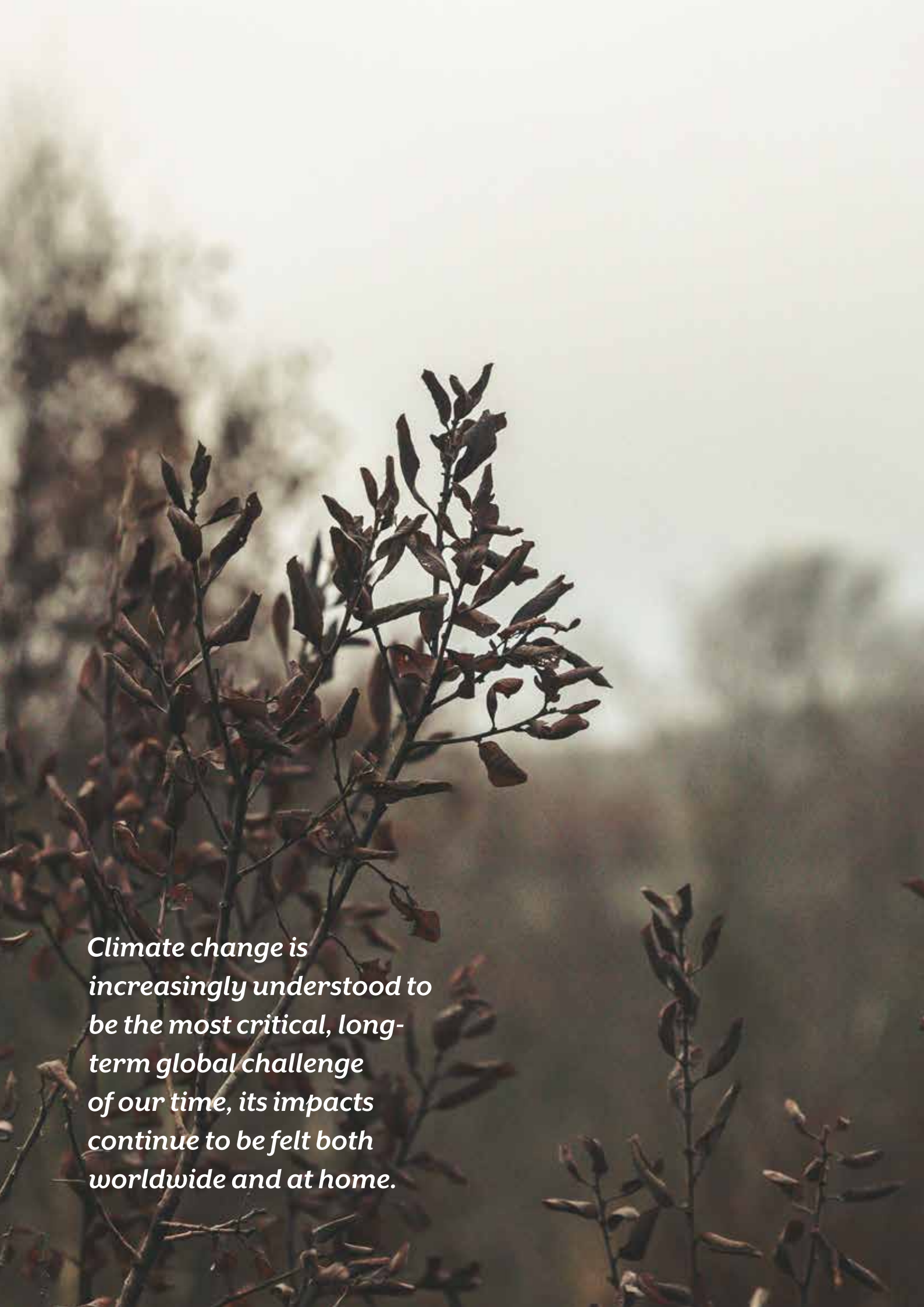
Offaly County Council

DRAFT CLIMATE ACTION PLAN

2024–2029

Comhairle Chontae Uíbh Fhailí
Offaly County Council

CLIMATE ACTION



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.

