

### **Foreword**

## - Chief Executive and Cathaoirleach



Cllr Liam McDaniel Pat Gallagher Cathaoirleach



Chief Executive

Climate Action is the most pressing long-term global challenge of our time and is a significant priority for Westmeath County Council. We are committed to working closely with all citizens, communities, and businesses to empower them to take the necessary action to address climate change.

Westmeath County Council has prepared this Climate Action Plan (2024 – 2029), which sets a clear pathway to reducing our emissions by 51% by 2030 and increasing energy efficiency from the 33% public sector target in 2020 to 50% by 2030. Westmeath County Council will play a leadership role in driving far-reaching climate action across its buildings, transport, waste, and energy usage. These targets are to be achieved while increasing climate literacy, implementing green public procurement, and retrofitting public sector buildings.

This Climate Action Plan has been prepared in consultation with our staff from each department within the organisation. We will lead by example, embedding climate action as a central value across all our departments, focusing on continuous improvements that deliver real measurable progress.

The Elected Members in partnership with the Executive of Westmeath County Council have committed to achieving the national targets for public sector emission reduction. The publication of this Climate Action Plan is a welcome and positive step towards addressing the impacts of Climate Change.

# Glossary of Acronyms

**BER** Building Energy Rating

**CARO** Climate Action Regional Office

**CCMA** County and City Management Association

**CIBSE** Chartered Institution of Building Services Engineers

**COP21** Conference of the Parties 21

**CSO** Central Statistics Office

**DECA** Delivering Effective Climate Action

DRS Deposit Return Scheme
DZ Decarbonisation Zone

**EMS** Energy Management System

**EPA** Environmental Protection Agency

**ESB** Electricity Supply Board

**GHG** Greenhouse Gas

GIS Geographical Information Systems

**IPCC** Intergovernmental Panel on Climate Change

**KPI** Key Performance Indicator

LACAP Local Authority Climate Action Plan

**LGMA** Local Government Management Agency

**LPG** Liquified Petroleum Gas

LULUC Land Use and Land Use Change
NAF National Adaptation Framework

NCN National Cycle Network
OSI Ordnance Survey Ireland

SDG's Sustainable Development Goals

**SEAI** Sustainable Energy Authority of Ireland

**SEC** Sustainable Energy Community

**SPC** Strategic Policy Meeting

**UNFCCC** United Nations Framework Convention on Climate Change

WCC Westmeath County Council



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## Executive Summary

As part of Irelands Climate
Action and Low Carbon
Development (Amendment) Act
2021 Westmeath County Council
has committed to developing
and implementing this county
focused Climate Action Plan.

The plan focuses on five thematic areas with a view to assessing the actions which can be carried out in order to tackle climate breakdown at a local level by carrying out measures to decrease emissions and enhance biodiversity locally with a view to slowing down and ultimately reversing climate change while closely focusing on quality of life for Westmeath citizens.

Recent adverse weather-related events have brought into sharp focus the need for every citizen, town, county, country and continent to play their part in decreasing the emissions of greenhouse gases at all levels of society. Specific to Westmeath there is a noticeable change in rainfall pattern particularly in both the number of days with heavy rainfall and the amount of flooding events increasing dramatically within the last 10 years.

Westmeath County Council is part of the Eastern and Midlands Climate Action Regional Office (CARO) area and, more specifically, the midlands sub-regional partnership of this group.

Baseline analysis of county wide emissions were carried out in order to get an understanding of where Westmeath's current emissions are being generated from with a view to using this evidence base to decrease emissions in the county. All sectors within the county were analysed within this baseline analysis. A county wide risk assessment was also carried out which investigated the effects of climate change already impacting Westmeath and provided an evidence base which helped to inform the development of this Climate Action Plan.

Mullingar town has been nominated as Westmeath's Decarbonisation Zone (DZ). This will hold Mullingar under a spotlight relating to carrying out actions which will address both climate mitigation and adaptation, but which will also focus on enhancing and protecting biodiversity within the DZ.

These measures will seek to address issues like local low carbon energy generation, decreasing greenhouse gas emissions, protecting and nurturing biodiversity and ultimately enhancing quality of life within the DZ.

Through the preparation of this Plan all sections within Westmeath County Council were involved in the preparation of actions. Public consultation was also carried out in tandem with the Local, Economic and Community Plan process as well as with the local Mullingar Sustainable Energy Community group. Formal public consultation was carried out through Westmeath County Councils online portal and details of this was advertised in our local newspapers as well as through our media platform streams.

The actions in this plan will be monitored and reported on to our local Management Team, SPC and to CARO on a regular basis. Implementation of the actions will be overseen by the in-house Climate Action Co-Ordination Team consisting of Climate Action Co-Ordinator and Officer, Community Climate Action Officer and Climate Action Graduate and assisted by our Energy Officer and Senior Engineer in Environment. Climate specific budgets will be provided for in our annual budgets and in our 3-year capital program. The actions will be divided among the relevant sections of Westmeath County Council who will be ultimately responsible of delivery of these actions. The Climate Action Team will be a constant source of support, advice and assistance to the various sections carrying out climate specific actions.

# 2. Introduction

Westmeath County Council has prepared this Climate Action Plan 2024-2029, to create a low carbon and climate resilient County, by delivering and promoting best practice in climate action, at the local level. This is aligned to the Government's overall National Climate Objective, which seeks to pursue and achieve, by no later than the end of 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy.

This is set out in the Climate Action and Low Carbon Development (Amendment) Act 2021, which also frames Ireland's legally binding climate ambition, to delivering 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.

In preparing this plan, the Council has also taken account of other relevant climate legislation and policy, a climate change risk assessment and a climate mitigation baseline assessment, at a County-wide scale as part of this plan.

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

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). This plan sets a clear pathway for Westmeath County Council to:

- actively translate national climate policy to local circumstances with the prioritisation and acceleration of evidence-based measures;
- assist in the delivery of the climate neutrality objective at local and community levels; and
- identify and deliver a DZ within the local authority area to act as a test bed for a range of climate mitigation, adaptation and biodiversity measures in a specifically defined area, through the identification of projects and outcomes that will assist in the delivery of the National Climate Objective.

Set against the backdrop of an evolving and ambitious framework of national climate policy, Westmeath County Council maintains a strong commitment to mainstreaming climate action across its own operations and functions, whilst also pursuing a leadership role on climate action, at the local level. This plan demonstrates a coherent approach to climate action across the administrative and political structure of the local authority. The plan is subject to approval by the Elected Members of the local authority, following public consultation and engagement. A range of other Westmeath County Council plans also support the Climate Action Plan.

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

The Council will also continue its efforts in rolling out ambitious climate action projects, drawing down available sources of funding, pursuing citizen and stakeholder engagement, all supported by a progressive policy framework. The Council will launch the Climate Action Fund Strand 1 - Building Low Carbon Communities. This is a fund for local authorities across the country, to support and build low carbon communities.

In a changing climate, the aim is to become more resilient to all future possibilities, allowing local communities to thrive and work towards real solutions that are meaningful, inclusive, fair and accessible for all, thereby prioritising a just transition.

#### Local Authority Scope on Climate Action

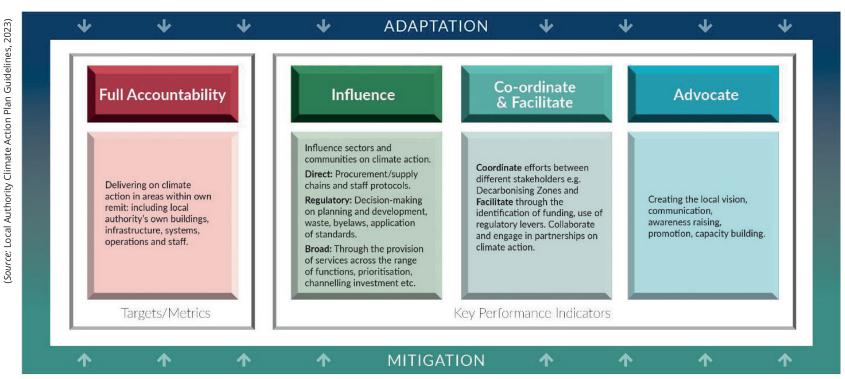


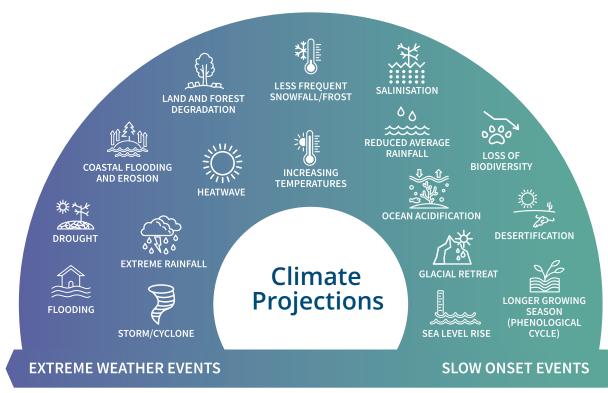
Figure 1: Illustrates the scope of the local authority's responsibility on climate action.

#### **Overview of Climate Change**

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

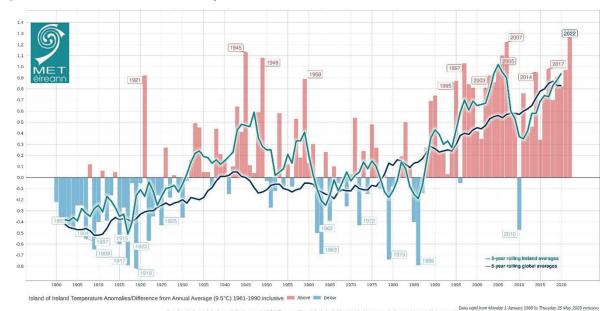
Ireland's climate echoes that statement. Figure 3 compares the global temperature rise since 1900 to Irish temperatures. Ireland is in line with the global temperature increases, following 2022, being a year of record-breaking extremes, in both temperature and precipitation (rainfall). Met Éireann stated that 2022 was 'the warmest year on record'. This would see Ireland's temperature above the long-term average for the 12th consecutive year. Furthermore, 2022 saw record breaking temperatures observed in Ireland during the summer, recording the second highest temperature ever recorded in Ireland at 33°C.

Figure 2: Future Possible Climate Projections for Ireland



(Source: Based on: © GIZ /Global Programme on Risk Assessment and Management for Adaptation to Climate Change (Loss and Damage))

Figure 3: Island of Ireland 1900-2022 Temperature (°C) Anomalies (difference from 1961-1990)



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

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

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

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

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

- Climate projections indicate that the climate trends observed over the last century will continue and intensify over the coming decades;
- Temperatures are increasing and are expected to continue to increase and across all seasons;
- Significant reductions in levels of average precipitation (rainfall) are expected in Spring and Summer, whilst projections indicate the increased occurrence of extreme precipitation events, particularly during Winter;
- Projections show little change in average wind speed and direction. The frequency of extreme wind conditions are expected to increase, particularly during Winter;
- Increases in the frequency of fluvial (river) and pluvial (surface water) flooding;
- Increases in the frequency and intensity of summer heat waves, extreme temperatures and drought;
- Reductions in the frequency of frost and snowfall; and
- An increase in the duration of the growing season (phenological cycle).

