and nitrous oxide.

**Green Infrastructure:** A strategically planned network of natural and semi-natural areas with other environmental features, designed and managed to deliver a wide range of ecosystem services, while also enhancing biodiversity.

**Methane:** This powerful greenhouse gas comes from sources like agriculture, fossil fuels and waste. It can be used as a fuel. For example, natural gas is mostly methane. It is the second most significant contributor to greenhouse gas emissions in Ireland.

**Net Zero Emissions:** This refers to achieving an overall balance between greenhouse gas emissions produced by human activity and greenhouse gas emissions taken out of the atmosphere.

**Nearly Zero Energy Buildings:** A building that has a very high energy performance. This means they need a very low amount of energy, fuelled mainly by renewable energy sources, in these houses or nearby. NZEB homes will be 70% more energy efficient and emit 70% less carbon dioxide than those built under previous building rules.

**Paris Agreement:** This legally binding climate change agreement was adopted in Paris, France, in December 2015. It sets out a global framework to avoid dangerous climate change by limiting global warming to well below 2°C and trying to limit it to 1.5°C. It also aims to strengthen countries’ ability to deal with the impacts of climate change and support them in their efforts.

**Resilience:** Is the capacity of social, economic and ecosystems to cope with a hazardous event, trend, or disturbance, responding or reorganising in ways that maintain their essential function, identity and structure.

**Energy Retrofitting:** In relation to buildings, energy retrofitting is anything done to improve the energy efficiency of an existing building. This usually includes upgrading the roof and wall insulation to help keep the heat in and installing renewable energy systems like heat pumps.



**Risk:** Is composed of three interrelated components – Hazard, Exposure and Vulnerability.

**Sustainable Development Goals:** These are goals (17 in all) developed by the United Nations to address the urgent environmental, political and economic challenges facing our world. Their goal is to end poverty, while protecting the planet and building economic growth.

**Sustainable Energy Authority of Ireland:** The Sustainable Energy Authority of Ireland is Ireland’s national energy authority. SEAI works with Government, homeowners, businesses, and communities to help create a clean energy future.

**Sustainable Management:** Controlling the use of resources in such a way as to provide for its equitable and continuous availability not only to the present generation but also for future generations without any harmful impact on the environment.


**UNFCCC:** This stands for United Nations Framework Convention on Climate Change. It is an international treaty to address climate change. It came into force in 1994 and has almost universal membership (197 members). The Paris Agreement is made under this treaty.

**Vulnerability:** Refers to the propensity or predisposition to be adversely affected. Vulnerability encompasses sensitivity (which refers to the degree to which an exposure will be adversely or beneficially affected by climate hazards) and adaptive capacity which refers to the ability of systems, institutions, humans, and other organisms to adjust to potential damage, to take advantage of opportunities, or to respond to consequences.



## Appendix B: Abbreviations

<b>°C:</b> Degrees Celsius	<b>DETE:</b> Department of Enterprise, Trade and Employment	<b>N2O:</b> Nitrous Oxide
<b>AA:</b> Appropriate Assessment	<b>DoT:</b> Department of Transport	<b>NAF:</b> National Adaptation Framework
<b>BEI:</b> Baseline Emissions Inventory	<b>DZ:</b> Decarbonising Zone	<b>NPWS:</b> National Parks and Wildlife Service
<b>BER:</b> Building Energy Rating	<b>EPA:</b> Environmental Protection Agency	<b>NTA:</b> National Transport Authority
<b>CAP:</b> Climate Action Plan	<b>EU:</b> European Union	<b>NZEB:</b> Nearly Zero Energy Building
<b>CARO:</b> Climate Action Regional Office	<b>EV:</b> Electric Vehicle	<b>OPW:</b> Office of Public Works
<b>CCAO:</b> Community Climate Action Officer	<b>GHG:</b> Green House Gas	<b>PPN:</b> Public Participation Network
<b>CCMA:</b> The County and City Management Association	<b>GPP:</b> Green Public Procurement	<b>PV:</b> Photovoltaic
<b>CCRA:</b> Climate Change Risk Assessment	<b>GWP:</b> Global Warming Potential	<b>R&amp;D:</b> Research and Development
<b>CH4:</b> Methane	<b>IT:</b> Information Technology	<b>SAC:</b> Special Area of Conservation
<b>CO<sub>2</sub>:</b> Carbon Dioxide	<b>KPI:</b> Key Performance Indicator	<b>SDGs:</b> Sustainable Development Goals
<b>CO<sub>2</sub>e:</b> Carbon Dioxide Equivalent	<b>LAWPRO:</b> Local Authority Waters Programme	<b>SEA:</b> Strategic Environmental Assessment
<b>CFRAMS:</b> Catchment-based Flood Risk Assessment and Management	<b>LED:</b> Light Emitting Diode	<b>SEC:</b> Sustainable Energy Community
<b>CSO:</b> Central Statistics Office	<b>LEO:</b> Local Enterprise Office	<b>SEAI:</b> Sustainable Energy Authority Ireland
<b>DAFM:</b> Department of Agriculture, Food and Marine	<b>LULUCF:</b> Land Use, Land Use Change and Forestry	<b>SPA:</b> Special Area of Conservation
<b>DECA:</b> Delivering Effective Climate Action	<b>MCC:</b> Monaghan County Council	<b>SuDS:</b> Sustainable Drainage
<b>DECC:</b> Department of Environment, Climate and Communications	<b>M&amp;R:</b> Monitoring and Reporting	<b>UN:</b> United Nations
	<b>MD:</b> Municipal District	<b>UNFCCC:</b> United Nations Framework Convention on Climate Change



Climate  
Action  
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