CONTENTS

EXECUTIVE SUMMARY

Offaly County Council's Climate Action Plan sets actions towards achieving a reduction in emission (by 51%) and an increase in energy efficiency (to 50%)

The impacts of climate change are visible to all, and it is internationally agreed there is an urgent need to take ambitious climate action to guard against future impacts resulting from intensified extreme weather events, such as storms, precipitation and flooding.

Offaly County Council are preparing this Climate Action Plan 2024-2029 to align with Government's national climate objectives, which seeks to transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy by 2050. The Climate Action and Low Carbon Development (Amendment) Act 2021 frames Ireland's legally binding climate ambition to deliver a reduction in greenhouse gas emissions of 51% by 2030.

This Climate Action Plan was developed in close collaboration with a range of internal stakeholders including Elected Members, our Management Team, Senior Management and Staff, together with external stakeholders including Offaly Public Partnership Network, communities, adjoining Local Authorities, Climate Action Regional Office (CARO), as well as sectoral groups and local businesses.

Our Climate Action Plan addresses climate mitigation, adaptation and biodiversity enhancement.

- Mitigation relates to changing how we live, move and consume so as to reduce or eliminate the production of greenhouse gases.

- Adaptation refers to how we deal with the impacts of existing and future climate changes by taking practical actions to manage risks, protect communities and strengthen the resilience of our county.

- Protect, conserve, restore and enhance local biodiversity by increasing awareness and strengthening knowledge while mainstreaming biodiversity into decision-making.

Offaly County Council's Climate Action Plan sets actions towards achieving a reduction in emission (by 51%) and an increase in energy efficiency (to 50%) across its own assets, services and infrastructure for which it is directly accountable. The Plan also identifies actions in which Offaly County Council has a leadership role in influencing, advocating and facilitating other sectors in achieving their own climate targets and ambitions. Offaly County Council is also committed to assisting, supporting and empowering local communities and individuals to become climate resilient and embrace the variety of opportunities presented by climate change.

Actions have been designed to complement SMART principles (Specific, Measurable, Achievable, Relevant, and Time-Bound) and cover six high level strategic goal thematic focus areas and twenty high level objectives – all of which reflect the level of climate action ambition held by Offaly County Council.

Each Local Authority is also required by Government to designate a "Decarbonising Zone" (DZ) which will act as a testbed of new technology, innovation and ambitious approaches to climate mitigation, adaptation and biodiversity enhancement at a local community level which may be scaled up across the county and further afield. Tullamore has been chosen as the DZ for Offaly, and an initial Register of Opportunities (ROO) has been identified within this plan, from which detailed implementation plans and stakeholder mapping/engagement will help deliver on emission and energy targets within the DZ.

In preparation of our Climate Action Plan, Offaly County Council commissioned a series of comprehensive reports into countywide emission baselines, Decarbonising Zone emission baselines and climate change risk assessments. The Plan has due regard to international, European and national legislation and climate action policy. The United Nations Sustainable Development Goals also formed an integral part of the Plan preparation, highlighted by our "Plan SDG Wheel" and SDG identification within each action area. The Plan has also been scrutinised by our environmental consultants and their Appropriate Assessment and Strategic Environmental Assessment reports accompany this Plan and are available for viewing on our website www.offaly.ie.

Offaly County Council's draft Climate Action Plan will be available for public and stakeholder consideration for a period of 6 weeks from 24th October until 6th December. During this time comments and observations are invited to be shared via climate@offalycoco.ie, Submit.com or by post. All observations received will be acknowledged, summarised and considered in a report by the Chief Executive. At this stage, an assessment of amendments will be made to this draft Plan before it is put before the elected members for adoption (with or without amendments) in February 2024.

The delivery of the Plan will be steered by the Climate Action, Environment and Transportation Directorate on behalf of the Council. Offaly County Council will continue to work collaboratively and in partnership with a range of key external stakeholders to support the delivery of this Plan and will adhere to the monitoring and reporting progress schedule required by the Department of Environment, Climate and Communications (via the Regional CARO network).

We will continue to share our progress via our governance work via publishing in Annual Reports etc., on our website, and via our social media channels and press releases.