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

(Source: Met Éireann)

#### **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. This is represented in Figure 4.

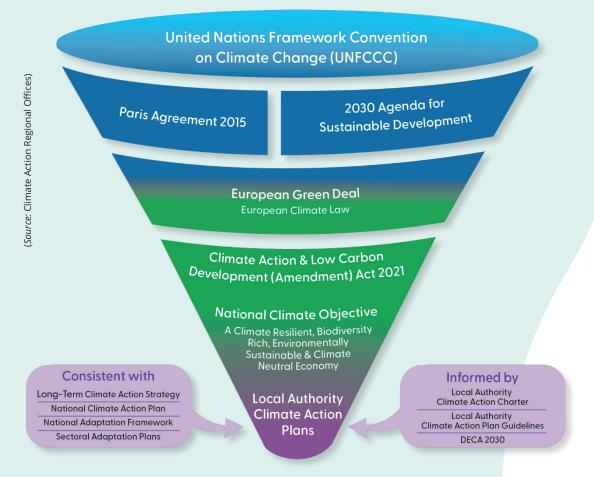


Figure 4: Legislation and Policy Context for the Climate Action Plan

## 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 preindustrial 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' in order to achieve the Goals within this timeframe. The SDGs are also addressed in Section 6 of this Plan.

Towards achieving greenhouse gas emission reductions as part of Paris Agreement commitments the European Commission, in December 2019, 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 EUs climate, taxation, energy, and transport policies to support achieving this aim. The European Climate Law made these targets legally binding, which also includes achieving a reduction in net greenhouse gas emissions of at least 55% by 2030.

#### 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, 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 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 Westmeath 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.

#### **Local Authority Climate Action Planning**

The Westmeath 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, Westmeath County Councils Climate Action Plan offers an opportunity to bring together critical stakeholders across communities and businesses to build a vision for a climate neutral future.

Westmeath County Council and other local authorities across Ireland, are already well positioned at the forefront of climate action in Ireland. Westmeath 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.

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

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.

## Structure of the Climate Action Plan

This Climate Action Plan has taken into full consideration international and national climate change policy and legislation as well as the most up-to-date knowledge on current levels of climate change as well as its impacts and projections for the future. In showing the outcome of this process, this Climate Action Plan is set out in four parts.

**Firstly**, the evidence base used to inform on climate action within the jurisdictional area of Westmeath County Council is presented, including climate change risks and emissions baseline profile.

**Secondly**, the plan outlines its framework for climate action including the Plan Vision, Mission, Strategic Goals, Objectives and Actions.

The **third** part focuses on Westmeath County Council's Decarbonising Zone, Mullingar Town, including the Vision for the DZ, DZ Strategic Priority Areas and DZ Actions.

The **final** part of this plan 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.



#### Characteristics of County Westmeath

Located in the heart of Ireland, County Westmeath covers an area of 1,756 square kilometers and is historically known as the 'Lake County', rich in arts, culture, heritage and natural amenities. These many natural amenities include the Hill of Uisneach, the mythological and sacred centre of Ireland, the River Shannon and Lough Ree, adjacent to Athlone, the River Brosna, Lough Owel and Lough Ennell, adjacent to Mullingar, with Lough Derravaragh, Lough Lene and Lough Sheelin in the north of the County.

The county has an established waterway network, including the Royal Canal Paddling Trails, which is part of the Blueways, a network of navigable inland waterways. The county is also part of the Royal Canal Greenway, an off-road cycling trail along the canal banks which extends from the River Shannon in Cloondara Co. Longford all the way towards Dublin. In terms of national and international tourism promotion, Westmeath's appeal is recognised and benefits from the dual promotion of Fáilte Ireland's 'Ancient East' brand proposition to the east of the County and 'Ireland's Hidden Heartlands' to the west.

Westmeath has an array of attractive towns and villages ranging from the thriving Regional Centre of Athlone, the County town of Mullingar, to the strong market towns of Moate and Kinnegad and the quaint and historical village's such as Multyfarnham, Glasson and Tyrrellspass.

The M4/N4 which traverses the County in a north-westerly direction offers the County ease of access to the greater Dublin area, with Dublin Airport and Dublin Port just one hour's drive from Mullingar. The M6 from Kinnegad, through Athlone provides further connection to Galway and the West. The N52, an important national secondary route traversing the County, further connects the northeast with the Ulster region. Significant rail infrastructure enhances this connectivity, with the Dublin-Sligo railway line serving Mullingar and the Dublin-Westport/Dublin-Galway line serving Athlone. Westmeath is also home to a strategic section of the Galway to Dublin National Cycle Network (NCN). Extending across the County from the Meath County boundary along the existing Royal Canal Greenway to Mullingar before connecting to 'The Old Rail Trail' for 42km to the town of Athlone.

There are four electoral areas in the County, Mullingar, Kinnegad, Moate and Athlone which in turn form the Mullingar-Kinnegad and Athlone-Moate Municipal Districts through which many of the local services are delivered by the Council.

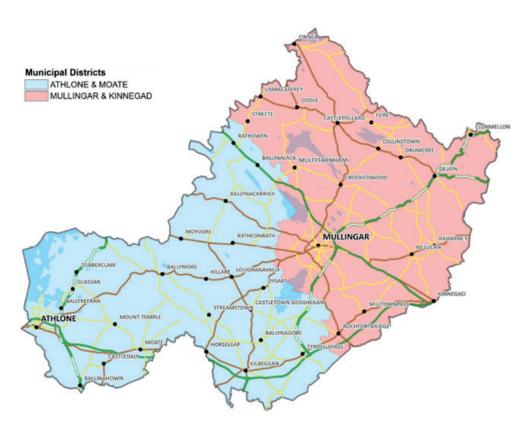


Figure 5: Map of Municipal Districts in Westmeath

#### Socio-economic Characteristics of County Westmeath

As of the 2022 Census, Westmeath has a population of 95,840 people, increasing by 7,070 since the 2016 Census. The county has experienced relatively steady population growth over recent years and has an almost exactly equal gender breakdown.

Recent CSO figures show that 53.8% (2011:48.54%) of people are living in urban settlements while 46.1% (2011:51.46%) are living in smaller towns, villages and rural areas. Approximately 70% of the county's total land area is employed for agriculture, with the remaining land used for purposes including equine, recreation and tourism.

The two main towns in the county, Athlone and Mullingar, both have populations exceeding 20,000. Athlone, located partially in County Westmeath and County Roscommon, has been designated a "Regional Growth Centre" (i.e. a large town with a high level of self-sustaining employment and services). As a result, the town both acts as a regional economic driver and plays a significant role for a wide catchment area. Mullingar, meanwhile, is classified as a "Key Town" and plays an important role in the region.

Within the Midlands region, County Westmeath is a focal point for economic development and modern industry. The county's employment is largely concentrated in the Professional Services (23%), Commerce and Trade (22%) and Manufacturing Industries (13%), according to recent CSO figures.

The County of Westmeath is connected by a national primary road to Dublin via the M/N4 in the East and via the N4 to Sligo in the Northwest, and to Galway in the West via the M6. The N52 national secondary road connects to Dundalk & Northern Ireland in the Northeast and connects to Limerick in the southwest providing excellent socio-economic connectivity. These high-quality transport connections have ensured that Westmeath remains accessible and have helped the county to grow.

# 3. Evidencebased Climate Action

#### County Westmeath Baseline Emissions Inventory

A Baseline Emissions Inventory was undertaken on behalf of Westmeath County Council. The report looks at baseline greenhouse gas emissions (GHG) from various societal sectors in the county and for the local authority organisation in 2018. The results of this study allows Westmeath County Council to measure the emission reductions required to achieve the emission reduction target of reducing GHG emissions by 51% by 2030. The GHG emission calculations that inform this report are based on data from MapElre and Ireland's National Emissions Inventory 2021.

The sectors that have been included in the county-wide analysis are;

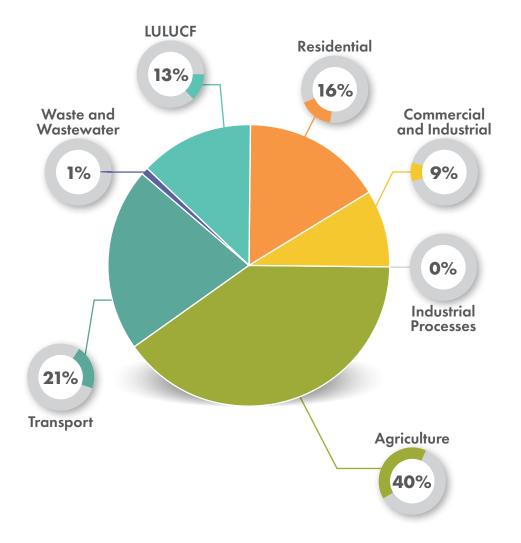
- Residential
- Commercial and Industrial
- Industrial Processes
- Agriculture
- Transport
- Waste and Wastewater
- Land Use, Land Use Change and Forestry (LULUCF)

GHG emissions associated with the local authority's own operations have been accounted for separately. The methodology is based on the Tier 1 'Top-down' Approach defined in Annex C to the Local Authority Climate Action Plan Guidelines. A percentage breakdown of sectoral GHG emissions in County Westmeath in the baseline year is provided in the figure 6 below.

Overall, the emissions generated from all analysed sectors in the county equate to 1,639,108  $tCO_2$ -eq in the baseline year. An overall emission reduction of 835,945  $tCO_2$ -eq to 803,163  $tCO_2$ -eq is required for the county across all sectors to achieve the target of reducing GHG emissions by 51% by 2030.

The top three sectors in the county in terms of GHG emission levels were Agriculture, Transport and Residential producing 40%, 21% and 16% of  $tCO_2$ -eq respectively, of the total emissions in the county. The analysis shows that these sectors should be the main targets of county wide climate action initiatives.

Figure 6: Percentage Breakdown of Sectoral GHG Emissions in County Westmeath



#### Sectors: Scope and Data Sources

#### Residential

This sector covers all GHG emissions associated with dwellings. It covers GHG emissions from electricity use and combustion sources. It covers both private owned dwelling and social house units.

- MapElre was used to source combustion related GHG emissions for the residential sector in the county.
- Central Statistics Office (CSO) data on metered electricity consumption for the residential sector in the county was sourced. GHG emissions associated with electricity consumption were calculated using the Sustainable Energy Authority Ireland (SEAI) emission factor for electricity in 2018.
- Residential sector GHG emissions for the county and per capita were calculated having regard to the above data.
- An estimate for main source of heating fuel for dwellings in the county was made using data from the CSO, which in turn is sourced from the Building Energy Rating (BER) database. This data was used to determine the number of dwellings in the county that rely on the following fuel types as their main source of space heating: Mains Gas, Liquefied petroleum gas, Heating Oil, Electricity, Solid Fuel. This aids the characterization of Residential sector emissions, providing an additional layer of insight.

#### **Commercial and Industrial**

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 does not include GHG emissions from specified Industrial Processes, which are dealt with under a separate category. The Commercial Services sub-category covers the provision of services for the purpose of generating profit or revenue generally. These can include: 1) selling goods and services, 2) advertising and marketing, and 3) banking and finance. 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.

#### **Data sources**

- Total non-residential electricity use levels for 2018 for the county was sourced from Electricity Supply Board (ESB) / CSO databases on metered electricity consumption. This total is then multiplied by the SEAI's electricity emission factor for 2018 to determine electricity related GHG emissions in the commercial and industrial sector for the year.
- The total GHG emissions in tCO<sub>2</sub>-eq for the county is then calculated by adding the combustion and electricity GHG emissions.
- Raw data on commercial and industrial sector combustion related GHG emissions for 2018 was sourced from MapElre / the EPA's National Emission Inventory (2021) for the county. This data is broken down by emissions from the combustion of fossil fuels in the commercial services sub-sector and the manufacturing sub-sector.

#### **Industrial Processes**

This sector covers a range of industrial processes which generate GHG emissions, such as cement production, ceramics, lime production, uses of carbonates, and solvent use. It does not include GHG emissions from manufacturing combustion or electricity use.

- A breakdown of emissions for the sector was obtained from the MapElre database. The Access Database file contains emissions from all sectors for all Irish counties separated into different sub-categories. The emissions data for Industrial Processes specific to the county was extracted.
- The GHG Emissions from the database are categorised into various pollutants (i.e., CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O and SF<sub>6</sub>). The emissions figures for these pollutants were converted to CO<sub>2</sub>-eq with reference to the GWP value for each substance.

#### **Agriculture**

This sector covers agricultural related GHG emissions from enteric fermentation, manure management, agricultural soils, liming, and use of fertilisers and urea application. Livestock farming results in the generation of GHG emissions from enteric fermentation and manure management. The management and use of soils in agriculture (e.g., through the application of fertilizer or lime) also results in the generation of GHG emissions (e.g., through N2O volatilisation from fertilizer, urine, dung; CO<sub>2</sub> volatilisation from liming or urea application).

#### Data sources

- County level agricultural data was obtained from the CSO's Census of Agriculture. This data was broken down into different agricultural activities relevant to the county.
- Livestock (sum of cattle (suckler and dairy), pigs, sheep and poultry).
- Managed Soils (sum of direct and indirect N2O emissions, limestone emissions and urea application emissions).
- Livestock emissions at county level was determined with reference to national emissions statistics, the national herd, and the herd in the county. This was considered to be the most representative and accurate method for determining emissions for livestock.
- Managed soils emissions at county level were estimated with reference to national emission statistics for direct and indirect N2O emissions, limestone emissions and urea application emissions; and the area of managed agricultural soils nationally compared to the area of managed soils in the county.

#### **Transport**

The primary source of this sector's emissions come from the burning of diesel and petrol in combustion engines. This sector covers GHG emission from private vehicle use as well as public transport.

- GHG emissions data for the transport sector was sourced from the MapElre database / the EPA's National Emission Inventory 2021. This database provides a breakdown of emission for a number of transport sub-categories. Various emission types (CH<sub>4</sub>, N<sub>2</sub>O) reported were converted to tCO<sub>2</sub>-eq using the GWP for each type of emission.
- For an additional layer of insight, an estimation of GHG emissions per single unit of each vehicle type is made by dividing emissions associated with each vehicle type by vehicle population. The CSO's Transport Omnibus from 2018 was reviewed to ascertain the vehicle population in the county for 2018 for each vehicle type.

#### **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.

Qualitative analysis of the waste sector in the county was carried out to determine the level of GHG emissions associated with the sector. The following waste categories defined in the EPA's National Emission Inventory 2021 were examined.

- Managed Waste Disposal
- Composting
- Anaerobic Digestion (AD)
- Incineration
- Open Burning of Waste.

#### Data sources

- Using national emissions data for the managed waste disposal, incineration and open burning of waste categories defined in the EPA's National Emission Inventory 2021, emissions associated with this sector for the county were estimated for the county on a pro-rata basis considering national and county population levels. The accumulated emissions data for these waste activities in the county were combined to determine emissions in tCO<sub>2</sub>-eq for the baseline year.
- One authorised composting facility was identified in the County. Using
  the permitted waste acceptance tonnage per annum for the facility, GHG
  emissions were calculated by evaluating the annual total intake capacity
  against the total national composting capacity and national composting
  emissions obtained from the EPA's National Waste Statistics, 2022.
- There are no Anaerobic Digestion facilities in the county. Thus, there are no emission in the county from this category of waste facility.
- Using national emissions data for the wastewater sector defined in the EPA's National Emission Inventory 2021, emissions associated with this sector for the county were estimated for the county on a population pro-rata basis.

### Land Use, Land Use Change and Forestry (LULUF)

This sector is responsible for emissions as well as removals, related to land use, land use change and forestry. Forest land (and harvested wood production), grassland, cropland, wetlands, and settlement areas all result in GHG emissions and removals. The  $\rm CO_2$  mass balance for each type of land use is dependent on the above-ground biomass, below-ground biomass, dead organic matter (litter and dead wood) and soils associated with each land use type. Land use change results in a change in  $\rm CO_2$  emission / removal mass balances associated with a geographic area based on these factors.

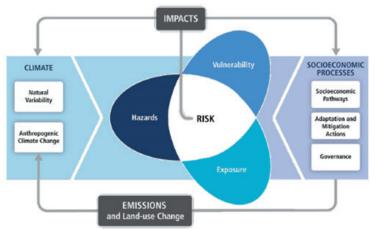
- A breakdown of emissions for the sector was obtained from the MapElre database. The Access database file contains emissions from all sectors for all Irish counties separated into different sub-categories. The emissions data for LULUCF specific to the county was extracted.
- The GHG Emissions from the database are categorised into various pollutants (i.e. CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O and SF<sub>6</sub>). The emissions figures for these pollutants were converted to CO<sub>2</sub>-eq with reference to the GWP value for each substance.

#### Climate Change Risk Assessment (CCRA) carried out by KPMG

This report provides an assessment of Westmeath's climate change risks and the impacts of these on the delivery of services by Westmeath County Council. The aim of the report is to provide the evidence base and inform the development of the LACAP for Westmeath County Council.

In assessing climate change risk, we have adopted the risk assessment framework of the Intergovernmental Panel on Climate Change (IPCC). This framework identifies three key components of climate risk; hazards, exposures and vulnerabilities.

Figure 7: Risk Assessment Framework of the Intergovernmental Panel on Climate Change (IPCC





**Hazard:** potential source of climate-related harm, i.e. damage or loss of property.



**Exposure:** presence of people, livelihoods, environmental services and resources, infrastructure, or economic and social or cultural assets in places that could be adversely affected.



**Vulnerability:** propensity / disposition to be adversely affected.



**Risk:** the potential for adverse consequences.

This CCRA has been undertaken in accordance with the Technical Annex B Climate Change Risk Assessment of the Local Authority Climate Action Plan Guidelines and provides a qualitative assessment of climate risk for County Westmeath / Westmeath County Council.

A **qualitative risk assessment** provides the evidence base to identify potential climate risks through an impact and risk analysis on the assets and service delivery function of a local authority and its administrative area. A qualitative assessment is based on available information and supports a screening of climate change related hazards and risks.

This type of assessment helps to:

- Prioritise systems that need further assessment risk;
- Communicate identified risks to relevant stakeholders
- Identify which stakeholders to engage in a semiquantitative risk assessment;
- Provide a broad understanding of where adaptation actions could be required.

The Technical Annex B provides a stepped approach to carrying out a climate change risk assessment:

### Step 1: Current Climate Risks and Impacts

Assess climate impact baseline, identify, assess and characterise the climate and weather-related impacts already being experienced by the authority,

- Develop profile of climate hazards
- Characterise climate hazards frequency
- Exposure, vulnerability and impacts (physical, social and environmental)
- Impact Assessment (Service Delivery)
- Overall impact on Westmeath County Council (e.g Asset damage, health and wellbeing, environment, social, financial, reputation, cultural heritage and cultural premises.

Step 2: Identify and assess potential future climate impacts and risks

- Assess future changes in climate hazards, frequency and intensity
- Assess future changes in exposure and vulnerability
- Uncertainty assessment
- Assess emerging hazards and potential future climate risks
- Overall impact on Westmeath County Council

In assessing climate change risk, we employ climate information derived from Nolan (2020) and Climate Ireland for two climate scenarios. RCP 4.5 and RCP 8.5.

- RCP 4.5 represents an "intermediate emissions" scenario with an average global warming of 1.4 degrees Celsius for the 2046-2065 period.
- RCP 8.5 represents an "very high emissions" scenario with an average global warming of 2 degrees Celsius for the 2046-2065 period.

The RCP 8.5 scenario was used as it is the best match to the mid-century current and stated policies. It is also the "worst case" scenario, which allows for a conservate risk assessment approach.

#### **Data Sources**

A wide range of qualitative and quantitative information was employed to inform the development of the CCRA. Westmeath County Councils Adaptation Strategy was reviewed and updated using a range of national and local data sources.

Climate Ireland was employed to access data and information on projected changes in the frequency and intensity of climate hazards accessed. The National Planning Framework, Westmeath County Council Development Plan 2021-2027 and the Regional Spatial and Economic Strategy for the Eastern and Midland Region were also employed to assess future development patterns.

In addition, a stakeholder workshop was held to garner further insights from Westmeath County Council.

Table 1: Impacts of Current Climate Risks on the Local Authority

Hazard	Current Frequency	Assets	Health and Wellbeing	Environment	Social	Cultural Heritage	Financial	Reputational	Overall Impact Score
Heatwave	Common	Moderate	Negligible	Moderate	Minor	Negligible	Minor	Negligible	1.9
Drought	Occasional	Negligible	Negligible	Moderate	Minor	Minor	Negligible	Negligible	1.6
Cold Spell	Occasional	Moderate	Moderate	Negligible	Moderate	Negligible	Moderate	Negligible	2.1
Heavy Snowfall	Occasional	Minor	Moderate	Minor	Minor	Negligible	Moderate	Minor	2.1
Severe Windstorm	Frequent	Moderate	Minor	Negligible	Moderate	Minor	Moderate	Minor	2.3
Pluvial Flood	Frequent	Moderate	Minor	Minor	Minor	Negligible	Minor	Moderate	2.1
River Flood	Frequent	Moderate	Minor	Minor	Minor	Negligible	Moderate	Moderate	2.3
Groundwater Flood	Occasional	Negligible	None	Negligible	Negligible	None	Negligible	None	0.6

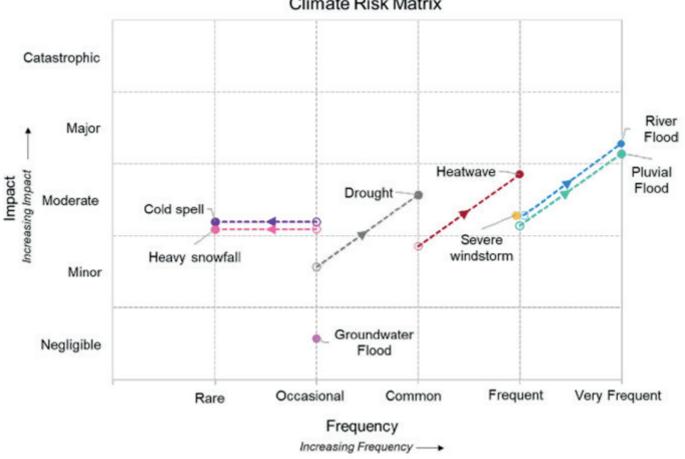
Table 2: Future Change in Impacts of Climate Risks on the Local Authority

Userand	Ass	ets		th and being	Enviro	nment	Soc	ial	Cultural	Heritage	Fina	ncial	Reput	ational
Hazard	Current	Future (2050)												
Heatwave	Moderate	Major	Negligible	Minor	Moderate	Major	Minor	Moderate	Negligible	Minor	Minor	Moderate	Negligible	Minor
Drought	Negligible	Minor	Negligible	Minor	Moderate	Major	Minor	Moderate	Minor	Moderate	Negligible	Minor	Negligible	Minor
Cold Spell	Moderate	Moderate	Moderate	Moderate	Negligible	Negligible	Moderate	Moderate	Negligible	Negligible	Moderate	Moderate	Negligible	Negligible
Heavy Snowfall	Minor	Minor	Moderate	Moderate	Minor	Minor	Minor	Minor	Negligible	Negligible	Moderate	Moderate	Minor	Minor
Severe Windstorm	Moderate	Moderate	Minor	Minor	Negligible	Negligible	Moderate	Moderate	Minor	Minor	Moderate	Moderate	Minor	Minor
Pluvial Flood	Moderate	Major	Minor	Moderate	Minor	Moderate	Minor	Moderate	Negligible	Minor	Minor	Moderate	Moderate	Major
River Flood	Moderate	Major	Minor	Moderate	Minor	Moderate	Minor	Moderate	Negligible	Minor	Moderate	Major	Moderate	Major
<b>Groundwater Flood</b>	Negligible	Negligible	None	None	Negligible	Negligible	Negligible	Negligible	None	None	Negligible	Negligible	None	None

Blue highlights where there is a predicted change between current and future impacts.