INTRODUCTION

Offaly County Council will be responsible for enhancing climate resilience, increasing energy efficiency and reducing greenhouse gas emissions...

Offaly County Council has prepared this Draft 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 the Draft 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 scale, which are included 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).

The Draft Climate Action Plan sets a clear pathway for Offaly 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 Decarbonising Zone (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, Offaly 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. The Draft 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 plans, including the Council's Corporate Plan and Offaly County Development Plan, also support the Draft Climate Action Plan.

The Draft Plan sets out how Offaly 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.

Local Authority Scope on Climate Action

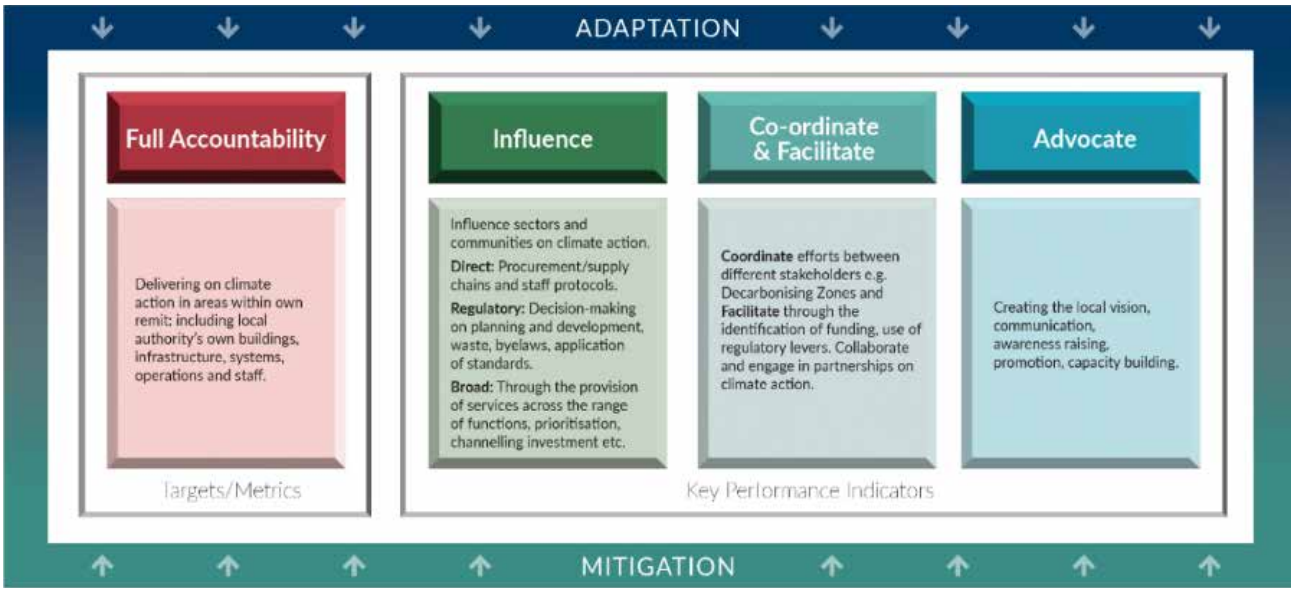


Figure 1.1 *Scope of the Council in Climate Action (Source: Local Authority Climate Action Plan Guidelines, 2023)*

Figure 1.1 illustrates the scope of the local authority's responsibility on climate action.

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.

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 reaching 1.1°C above 1850-1900, in the 2011-2020 period.

Ireland's climate echoes that statement. **Figure 1.2** 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.

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.

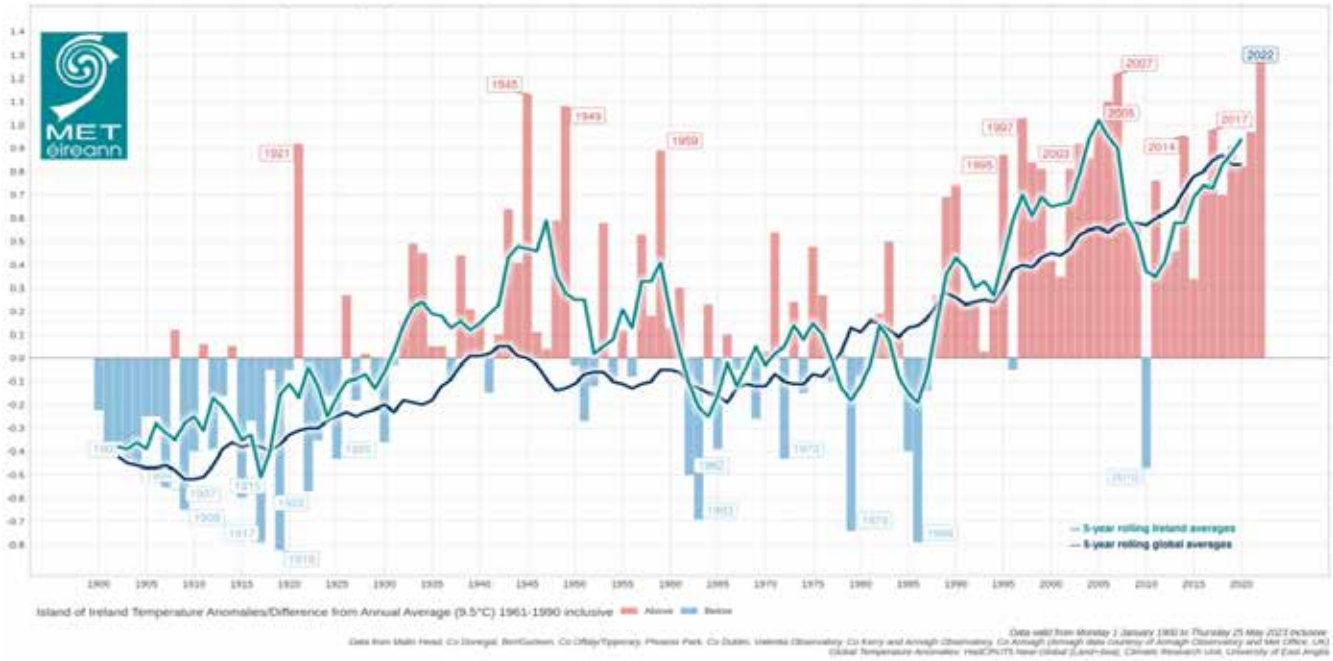


Figure 1.2: *Island of Ireland 1900-2022 Temperature (°C) Anomalies (difference from 1961-1990) (Source: Met Éireann)*

The EPA, Marine Institute and Met Éireann published The Status of Ireland's Climate Report in July 2021. Future climate projections for Ireland / Offaly 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.

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 Draft Climate Action Plan is set within a broader context of international, EU, national and sectoral climate policy. This is represented in **Figure 1.3.**