Figure 8: Climate Change Risk Matrix





The risk matrix above shows the future changes in risk for the identified hazards within County Westmeath. For each hazard there is a solid marker, which identifies the future risk, and a hollow marker showing the current risk. The dotted line in between these markers shows the change between the current and future risk.

#### **Key Results and Findings**

The frequency and intensity of some hazards (e.g river and pluvial flooding, heatwaves and drought) will increase while others will remain the same (e.g severe windstorms and groundwater flooding). Some hazards are expected to decrease in frequency, such as cold spells and heavy snowfalls.



Recent experiences of **cold spells and heavy snowfall** events in 2018 (e.g Storm Emma) demonstrated the wide range of impacts for Co. Westmeath. These included, amongst others, road closures, disruption to public transport, power outages, reduction in agricultural production and disruptions to water supply. Projected increases in average temperature and decreases in the frequency of snowfall indicate a **decrease in the frequency of cold spells**, **heavy snowfall**, and their associated impacts.



Recent experiences of **river and pluvial flooding** events resulted in the inundation of damaged residential properties, farmland and recreational areas, closure of businesses and disruption of transport networks. Projected **increases in the frequency of extreme precipitation** events will result in the **increases surface water and riverine flood** risk for Westmeath.



Westmeath experienced both a **heatwave and drought** in 2018, with a heatwave recorded again in 2021. These events resulted in damage to road surfaces, disruption of public transport networks, the imposition of restrictions on water supply, placed increased demand on recreational areas and had detrimental impacts on freshwater quality and fish populations. Projected **increases in the frequency of heatwaves and drought** conditions will mean that events currently experienced on an infrequent basis will become **more frequent**. As the population ages, there will be an **increase in the number of vulnerable people exposed to heat-related risks**.



**Severe windstorms** are currently experienced on a frequent basis in Westmeath and result in wide-ranging impacts, including disruption to energy supply and transport networks. Projections indicate **no significant change** to this frequency.



**Groundwater flooding** can be experienced on an occasional basis in Westmeath and results in road damages, isolation of communities and inundation of farmland. Projections indicate **no substantial change** in this frequency.

To increase resilience, Westmeath County Council will need to proactively plan for and adapt to the current and future climate change risks identified in this report.

# 4. Framework of Climate Actions

#### Vision Statement

To achieve by no later than the end of the year 2050 a Climate Resilient, Biodiversity Rich, Environmentally Sustainable and Climate-Neutral Economy.

#### Mission Statement

To work with the citizens, communities and stakeholders of Westmeath to achieve a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy for all.

Thematic Area	Strategic Goal
Governance and Leadership	Westmeath County Council will seek to provide robust leadership, governance and commitment to drive Climate Action throughout all our activities and to further provide guidance and support to our local communities to assist with their Climate Action objectives.
Built Environment and Transport	Westmeath County Council will endeavour to continue undertaking all necessary actions to ensure that our GHG emissions and energy usage are decreased in line with national targets.
Natural Environment and Green Infrastructure	Westmeath County Council will continue to further protect, promote and enhance biodiversity across the county and will prioritise the use of nature-based green infrastructure, where possible, to overcome urban and climatic challenges.
Communities: Resilience and Transition	Westmeath County Council will support and empower communities to become sustainable, inclusive and resilient through a Just Transition to a carbon neutral economy.
Sustainability and Resource Management	Westmeath County Council will place sustainability at the core of our everyday work practices and assist with putting in place efficient services for the community to effectively participate in the circular economy.

# Governance and Leadership

Westmeath County Council seeks to lead in the area of climate change adaptation and mitigation by fully resourcing climate action within the Local Authority and reducing climate change drivers by achieving a 51% energy efficiency improvement in our own energy use by 2029. Climate Action will be mainstreamed into all activities and functions of Westmeath County Council, incorporating climate risk into the broad range of services that they are responsible for.

The actions set out under this goal seek to encourage a sustainable approach for all investments, services, projects and procurements, while also ensuring necessary climate action resources are available to lead and promote adaptation and mitigation within the organisation and within the community.

#### Theme 1: Governance and Leadership

Goal: Westmeath County Council will seek to provide robust leadership, governance and commitment to drive Climate Action throughout all our activities and to further provide guidance and support to our local communities to assist with their Climate Action objectives.

No.	Action	Objective	Adaptation/ Mitigation	Tracking Measure	Section	Partners	Timeframe
1.1.	Appoint a Climate Action Co-Ordination Team to facilitate adaption and mitigation, to include a Climate Action Co-Ordinator, Officer & Community Officer. The Climate Action Co-Ordination Team shall be assisted with representatives from across key functions of WCC.	To fund and resource climate action	Adaptation/ Mitigation	Climate Action KPIs	MT	Central Government	2024-2029
1.2.	The CAT shall give regular updates at Full Council meetings as required.	Inform Elected Members of CAP progress	Adaptation/ Mitigation	No. of presentations at Council meetings	CAT		2024-2029
1.3.	Create a Climate Awareness section on WCC website and social media with practical tips and advice on everyday actions to help offset climate change.	To engage with the community and create an awareness of climate change locally	Adaptation/ Mitigation	No. of views	CAT	CARO, Corporate Services, SEAI	2024-2029

#### Theme 1: Governance and Leadership

Goal: Westmeath County Council will seek to provide robust leadership, governance and commitment to drive Climate Action throughout all our activities and to further provide guidance and support to our local communities to assist with their Climate Action objectives.

No.	Action	Objective	Adaptation/ Mitigation	Tracking Measure	Section	Partners	Timeframe
1.4.	Ensure that climate action is listed as a standing item on the agenda at Management Team and relevant SPC meetings.	Embed Climate Action within all activities of WCC	Adaptation/ Mitigation	No. of meetings CA discussed	MT		2024-2029
1.5.	Maintain liaison and collaboration with the Eastern and Midlands CARO.	To ensure commonality of approach to Climate Action with adjoining Counties	Adaptation/ Mitigation	No. of regional/sub- regional CARO meetings attended	CAT	EM CARO Midlands subgroup	2024-2029
1.6.	Ensure alignment to National Climate Policy.	Comply with Central Government requirements	Adaptation/ Mitigation	Climate Action KPIs	MT	Central Government, SEAI	2024-2029
1.7.	WCC will participate in ongoing Climate Action Training and to consider roll out of Sustainable Development Goals training to all staff.	Build capacity	Adaptation/ Mitigation	Climate Action KPIs	MT	CARO	2024-2029
1.8.	Ensure that climate action policy is mainstreamed and translated into all WCC functional plans, strategies and projects.	Align Council policies with national climate policies	Adaptation/ Mitigation	Assessment of policies, plans and projects	All	Central Government	2024-2029
1.9.	Commitment to implementation, monitoring and reporting of LACAP Actions.	Measure success or otherwise of Climate Actions	Adaptation/ Mitigation	Climate Action KPIs	MT	CARO, CAT	2024-2029
1.10.	Explore ways to be an exemplar in all climate related actions.	Influence others to undertake Climate Action measures by leading by example	Adaptation/ Mitigation	Quantitative and Qualitative Analysis	CAT	Business & Community organisations, Citizens, PPN	2024-2029

#### Theme 1: Governance and Leadership

Goal: Westmeath County Council will seek to provide robust leadership, governance and commitment to drive Climate Action throughout all our activities and to further provide guidance and support to our local communities to assist with their Climate Action objectives.

No.	Action	Objective	Adaptation/ Mitigation	Tracking Measure	Section	Partners	Timeframe
1.11.	WCC will continue to promote green procurement in line with Westmeath County Council Procurement Procedures Manual.	To minimise the climate change impact of WCC contracts and purchases	Mitigation	No of contracts awarded with green procurement criteria	Procurement	Central Government, OGP	2024-2030
1.12.	The Westmeath CDP and Local Area Plans will be supported through this CAP.	Embed Climate Action within all activities of WCC	Mitigation/ Adaptation		CAT		2024-2029
1.13.	WCC shall explore ways to actively reduce the organisational carbon footprint.	Ensure WCC becomes energy efficient and meets their energy targets	Mitigation	Reporting energy to SEAI via M&R annually	CAT	SEAI, South East Energy Agency.	2024-2029
1.14.	Liaise and engage with the Department of Housing, Local Government and Heritage and the Eastern and Midland Regional Assembly during the review process of the Westmeath County Development Plan to develop a coherent and sustainable approach to land use, consistent with the National Strategic Outcomes of the National Planning Framework and the Regional Strategic Outcomes of the Eastern and Midland Regional Spatial and Economic Strategy to help transition to a low carbon and climate resilient society.	Align Council policies with national objectives	Mitigation	Review process undertaken	Planning	Central Government, EMRA.	2024-2029

# Built Environment and Transport

Westmeath County Council seeks to create a resilient Built Environment and Transport network in County Westmeath, to withstand the impacts of climate change. Creating resilient infrastructure will help to ensure that local authority service delivery is not impacted during extreme weather events, preventing disruption to communities.

Climate considerations will be integrated into the design, planning and construction of all local authority developments, and a focus will also be placed on the regeneration and retrofitting of existing built environment and transport infrastructure.

The actions set out under this goal seek to address the risks and vulnerabilities to local authority assets and bring forward mitigation and adaptation measures to increase the resilience and sustainability of infrastructure services and practices.