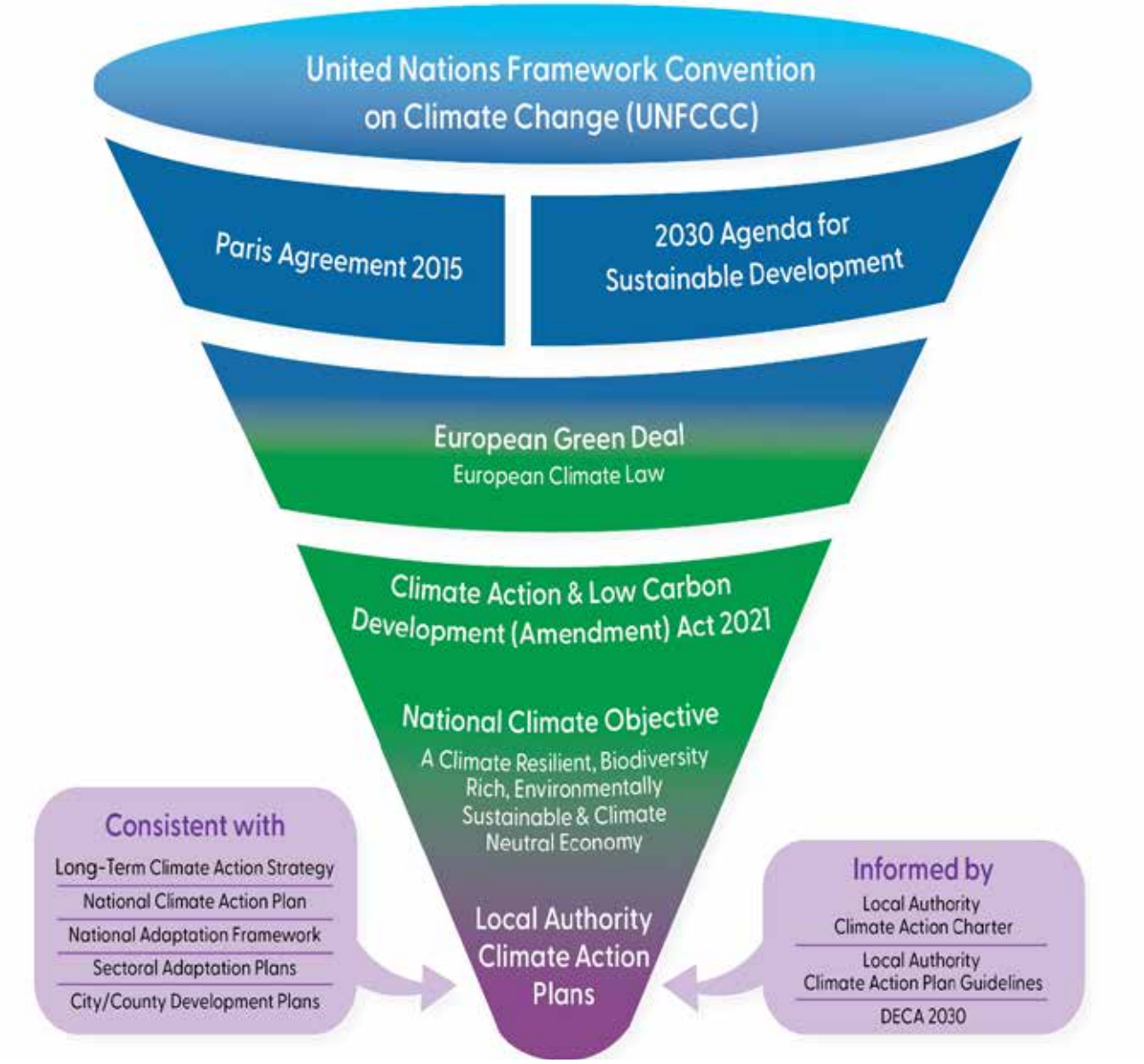


Figure 1.3: *Legislation and Policy Context for the Climate Action Plan (Source: Climate Action RegionalOffices)*

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 20C and pursuing efforts to limit the temperature increase to 1.50C above pre-industrial levels; and

ii. Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience.

Another International agreement closely linked with the Paris Agreement is the 2030 Agenda for Sustainable Development which was adopted by UN Member States in September 2015. At the Agenda's core are 17 Sustainable Development Goals (SDGs). These goals aim to "end poverty, protect the planet and improve the lives and prospects of everyone, everywhere." The 17 SDGs contain 169 targets to be achieved by 2030. In 2019, World leaders called for a 'decade of action' 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 Offaly 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 Offaly County Council climate action plan strengthens the links between national and international climate policy and the delivery of effective climate action at local and community levels, through place-based climate action. The intrinsic value of the climate action plan is that it plays a significant role in reinforcing the commitment by the local government sector to lead on climate action at local and national levels, as reflected in the local government strategy DECA 2030. Over its preparation and implementation, the Council's climate action plan offers an opportunity to bring together critical stakeholders across communities and businesses to build a vision for a climate neutral future.

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

Citizen and Stakeholder Engagement

Local authorities have significant experience in engaging citizens and stakeholders, through their existing functions, including land-use planning, housing, enterprise, transport and environmental awareness. Local authorities are also engaged in existing public participation structures and approaches that are bottom-up, local community centred and are outcome focused. These include Public Participation Networks (PPN), Local Community Development Committees (LCDC), Tidy Towns, Age Friendly Ireland, Sports partnerships, Sustainable Energy Communities (SECs), Teagasc and a range of other programmes and initiatives.

The challenges of climate change which are far reaching across society, are not defined by spatial boundaries and therefore require holistic and collective responses. Engagement and participation by citizens and stakeholders in climate decisions and measures that involve them is considered very important. This ensures climate actions positively and equitably influence the choices they make.

Delivering on our climate ambition requires the Government and citizens of Ireland to come together in a strengthened 'social contract' for climate action and the co-creation of real solutions to climate change, that are meaningful, inclusive, fair, and accessible for all, thereby prioritising a just transition (Climate Action Plan 2023).

Climate Action Training

In partnership with the CAROs and the Local Authority Services National Training Group (LASTNG), climate action training continues to be rolled out for the entire local authority sector including elected members, to empower and upskill staff to act as leaders on climate action. To date 92% of staff in Offaly County Council have been trained in various pillars of climate action training, with future training requirements being assessed on a continuous basis. The Association of Irish Local Government (AILG) has also organised training events and an accredited training course for elected members.

Offaly County Council has also organised workshops for local community groups such as Age Friendly Climate Event. In partnership with the CAROs, 'Let's talk Climate Action' workshops have also been organised across the country, through the network of Age Friendly Ireland coordinators in local authorities.

At a school level, the Council's Environmental Awareness officer/ Green Schools coordinators work closely with the An Taisce Green Schools programme, to continue awareness activities and Green Flag awards in both primary and post-primary schools. An Taisce has also developed new resources for teachers on climate action, to overlap with teaching curriculums.

Offlay County Council received approval in September 2022 to employ a Biodiversity Officer under the National Heritage Council and County and City Managers Association (CCMA) programme with support from the DHLGH and NPWS. This new resource is working hard to develop and implement Biodiversity Action Plans, integrating biodiversity considerations across all of our operations while raising awareness of biodiversity loss and promoting climate actions both internally and externally.

National Dialogue on Climate Action

In 2022, the Council continued to support citizen and stakeholder engagement initiatives, including the Government's National Dialogue on Climate Action (NDCA), in particular local 'Climate Conversations' led by the Public Participation Network (PPN). The Climate Acts 2015-2021 recognise the Public Participation Networks as a key network to consult regarding climate action and the Council has engaged with the Offaly PPN in the public consultation of the Climate Action Plan.

Cumulatively, evidence from the 2022 NDCA programme suggests that there is a high level of awareness of climate change among the Irish people, and they want to get involved in climate action. The findings of the 2022 engagement programme have also shown that there is a willingness to engage in climate action, but people may not know which actions are most effective or where to start acting. Further enabling citizen and stakeholder engagement can make it possible to realise the opportunities that a transition to a carbon-neutral society and economy presents, such as new sustainable careers, warmer more energy-efficient homes, better travel options, more sustainable consumer choice, integrated spatial planning, cleaner air and water and a better environment for future generations.

Figure 1.4 summarises some of the needs of participants in online 'Climate Conversations', as part of the National Climate Dialogue. It clearly shows that we as a local authority, including elected representatives, have an important role in enabling citizens to engage in climate action, through the services we provide.