#### Theme 2: Built Environment and Transport

No.	Action	Objective	Adaptation/ Mitigation	Tracking Measure	Section	Partners	Timeframe
2.1.	WCC will continue to support, progress & resource the Regeneration Team with respect to existing Masterplans and Town Centre First plans. Continue to support the generation of future plans to guide Westmeath towards sustainable modal shift, compact growth and active land management. This will be undertaken whist having due regard to the need to appropriately protect and conserve protected structures in accordance with relevant protected structures regulations, and the need to not negatively impinge on any protected species.		Adaptation / Mitigation	No of regeneration projects with Climate Action Initiatives	Regeneration	Central Government	2024-2029

No.	Action	Objective	Adaptation/ Mitigation	Tracking Measure	Section	Partners	Timeframe
2.2.	WCC will continue to implement active land management measures as defined in the masterplans and Town Centre First Plans and in line with Project Ireland 2040, having due regard to all environmental sensitivities, and the need to appropriately protect heritage.	Sustainable Development	Adaptation / Mitigation	No of regeneration projects with Climate Action Initiatives	Regeneration	Central Government	2024-2029
2.3.	WCC will continue to carry out deep retrofits on WCC building stock and social housing units to achieve minimum BER ratings in line with legislative national targets. WCC will undertake the above whilst having due regard to environmental sensitivities such as local human receptors, European sites and biodiversity, and the need to appropriately protect and conserve protected structures.	Reduce GHG emissions, energy consumption and fuel poverty.	Adaptation/ Mitigation	No of retrofits	Housing	Central Government	2024-2029
2.4.	Incorporate an Energy Survey and BER assessment as part of the process in returning void properties to use, having due regard to environmental sensitivities such as local human receptors, European sites and biodiversity, and the need to appropriately protect and conserve protected structures.	Reduce GHG emissions, energy consumption and fuel poverty.	Adaptation/ Mitigation	Number of voids receiving energy upgrades	Housing	Central Government	2024-2030
2.5.	WCC will strive to incorporate climate smart building and urban design performance outcomes on its new construction projects. Onsite renewable energy projects will be supported and prioritised in a bid to decarbonise thermal and electricity power requirements, having due regard to the need to ensure renewable energy development forming part of this project will not have any significant negative environmental effect.	Reduce GHG emissions, energy consumption and fuel poverty.	Adaptation/ Mitigation	Number of new construction projects with Climate Action Initiatives included	All applicable sections carrying out applicable construction works.	Central Government	2024-2031

No.	Action	Objective	Adaptation/ Mitigation	Tracking Measure	Section	Partners	Timeframe
2.6.	Awareness campaigns regarding Energy Efficiency shall be undertaken with all Council tenants. New Tenants will receive an induction on the most efficient use of energy in the home.	Reduce GHG emissions, energy consumption and fuel poverty.	Adaptation/ Mitigation	Induction to be standard handover formality. No of inductions vs handovers.	Housing	Central Government	2024-2032
2.7.	WCC will collaborate with neighbouring local authorities to develop a comprehensive Electric Vehicle (EV) charging strategy, ensuring a seamless and regionally integrated charging infrastructure to support the widespread adoption of electric vehicles, having due regard to environmental sensitivities such as European sites and biodiversity.	Create the environment to promote the transition to non GHG emitting vehicles	Mitigation	No. of public EV charging points in County Westmeath	Transportation	CAT, Central Government, SEAI, business groups, Just Transition, ZEVI	2024-2029
2.8.	Carry out a review of current drainage maintenance programmes and compare with flooding issues. Update as required.	To increase climate resilience due to more severe flooding caused by Climate Change	Adaptation	No. of gullies cleaned and maintained	Transportation	OPW, TII, Department of Transport	2024-2029
2.9.	Integrate climate considerations into the design, planning and construction of new roads, bridges, active travel infrastructure and public realm construction projects, having due regard to ensure appropriate environmental protection, including protection of European sites, during the planning and design process.	To identify vulnerabilities of key infrastructure to the effects of climate change and thereby influence investment decisions	Adaptation/ Mitigation	Percentage of annual schemes audited	All applicable WCC Sections	Dept of Transport	2024-2029

No.	Action	Objective	Adaptation/ Mitigation	Tracking Measure	Section	Partners	Timeframe
2.10.	Carry out a risk assessment to identify the most climate vulnerable sites in public ownership to establish a baseline for heritage resources. Develop a programme for the protection of heritage and cultural assets in the county to the impacts of climate change.	To identify vulnerabilities of key infrastructure to the effects of climate change and thereby influence investment decisions	Adaptation/ Mitigation	Risk Assessment Complete	Heritage	Heritage Council, CARO	2024-2025
2.11.	Identify WCC lands that may be suitable for climate action initiatives and biodiversity enhancement and develop an Action & Enhancement Plan for suitable sites identified, having due regard to the need to ensure renewable energy development supported by this action will not have any significant negative environmental effect.	Promote emission reductions and biodiversity enhancement	Mitigation	Action & Enhancement Plan commenced	Property Management	Environment	2024-2029
2.12.	Reallocate suitable road space in favour of sustainable transport options, having due regard to environmental protection considerations, including cultural heritage protection and climate action cobenefits. Work towards ensuring network options are developed between active travel options and public transport routes, having due regard to environmental protection considerations, including cultural heritage protection and climate action co-benefits. Work towards ensuring network options are developed between active travel options and public transport routes.	To give priority to more sustainable transport options, i.e walking, cycling	Adaptation	Kilometers reallocated	Transportation, Active Travel	MDs, Department of Transport	2024-2029

No.	Action	Objective	Adaptation/ Mitigation	Tracking Measure	Section	Partners	Timeframe
2.13.	Explore sustainable transport solutions to encourage a modal shift, especially with regards to commuting. This action will be progressed whilst having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality, and cultural heritage.	Reduce car use in County Westmeath	Mitigation	Counts relative to population	Transportation /Active Travel	NTA	2024-2029
2.14.	Apply a robust risk assessment and management framework to Westmeath County Council owned buildings and properties to identify and protect against the key vulnerabilities to the impacts of climate change and mitigate against service disruption, having due regard to environmental sensitivities such as local European sites and biodiversity.	Identify WCC owned buildings that are susceptible to the impacts of climate change	Adaptation / Mitigation	RA carried out	Property Management	SEAI	2024-2029
2.15.	Undertake a Risk Assessment of road infrastructure to identify the severity of climate change risks on their function and condition. Consideration should be given to prioritising sections of the road network that are identified as being critical through the findings of this assessment.	Identify critical road infrastructure that are susceptible to the impacts of climate change	Adaptation	Risk Assessment carried out	Transportation	Dept of Transport, RMO.	2024-2029
2.16.	Support the NTA regarding the integration and linking of existing and proposed green cycle and pedestrian routes to settlements and villages. Secure bicycle parking to be provided at key locations, having due regard to environmental sensitivities such as sensitive human receptors, cultural heritage, European sites and biodiversity.	Promote and encourage a modal shift to more sustainable transport alternatives	Mitigation	No. of secure bicycle parking spaces provided	Transportation, Active Travel	CAT, Fáilte Ireland, MD's	2024-2029

No.	Action	Objective	Adaptation/ Mitigation	Tracking Measure	Section	Partners	Timeframe
2.17.	Continue the development and provision of Active Travel infrastructure in the County through the NTA's Active Travel Programme, having due regard to environmental sensitivities such as sensitive human receptors, cultural heritage, European sites and biodiversity.	Promote and encourage a modal shift to more sustainable transport alternatives.	Mitigation	No. of Kilometer's of infrastructure delivered	Active Travel/ Transportation	Central Government, NTA, TII, Department of Transport	2024-2029
2.18.	Safe Routes to Schools (SRTS). Continue to work with An Taisce Green Schools and the NTA to encourage as many pupils and students as possible in primary and post-primary schools to walk and cycle to school, having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites local air quality, cultural heritage etc.	Increase active travel infrastructure to promote walking and cycling in local schools	Mitigation	No. of successful schemes	Active Travel/ Transportation	An Taisce, NTA, Local Schools, Department of Education	2024-2029
2.19.	Support the delivery and possible expansion of local bus services in the county, whilst advocating and exerting influence to ensure such projects promote climate action co-benefits and do not contravene relevant environmental protection criteria or cause significant negative environmental effects.	Increase public transport accessibility in the county	Mitigation	No of bus routes being provided	Active Travel/ Transportation	Local Link, TII, NTA	2024-2029
2.20.	WCC will continue to actively engage in the Midland Energy Agency and participate in the associated SEAI Pathfinder programme with due regard to environmental sensitivities such as local human receptors, European sites and biodiversity; and the need to appropriately protect and conserve protected structures, during any retrofitting works.	To reduce the GHG emissions and energy usage in line with National Targets	Mitigation	No of buildings upgraded	CAT	SEAI, South East Energy Agency.	2024-2029

No.	Action	Objective	Adaptation/ Mitigation	Tracking Measure	Section	Partners	Timeframe
2.21.	WCC shall develop a Fleet Management Plan in an effort to reduce our transport emissions in line with national target requirements, whilst ensuring energy/fuel used to power local authority alternative vehicles is sustainably sourced, and appropriate end-of-life management practices are in place for Electric Vehicles, having due regard to environmental sensitivities such as the receiving water environment., biodiversity, European sites, local air quality, cultural heritage etc.	To reduce the GHG emissions and energy usage in line with National Targets	Mitigation	SEAI M&R	Transportation	Central Government	2024-2029
2.22.	Ensure new commercial and residential estates are adequately serviced with surface water drainage infrastructure, e.g SUD's which meets the requirements of the Water Framework Directive, associated River Basin Management Plans and CFRAM Management Plans, 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.	Build climate resilience	Adaptation/ Mitigation	Internal annual review	Planning	Environment	2024-2029
2.23.	Continue to ensure that new developments promote Active Travel measures and are within easy reach of high quality public transport options. Ensure these measures are embedded in all forthcoming plans, having due regard to environmental sensitivities such as European sites and biodiversity.	Reduce emissions from vehicles in the county by increasing public transport, walking nd cycling routes	Mitigation	Formal assessment carried out on all development applications	Planning	Active Travel	2024-2029

### Theme 2: **Built Environment and Transport**

Goal: Westmeath County Council will endeavour to continue undertaking all necessary actions to ensure that our GHG emissions and energy usage are decreased in line with national targets.

No.	Action	Objective	Adaptation/ Mitigation	Tracking Measure	Section	Partners	Timeframe
2.24.	Build climate resilience and improve energy performance of architectural and archaeological heritage in public and private ownership through applicable schemes, having due regard to environmental sensitivities such as local human receptors, European sites and biodiversity, and the need to appropriately protect and conserve protected structures.	Promote climate resilience and energy efficiency of buildings with heritage importance.	Mitigation/ Adaptation	Annual targets met	Heritage		2024-2029
2.25.	WCC will ensure that the upgrade of the Public Lighting network to full LED will be continued throughout the county. Dimming and Trimming options to be explored as well as biodiversity and nature friendly public lighting, ensuring the lumen levels and spectral range are maintained or reduced/controlled to avoid effects to biodiversity.	To reduce the GHG emissions and energy usage in line with National Targets	Mitigation	Percentage of street lighting upgraded to energy efficient LEDs	Transportation	Central Government, Kilkenny County Council	2024-2029

## Natural Environment and Green Infrastructure

Westmeath County Council seeks to promote the natural environment and green infrastructure through a number of different actions.

Protection of existing natural heritage, habitats and resources will be at the forefront of all local authority developments, with a particular focus on increasing biodiversity and nature-based solutions in County Westmeath.

### Theme 3: Natural Environment and Green Infrastructure

Goal: Westmeath County Council will continue to further protect, promote and enhance biodiversity across the county and will prioritise the use of nature-based green infrastructure, where possible, to overcome urban and climatic challenges.

No.	Action	Objective	Adaptation/ Mitigation	Tracking Measure	Section	Partners	Timeframe
3.1.	Continue to promote Biodiversity and protect Natural Heritage in line with WCC Biodiversity Plan 2014-2020. Implement relevant actions of the Built Heritage and Archaeology Climate Change Sectoral Adaptation Plan 2019. Resource and implement relevant actions of the National Biodiversity Action Plan and the Biodiversity Climate Change Sectoral Adaptation Plan.	Meet urgent conservation and restoration needs and embed biodiversity at the heart of climate action	Adaptation/ Mitigation	Key Indicator Species Surveys	Heritage/ Biodiversity	NPWS, Fisheries, Heritage Council, Central Government	2024-2029
3.2.	WCC shall seek to continue to improve air quality throughout the county particularly regarding enforcement of smokey fuels legislation and liaising with the EPA regarding control and enforcement of discharge licences.	To encourage a reduction in the use of smokey fuels in County Westmeath and the transition to non fossil fuel forms of heating	Mitigation	Air Quality Measurements	Environment	CAT, EPA	2024-2029

### Theme 3: Natural Environment and Green Infrastructure

Goal: Westmeath County Council will continue to further protect, promote and enhance biodiversity across the county and will prioritise the use of nature-based green infrastructure, where possible, to overcome urban and climatic challenges.

No.	Action	Objective	Adaptation/ Mitigation	Tracking Measure	Section	Partners	Timeframe
3.3.	Natural borders/buffers to be included as an integral component of the design of greenways/ blueways, tracks and trails and amenity areas to promote natural enhancement. Ensure appropriate buffer zones are provided, maintained and protected to avoid potential impacts on designated habitats or protected species and habitats, and to protect and enhance wider bio-diversity.	To protect habitats and promote pollinators.	Mitigation	No of pollinator schemes etc.	Heritage/ Biodiversity	Planning, Water Ways Ireland, NPWS	2024-2029
3.4.	Develop and support the proposed Tree Management Strategy which seeks to protect existing trees, promote native tree planting and advise on the appropriate maintenance of existing tree stock. Appropriate training regarding tree care and maintenance shall be undertaken by applicable staff regularly in line with the Tree Management Strategy.	Recognise the importance of new and existing trees in the climate challenge	Mitigation	Carrying out of measures advised in Strategy/ No. of trees planted	CAT	MDs, Biodiversity, National Tree Council, NPWS	2024-2029
3.5.	Continue to record and document severe weather events and their impacts on the infrastructure as a baseline approach to future planning for severe weather events. Information to be visually presented through GIS mapping subject to adequate resourcing.	Protection of infrastructure by documenting and monitoring the impacts of severe weather events	Mitigation/ Adaptation	No. of events entered onto database/ severity of events	MDs	CARO, CAT	2024-2029
3.6.	Continue to support the local policy regarding chemical pesticide/herbicide use, as adopted by Westmeath County Council, whilst ensuring these substances are only used to a degree that does not cause significant effects on the receiving environment, such as the receiving water environment, biodiversity or European sites.	Maintain public areas in line with the policy	Mitigation	Amount of chemical pesticides/ herbicides used annually	All applicable Sections of WCC	CARO, Kildare County Council.	2024-2029

### Theme 3: Natural Environment and Green Infrastructure

Goal: Westmeath County Council will continue to further protect, promote and enhance biodiversity across the county and will prioritise the use of nature-based green infrastructure, where possible, to overcome urban and climatic challenges.

No.	Action	Objective	Adaptation/ Mitigation	Tracking Measure	Section	Partners	Timeframe
3.7.	Public awareness campaigns to be undertaken to advise public on policy change regarding weed control.	Change public expectations regarding weed control	Mitigation	No. of public interactions	CAT	Tidy Towns, PPN	2024-2029
3.8.	Continue to implement The Planning System and Flood Risk Management Guidelines for Planning Authorities (2009)	Ensure future developments are assessed regarding flooding.	Mitigation/ Adaptation	All applications assessed in relation to the guidelines	Planning	Central Government, OPW.	2024-2031
3.9.	Require proposals for new development to integrate with existing Green Infrastructure networks and contribute to the development and protection of overall Green Infrastructure assets, having due regard to environmental sensitivities such as archaeology, European sites, biodiversity and amenity value.	Promote green infrastructure in County Westmeath	Adaptation/ Mitigation	Sustainability to be a formal assessment in all applications	Planning		2024-2029
3.10.	Support the development of a Green Infrastructure Strategy which promotes and prioritises the delivery of green infrastructure (including urban greening) and nature based solutions through appropriate provisions in planning policies, having due regard to environmental sensitivities such as Archaeology, European sites, biodiversity and amenity value etc.	Sustainable Development	Adaptation/ Mitigation	No. of compact developments	Planning	Central Government	2024-2029

### Communities: Resilience and Transition

Westmeath County Council will work with communities to increase understanding and awareness of the impacts of climate change. Empowerment and facilitation of climate action by the local authority will enable community groups to be proactive in their goal to reduce greenhouse gas emissions and adapt to the impacts of climate change.

Community events and social media will be used by Westmeath County Council to disperse information and engage locally, supporting a Just Transition to become more sustainable and resilient.

### Theme 4: Resilience and Transition

No.	Action	Objective	Adaptation/ Mitigation	Tracking Measure	Section	Partners	Timeframe
4.1.	WCC to play a lead role in raising awareness of the impacts of climate change and to advise on possible positive actions to mitigate against Climate Change via targeted public information streams.	Promote community resilience to the impacts of climate change	Adaptation/ Mitigation	No. of engagements	CAT	Community, LEADER, PPN, Sports Partnership, Healthy Ireland/ SHCP/ Comhairle na nÓg/ Age Friendly Ireland	2024-2029
4.2.	WCC shall continuously engage with local citizens and collaborate with key stakeholders regarding Climate Action and will seek to provide assistance and support to groups on their path to a low carbon, energy saving future through climate change mitigation and energy efficiency projects.	To inform the population about the challenges posed by Climate Change and the need for urgent action	Adaptation/ Mitigation	No. of engagements	CAT	Community, LEADER, PPN, Sports Partnership, Healthy Ireland/SHCP/ Comhairle na nÓg/Age Friendly Ireland	2024-2029

### Theme 4: Resilience and Transition

No.	Action	Objective	Adaptation/ Mitigation	Tracking Measure	Section	Partners	Timeframe
4.3.	WCC with engage with SEAI to seek to support the local SEC Network to assist with developing and implementing community initiatives which address emission reduction and energy efficiency, having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality, cultural heritage etc.	To build capacity to support communities in developing and implementing Climate Action measures	Adaptation/ Mitigation	No of initiatives/ schemes/ SECs supported	CAT	SEAI, SECs, CARO, Community Groups, Central Government	2024-2029
4.4.	WCC shall seek to promote Climate Action through Arts, Culture and Creativity. Raise awareness of climate change and sustainable living, by providing relevant information, resources and by hosting events.	To inform the population about the challenges posed by climate change and the need for urgent action	Mitigation/ Adaptation	No of projects	Arts/Library	Arts Council	2024-2029
4.5.	WCC Climate Action Section shall align actions and initiatives with the Local Economic and Community Plan.	To transition Westmeath to a environmentally sustainable and climate neutral economy	Mitigation/ Adaptation	Completion of the LECP	CAT	Community, PPN	2024-2029
4.6.	WCC shall review and reconstitute The Last Mile initiative to limit isolation due to severe weather events.	Limit the isolation of vulnerable citizens during severe weather events by creating a community outreach program	Adaptation	Implementation of Outreach Programme	Community	PPN, An Garda Síochána, HSE, Civil Defence	2024-2029

### Theme 4: Resilience and Transition

No.	Action	Objective	Adaptation/ Mitigation	Tracking Measure	Section	Partners	Timeframe
4.7.	WCC shall release a call for Expressions of Interest from community groups to help them to improve their capacity to respond to and recover from extreme weather events with specific aims to:  • help the vulnerable community to develop a stronger facilitating role for mitigating risks  • provide advice on the risk of extreme events affecting their locality  • devise mitigating actions to enhance preparedness  • provide support to develop appropriate resilience arrangements to enable response and recovery  The programme will be designed and implemented to include Sustainable Urban Drainage Systems (SUDS), nature-based solutions, protection of biodiversity and avoidance of habitat fragmentation.	To provide protection to vulnerable communities from the effects of climate change	Adaptation	Completion of identified community assessments	Community	CAT, PPN	2024-2029
4.8.	WCC LEO will actively promote hot desking and e-working facilities in the county and will work in conjunction with providers of these facilities.	To facilitate remote working in order to reduce commuter travel	Mitigation	No of remote desks/hubs supported by Westmeath County Council	LEO	Central Government, Chambers/ Business groups & private providers	2024-2029
4.9.	Guided by the Memorandum of Understanding signed between the GAA and CCMA, towards working together on sustainability and climate action projects, engage with the Green Club Programme through a nominated lead, working with the CARO and GAA, in the promotion and support of projects by participating clubs, to meet the objectives, and during key phases, of the programme to 2029	To assist with community climate actions projects	Mitigation	No. of projects assisted	CAT	GAA, CARO, CCMA	2024-2029

### Theme 4: Resilience and Transition

No.	Action	Objective	Adaptation/ Mitigation	Tracking Measure	Section	Partners	Timeframe
4.10.	WCC will work with local businesses to assist them to transition to a low carbon business model	To assist businesses with energy efficiency	Mitigation	No of businesses assisted	LEO	Central Government, Chambers/ Business groups.	2024-2029
4.11.	Continue to encourage and support the local production and distribution of food and natural produce by engaging with and facilitating the hosting of farmers markets at suitable locations around Westmeath	Facilitate the hosting of farmers markets to promote the production and distribution of natural produce	Adaptation/ Mitigation	No. of farmers markets held.	MDs	IFA, PPN	2024-2029

## Sustainability and Resource Management

Westmeath County Council aims to create a sustainable and circular economy culture within its organisation and support broader society in achieving the same. Sustainable practices will be based on the use of renewable energy and carbon neutral technology, in the hope of reducing the organisations greenhouse gas emissions.

Leadership and advice will be provided to local communities in the area of sustainability and resource management as Westmeath County Council seeks to set an example in the face of climate change.

The below actions will focus of practical actions within the remit of Westmeath County Council, such as waste management, renewable energy, carbon offset and protection of natural resources.

### Theme 5: Sustainability and Resource Management

Goal: Westmeath County Council will place sustainability at the core of our everyday work practices and assist with putting in place efficient services for the community to effectively participate in the circular economy.