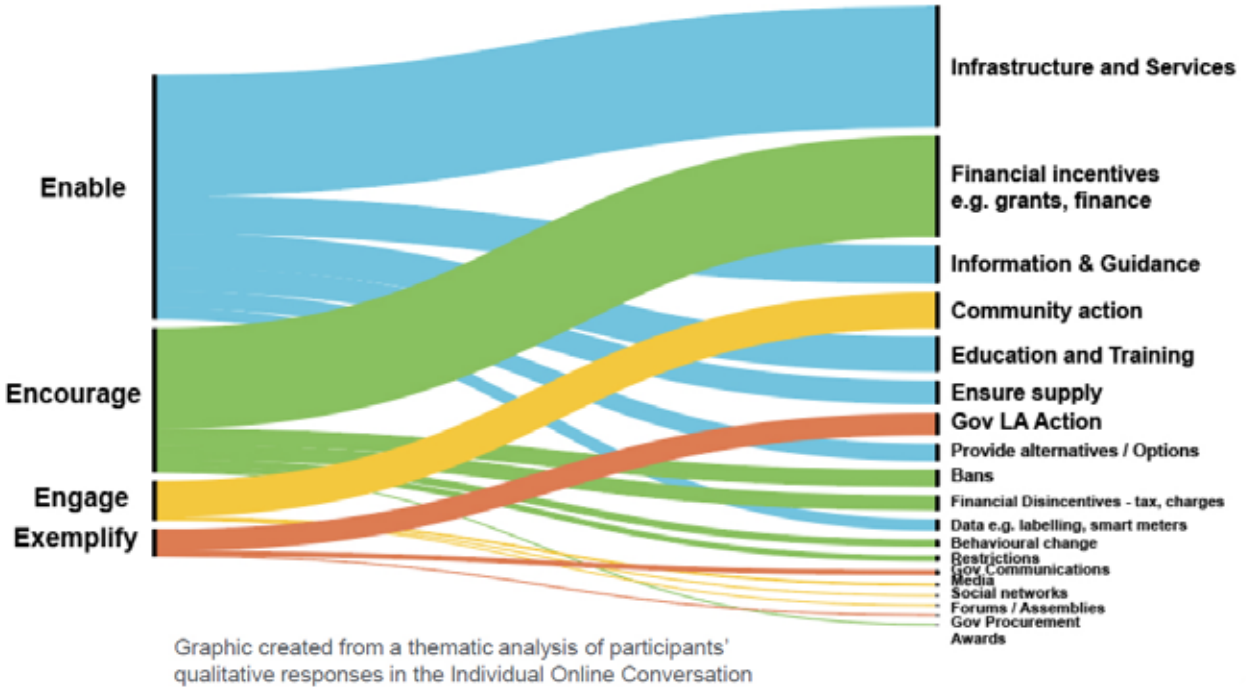


Figure 1.4: *Summary of findings of the 'Climate Conversations' online responses (Source: Department of the Environment, Climate & Communications/MCo)*

Community Climate Action Fund

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

Strand 1 requires the appointment of dedicated Community Climate Action Officers (CCAO) in all local authorities to guide and support communities from the very start. Offaly County Council has recruited a Community Climate Action Officer and will launch the Fund in the coming weeks in line with the Departments grant agreement.

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

- Community & Energy
- Travel
- Food and Waste
- Shopping and Recycling
- Local Climate and Environmental Action

The actions included in this Climate Action Plan, aim to equip all citizens and other stakeholders, with the right information to make informed decisions, thereby assisting and empowering them to play their part in the County's transition to low carbon and climate resilient region, together with the adjoining local authorities in the CARO Midlands and Eastern region. By communicating effectively with citizens, businesses and other sectors about climate action, there is real opportunity to create long-term, positive behavioural change which will have a significant impact on reducing both greenhouse gas emissions and the impacts of climate change to 2030, 2050 and beyond.

In implementing and updating the Climate Action Plan into the future, strengthening existing networks and creating new climate action partnerships, will progressively inform and encourage all citizens, communities and other stakeholders to have increased access to information and advice. Interest areas could include the identification and implementation of relevant energy efficiency measures, renewable energy actions, climate adaptation and resilience measures, access to funding sources such as Sustainable Energy Authority of Ireland grant schemes, the Climate Action Fund, European Commission funding and others. Local authority efforts in citizen and stakeholder engagement will continue to be supported by the CAROs, the Environmental Protection Agency, the National Dialogue on Climate Action, and other partners.

Climate Action Research Activities

Offaly County Council participates in a range of research projects across different business areas to help inform our response to key work areas such as climate action. Collaborating on research also maintains good working relationships with 3rd level universities, as well as other research stakeholders such as representative bodies like the Local Government Management Agency.

These research projects and associated academic partners include:

- Scientific Assessment of Alternatives to Herbicide Use in the Maintenance of Amenity Public Open Spaces in conjunction with Maynooth University (MU)
- Preparation of Guidance for Local Authorities on Climate Adaptation of Regional and Local Roads in conjunction with Technological University of the Shannon (TUS)
- Nature Based Solutions Education Network in conjunction with Trinity College Dublin (TCD)

Structure of the Climate Action Plan

This Draft 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 Draft Climate Action Plan is set out in four parts.