No.	Action	Objective	Adaptation/ Mitigation	Tracking Measure	Section	Partners	Timeframe
5.1.	WCC shall assess management of our own waste and seek to minimise waste through reuse of materials and the circular economy, whilst ensuring waste management activities are undertaken in accordance with the Waste Management Act and in a manner that does not result in negative environmental impacts or nuisance.	To reduce the climate change impacts of waste generated by Westmeath County Council	Mitigation	No of roads projects using recycled road materials	Environment	REPAK, Waste Collectors	2024-2029
5.2.	WCC will expand the operation and availability of bike share and other similar schemes throughout the county.	To incentivise alternatives to car use for short journeys	Mitigation	No. of bike share stand locations	Environment	CAT, Private Suppliers	2024-2029
5.3.	Identify, where appropriate, areas considered beneficial for use as local carbon offset through carbon sequestration, having appropriate regard to relevant planning and environmental protection criteria.	To recognise all possible emission sequestration opportunities.	Mitigation	No of tonnes of GHGs sequestered	CAT	CARO, NPWS	2024-2029

### Theme 5: Sustainability and Resource Management

Goal: Westmeath County Council will place sustainability at the core of our everyday work practices and assist with putting in place efficient services for the community to effectively participate in the circular economy.

No.	Action	Objective	Adaptation/ Mitigation	Tracking Measure	Section	Partners	Timeframe
5.4.	Work with and support private group water schemes to identify drinking water sources that are at risk to the impacts of climate change and identify alternative reserve sources of water to maintain water supplies in critical times	Ensure continuity of safe water supply to all citizens in Westmeath	Adaptation / Mitigation	Percentage of compliance with HSE guidelines	Environment	HSE, UE, Local Communities	2024-2029
5.5.	Carry out a review of discharge licenses to counter possible reduced assimilative capacity of water courses and amend/revoke as required.	Ensure water courses are not adversely affected by the issuing of discharge licences	Mitigation/ Adaptation	Percentage of compliance with issued discharge licences	Environment	EPA	2024-2029
5.6.	Develop a strategy to encourage a circular economy in Westmeath in partnership with Social Enterprise/Community Enterprise, whilst ensuring waste management activities are undertaken in accordance with the Waste Management Act and in a manner that does not result in negative environmental impacts or nuisance.	To reduce the climate change impacts of waste within County Westmeath and beyond	Mitigation	No of recycling enterprises permitted by Westmeath County Council	Environment	CAT, Business, WERLA, Westmeath Community Development	2024-2029
5.7.	Explore possibility of installing plastic recycling bins throughout the county.	To increase plastic recycling rates.	Mitigation	Weight of plastic collected	CAT	Waste Collectors, REPAK, WERLA	2024-2029
5.8.	WCC shall support the National Renewable Energy Action Plan and Ireland's Transition to a Low Carbon Energy Future 2015-2030, having due regard to environmental sensitivities such as sensitive human receptors, archaeology, cultural heritage, landscape character and visual amenity, European sites, biodiversity and amenity value.	To reduce our dependence on imported fossil fuels	Mitigation	No. of Kw power produced by renewables	Planning	CARO, CAT, Environment	2024-2029

### Theme 5: Sustainability and Resource Management

Goal: Westmeath County Council will place sustainability at the core of our everyday work practices and assist with putting in place efficient services for the community to effectively participate in the circular economy.

No.	Action	Objective	Adaptation/ Mitigation	Tracking Measure	Section	Partners	Timeframe
5.9.	Support, in line with the policies of the County Development Plan, initiatives for limiting emissions of greenhouse gases through energy efficiency and the development of renewable energy sources which make use of the natural resources in an environmentally acceptable manner having due regard to environmental sensitivities such as biodiversity, noise environment, air environment and European sites. Where it is confirmed through a glint and glare assessment that any solar development will not have any potential glint and glare impact on sensitive receptors, or otherwise, where it is confirmed that any solar development constitutes exempted development under the Planning and Development Regulations by virtue of its size or location outside a Solar Safeguarding Zone.	Reduce greenhouse gas emissions through increased energy efficiency	Mitigation	No. of new renewable energy developments	Planning	SEAI, MEA, CARO	2024-2029
5.10.	Channel Maintenance and flood alleviation measures 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 etc.	To increase climate resilience due to more severe flooding caused by climate change	Adaptation	KM of drainage channel maintained/ No. of water cuts maintained.	MDs	Fisheries, Waterways Ireland, OPW	2024-2029
5.11.	Regulate and enforce the National Enforcement Priorities (NEPs) which focus on delivering positive environmental outcomes for air quality, water quality and waste management.	Increase positive environmental outcomes	Mitigation	EPA monitoring	Environment	EPA, HSE, WERLA	2024-2029

# 5. Decarbonisation Zone Mullingar Town

Westmeath County Council has a vision that:

Mullingar will become an important testbed for the various strategies, plans and ideas that will contribute to the overall target for the country to become carbon neutral by 2050. Action 165 of Irelands Climate Action Plan 2019 requires Local Authorities to identify and develop plans for one Decarbonising Zone.

Mullingar Town has been designated as the spatial area in which a range of climate mitigation, adaptation and biodiversity measures and actions will be identified to address local low carbon energy, greenhouse gas emissions and climate needs to contribute to national climate action targets. Mullingar, based on its socioeconomic and physical environment characteristics has been deemed an appropriate fit against a set of defined DZ criteria, namely:

 Urban areas and agglomerations with a population not less than 5000 persons

### OR

- Rural Areas with an area of not less than 4km<sup>2</sup>
- Other location/areas that can demonstrate decarbonisation at a replicable scale.

Mullingar town is an urban area with a population of approx. 22,667 as defined in Census 2022. The total land area of Mullingar is approx. 15.48km² and includes 75 small areas under 3 Electoral Divisions (Mullingar North Urban, Mullingar South, Urban and Mullingar Rural).

It is envisioned that Mullingar town will undertake a range of climate change mitigation measures which will contribute to meeting national climate action targets. Mullingar will be used as a test bed in Westmeath to showcase what is possible for decarbonisation and climate action at a local and community level. Through a system of experimentation and evaluation Mullingar will endeavour to undertake the objectives in a flexible, incremental and community driven approach to deliver it's objectives.

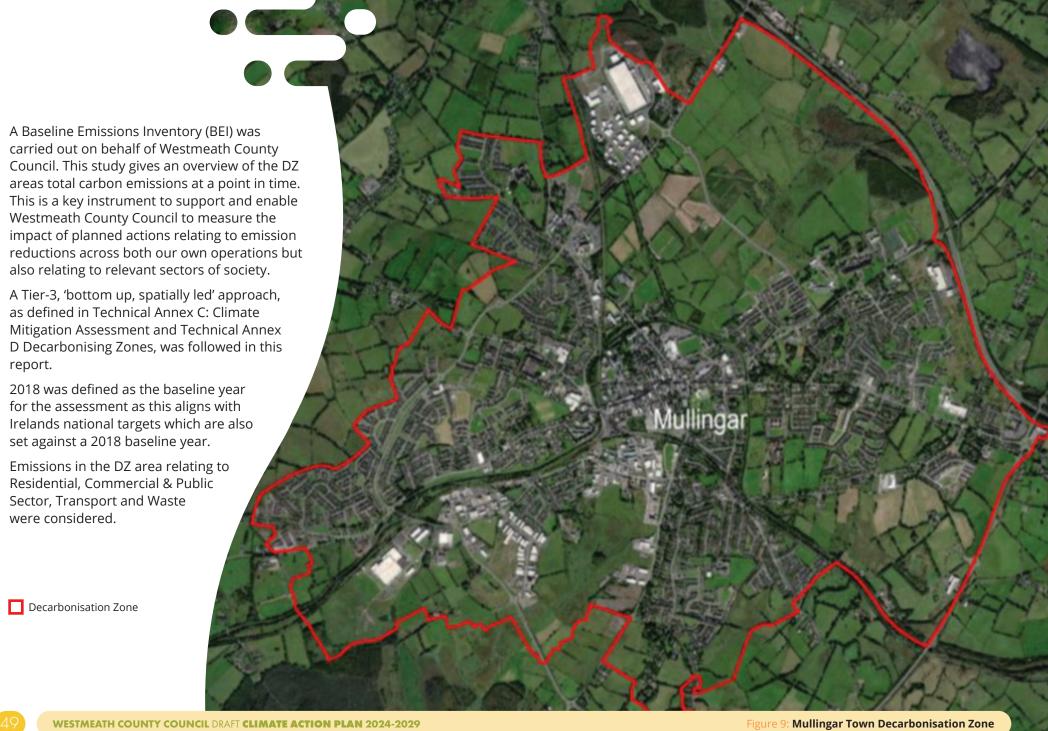
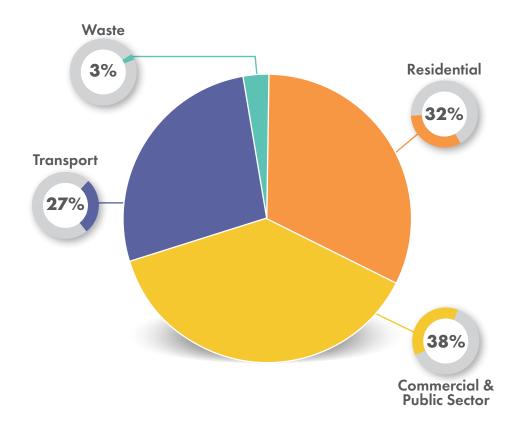


Figure 10: Total Carbon Emissions in the Decarbonisation Zone

The results of the 'bottom up' Tier 3 assessment are presented on the table and chart below. Total carbon emissions equate to approximately **138,421 tCO\_e**. This translates to **7.19 tCO\_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 significantly higher than the EU average of 8.2 tCO<sub>2</sub>e per capita.\*

### **Carbon emissions** (tCO<sub>2</sub>e) Residential 45,091 **Commercial & Public Sector** 52,432 **Transport** 36,855 Waste 4,043 **Total carbon emissions** 138,421 **Total carbon emissions per** 7.19 capita (tCO<sub>2</sub>e/capita)

### Total carbon emissions in the DZ area



### Methodology

Two steps have been undertaken to inform a robust understanding of the energy and carbon emissions within the DZ area. As summarised below:

Step 1

A 'top down' overview of carbon emissions within the DZ area was informed by data gathered from the Environmental Protection Agency's (EPA) MapEire database. This assessment allowed for a 'helicopter' overview of the magnitude of emissions within the area and the sectoral hotspots. The purpose of this 'top-down' assessment was not to override the 'bottomup' assessment outcomes, but rather to provide an additional layer of context to inform decision making.

Step 2

This was followed by a Tier3 'Bottom-Up' assessment approach, informed predominantly by spatial data and the use of geographical information systems (GIS) software and processes. This allowed for the mapping of data and information within the DZ area, supporting effective communication and engagement with key internal and external stakeholders. The assessment also included non-spatial data to support the analysis and future action planning.

### **Data Sources**

### **Residential Sector**

In order to meet highly ambitious targets, the DZ area must significantly reduce its use of fossil fuels, including coal, oil and peat, and increase dependance on renewables and electricity to heat existing residential buildings, while also optimizing and enabling energy efficiency. Retrofit activity must be supported to underpin this reduction.

To estimate residential sector energy consumption and associated carbon emissions within the DZ area, a number of non-spatial data points have been used.

### CSO

Total housing stock obtained by the CSO grouped by construction period and dwelling type. A weighted average has been applied to account for the number of "Not stated" dwellings.

### SEAI BER Research Tool

Average energy consumption for each dwelling type and period built related to the DZ obtained from the BER Research Tool. Residential BER ratings are only available for a number of residential dwellings and therefore are not entirely representative of the ED and DZ area.

### CSO

Total energy consumed broken down into fuel sources and electricity using CSO data representative of the central heating in each individual ED.

### SEAI Conversion Factors

Total energy consumed converted to carbon emissions using relevant SEAI Conversion Factors.

### Outputs

- Energy consumed broken down by fuel and electricity, dwelling type, construction period and ED.
- Carbon emissions broken down by fuel and electricity, dwelling type, construction period and ED.

### **Commercial & Public Sector**

In order to achieve targets, the use of all fossil fuels (coal, natural gas, oil and peat) to heat our buildings must be reduced and the support of a major expansion to retrofit activity must be released. in retrofit activity must be realised.

The challenge facing the commercial and public sector is that its existing buildings will require the most effort to decarbonise. Technologies such as heat pumps in the residential sector are also suitable for commercial buildings and the scaling-up in deployment of solutions such as district heating and renewable gases will also benefit commercial and public buildings –these will be important levers for the DZ area to consider. This chapter explores the

To estimate commercial and public sector energy consumption and associated carbon emissions within the Mullingar DZ, a number of non-spatial data points have been used.

### Ordnance Survey Ireland (OSI)

Total commercial and public sector buildings broken down by building use and total floor area (m<sup>2</sup>)

### CIBSE Energy Benchmarks

Fuel and electricity consumption benchmarks (kWh/m²) to estimate energy use for each of the building types, based on their floor area.

### SEAI National Breakdown of Fuel/Electricity

Total energy consumed broken down into fuel sources and electricity using the national energy breakdown for the commercial and public sector. Note that data directly representative of the DZ area were not available.

### SEAI Conversion Factors

Total energy consumed converted to carbon emissions using SEAL Conversion Factors

### Outputs

- I Energy Consumed broken down by fuel and electricity, building type and ED.
- I Carbon emissions broken down by fuel and electricity, building type and ED.

### **Transport Sector**

To estimate transport sector energy consumption and associated carbon emissions within the DZ area, a number of non-spatial datapoints have been used. An overview of the approach used is outlined below. Note that this approach reflects vehicles owned and licenced within the DZ area and does not reflect all transport movements within the DZ area.

### Transport Omnibus

Number of vehicles licenced by end of 2018 in Westmeath. These numbers have been proportioned down to the DZ area based on population.

### SEAI National Energy Balance

Fuel and electricity consumption benchmarks (kWh/m2) to estimate energy use for each of the building types, based on their floor area.

### SEAI Conversion Factors

Total energy consumed broken down into fuel sources and electricity using the national energy breakdown for the commercial and public sector. Note that data directly representative of the DZ area were not available.

### Outputs

Energy consumed broken down by fuel and electricity source, and transport mode

Carbon emissions broken down by fuel and electricity source and transport mode

### **Waste Sector**

Using a benchmark for waste related carbon emissions of 0.21  $tCO_2e$ /head of population\*, it can be estimated that waste related carbon emissions within the boundary of DZ area is approximately 4,043 $tCO_2e$ .

	DZ Possible Actions/Register of Opportunities		
No.	Action	Main	Sub
1.	WCC will promote and assist in the setting up of efficient and effective bus routes and more public transport opportunities in general in the DZ.	NTA, TII, Private providers	WCC
2.	Active travel and providing safe travel routes for both cyclists and pedestrians will be prioritised including secure parking facilities for bicycles. Safe links from canal and Greenways into DZ town centre shall be provided, having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality and cultural heritage.	NTA, TII, WCC	
3.	Consideration should be given to protecting, promoting and maximising the opportunities in relation to biodiversity, green corridors, native hedgerows and green spaces within the DZ and use these areas to full potential for carbon sequestration and quality of life. An assessment of current green & open spaces in the DZ should be undertaken and potential regarding tree planting, dedicated wastelands etc should be explored. Consider public lighting levels at night time in Town Centre and seek to minimise the impact on biodiversity having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality, cultural heritage and prioritising the use of native species	WCC, Tidy Towns	
4.	Consider assisting in facilitating and promoting clinics which give advice to public regarding energy efficiency, available grants, EV info.	SEAI, energy providers	WCC
5.	Explore the possibility of supporting an Energy Audit programme for homes & businesses.	SEAI, Private Energy Auditors	WCC
6.	Promote and advocate for the Cycle to School programme.	NTA, Green Schools, DoT	WCC
7.	Promote & publicise the benefits of using the Home Energy Kits in Mullingar Library.	WCC	Codema, CARO
8.	Support any programmes organised by external bodies to supply training for labourers/contractors re retrofitting skills having due regard to environmental sensitivites such as local human receptors, European sites and biodiversity, and the need to appropriately protect and conserve protected structures.	SEAI, educational providers, CARO	CARO
9.	Consider the set up of a community virtual info board with readily available info, advice, knowledge, awareness etc of small win climate friendly actions.	WCC	SEAI, CARO
10.	Assist and support the creation of Community EV charging farms and promotion of active travel, modal shifts, having due regard to environmental sensitivities such as local human receptors, European sites, biodiversity and cultural heritage.	WCC - when policy is agreed	TII, CARO, NTA
11.	WCC will aim to become an exemplar regarding deep retrofitting of WCC owned historic/protected structures in the DZ, having due regard to environmental sensitivities such as local human receptors, European sites and biodiversity, and the need to appropriately protect and conserve protected structures.	WCC	SEAI, SEAA

DZ Possible Actions/Register of Opportunities			
No.	Action	Main	Sub
12.	WCC will consider developing a waste management plan for the DZ and should be implemented paying particular attention to the circular economy principals. This plan should allow for the understanding of waste streams within the DZ area and support effective management at source rather than at end of life. Promotion of the circular economy ie recycling facilities, DRS etc, whilst ensuring such facilities are appropriately located, designed and managed. On street waste segregation to be piloted.	WCC & private industry	Repak
13.	WCC building stock including LA housing energy efficiency upgrades. All WCC buildings (excl LA Housing) to have EMS installed, having due regard to environmental sensitivities such as local human receptors, European sites and biodiversity, and the need to appropriately protect and conserve protected structures.	WCC	SEAI, SEAA
14.	WCC will continue with the SEAI Pathfinder programme with regards to WCC buildings in the DZ, having due regard to environmental sensitivities such as archaeology, European sites, biodiversity and amenity value etc.	WCC	SEAI, SEAA
15.	WCC will explore installing renewable energy sources in all it's building stock in the DZ. District heating options should be considered in the DZ where it is confirmed through appropriate environmental assessment that associated renewable energy development will not have any significant environmental effect.	SEAI, energy providers	WCC
16.	WCC will continue to monitor Air Quality in the DZ and will continue to enforce Smoky Fuel ban in the DZ.	WCC	Fuel Providers
17.	Permeable surfaces should be prioritised especially in public car parking facilities in the DZ. Planning will explore conditioning suitable areas as having permeable surfacing. Ensure all related construction works are designed and implemented in a manner that does not result in the occurrence of significant adverse environmental effects.	WCC	Developers
18.	WCC will work with local businesses in Mullingar to assist them to transition to a low carbon business model.	WCC	SEAI, Business Groups
19.	Investigate the development of suitably located composting centre to promote circularity of green waste.	WCC	Business Groups



## 6. Implementation and Reporting

### 6.1 Planning for implementation

This Climate Action Plan will be implemented by Westmeath County Council. Whilst the plan requires a whole-of-Council approach, the ownership of the plan is held within the Westmeath County Council Environment, Climate Action, Water & Emergency Services Directorate.



A Climate Action Co-Ordination Team was established in Westmeath County Council in 2023. This team includes a Climate Action Coordinator, Climate Action Officer, Community Climate Action Officer and a Climate Action Graduate and assisted by our Energy Officer and Senior Engineer in Environment. The role of this team is to mainstream climate action into the activities of Westmeath County Council, monitor the implementation of the actions of the Climate Action Plan and to coordinate the reporting and evaluation of this plan, following its approval by the Elected Members. The core Climate Action Co-Ordination Team is supported by the wider climate action team across the organisation, that have ownership of particular actions in this plan. These include the following Sections; Active Travel, Procurement, Planning, Regeneration, Water Services, Fire & Emergency, Human Resources, Corporate Services, Heritage, Transport, Environment, Housing, Heritage, Municipal Districts, ICT, Local Enterprise Office, Libraries, Community. The core Climate Action Team will also be the point of contact for the public to learn about climate action in the County.

Westmeath 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 Offaly, Laois, Longford and Roscommon, the Midlands and Eastern Climate Action Regional Office (CARO), Sustainable Energy Authority of Ireland (SEAI), South East Energy Agency, the Local Authority Services National Training Group, Eastern and Midlands Regional Assembly, Local Government Management Agency, City and County Management Agency, Public Participation Network, Smart Dublin, Age Friendly Ireland, Comhairle na nÓg and Mullingar/Athlone SEC's. 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 Draft 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 CARO midlands sub region, whereby they can collaborate closely on the implementation of the Climate Action Plans.

Following approval of this plan, a summary will be developed for each action, which will set out in detail how the action will be delivered including, noting the responsible department and timescales. Westmeath County Council will align the timing of internal implementation reporting intervals with that of sectoral progress reporting requirements.

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### 6.2 Funding and Partnerships

To lead by example and drive the transition to a climate neutral society, Westmeath 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. Westmeath 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.

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. Westmeath County Council will encourage and facilitate collaboration with the private sector where possible.

### 6.3 Tracking Progress through Key Performance Indicators

Performance by Westmeath 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 Authority of Ireland (SEAI).

For actions outside of this, one of the reporting avenues that Westmeath 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[1] (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 are 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 Westmeath County Council will contribute relevant information as required, to assist in highlighting the progress of the local government sector on climate action.

### 6.4 Reporting Requirements and Arrangements

### **CAP 23 Reporting**

Sectoral Reporting
- NOAC
- Annual Progress Report
- CCAC Reporting

**SEAI MNR Gap to Target Tool** 

**Internal Reporting Requirement** 

**Newsletter & other communications** 

### 6.4.1 Internal Reporting

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

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

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

### **6.4.3 Sectoral Performance**

Westmeath County Council will report annually on their performance on climate action by way of KPIs (as outlined in Section 6.3) to inform the performance of the local government sector on climate action, as part of the local government DECA 2030 Strategy.

### 6.4.4 National Climate Action Plan

Westmeath County Council will report to the Department of the Environment, Climate and Environment 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.

### **6.4.5 Sustainable Development Goals**

The 2018-2020 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." Ireland's Second National Implementation Plan for the Sustainable Development Goals 2022-2024, intends to build on the role of local government in Ireland and incorporates specific actions to do so which include:

- i. Showcasing, sharing and building on existing initiatives
- ii. Capacity building and awareness raising
- iii. Embedding the SDGs in Governance and reporting frameworks
- iv. Incorporating the SDGs within local planning frameworks
- v. Community Engagement

Furthermore, local authorities are recognised as one of Agenda 2030's nine "Major Groups", which play a crucial role in sustainable development 31 and Agenda 2030 also highlights the particular role of local authorities and communities in sustainable urban development.

Westmeath County Council is working to advance the SDGs, including through

- the incorporation of the SDGs into their Corporate and City/County Development Plans;
- establishing local partnerships;
- the provision of training and;
- the holding information events with external groups including universities,
   PPNs, Tidy Towns and Creative Ireland.