Firstly, the evidence base used to inform on climate action within the jurisdictional area of Offaly 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 Offaly County Council's Decarbonising Zone (DZ), Tullamore, 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.

EVIDENCE-BASED CLIMATE ACTION

...in any effort to prioritise and manage future climate mitigation actions, it is vital for local authorities to identify and understand their challenges...

As civilization is experiencing a global climate and biodiversity crisis, many of the solutions and actions that will help reverse the current climate situation are locally based. Therefore, in any effort to prioritise and manage future climate mitigation actions, it is vital for local authorities to identify and understand their challenges while also harnessing synergies to benefit from opportunities in the delivery of effective climate action in their areas.

Each local authority has three roles when it comes to accounting for GHG in their administrative areas;

1) Direct emissions for local authority operations and services (public lighting, fleet, local authority owned and operated buildings and facilities)

2) Direct influence on emissions through local authority functions (planning, procurement, infrastructure delivery)

3) In-direct influence on County-wide emissions (collaboration, facilitation, awareness, promotion with private sector, etc.)

Currently sectoral GHG emissions tracking is carried out at a national level centrally by government bodies. These are not broken down to local authority level. There is no publicly available data on private sector emissions at building level. There are varying levels of experience and expertise in the field of baselining emission data across the local authority network in Ireland.

In order to address the data gap, the five midland counties decided to collectively procure consultants to develop the required Baseline Emission Inventory (BEI) assessment reports covering countywide emissions and more specific decarbonisation zones emissions. The sub-regional approach to procuring consultants allowed for economies of scale, swiftness of appointment and consistency of approach across the five midland counties. These BEI assessment reports would help identify key sectoral sources of emissions across the individual administrative areas while identifying problem areas for priority actions for each local authority.

Offaly County Council was the lead authority in the procurement process of BEI assessment consultancy for the midlands sub-region and worked closely with our colleagues in the Midlands & Eastern Region CARO office during the tendering, tender assessment and appointment phases. The scope of works contained in each tender followed the Local Authority Climate Action Plan Guidelines tiered approach, with Tier 1 being a Top-Down approach for county-wide BEI assessments and Tier 3 bottom-up, spatially led for DZ assessment reporting. It must also be noted that the BEI assessment report is a "snap-shot in time" of an areas GHG emission sources.

Another critical tool in effective evidence-based adaptation planning and implementation is the development of climate change risk assessments (CCRA). Here again Offaly County Council volunteered to procure, with the assistance of CARO, expert consultants in the field of climate risk assessment to produce five individual CCRA, tailored specifically to each local authority while using a consistent methodology across the sub region, on behalf of the five midland counties.

The following pages give a summary of each assessment report for Offaly County Council i.e., Climate Change Risk Assessment, County-Wide Baseline Emission Inventory assessment report and Offaly County Council's current emission profile.

Final consultant reports on County-Wide BEI's, Decarbonisation Zone BEI's and Climate Change Risk Assessment are supplementary documents to this Climate Action plan and are publicly available to view or download from www.Offaly.ie

Climate Change Risk Assessment

Adaptation is the approach for addressing the current or future risks posed by a changing climate. The aim of adaptation is to increase resilience while reducing the risks posed by climate change to our environment, society and economy. Adaptation can also bring opportunities through green growth, innovation, employment and ecosystem enhancement.

Assessing climate change risk underpins evidence-based adaptation planning and implementation. Climate change risks differ from other risks as it can be difficult or even impossible to quantify short-term or long-term probabilities due to the sheer speed of current climate changes. As a result, conventional risk assessments that use statistical probabilities can be ineffective. For the purpose of assessing climate change, risk is composed of three inter-related components;

1. Hazards: Refers to potential sources of harm in terms of damage/loss of property/infrastructure, potential injury, loss of life or other health impacts, livelihoods, service provision, ecosystems and environmental resources. Here we generally refer to climate related physical events or trends or their physical impacts.

2. Exposure: Refers to the presence of assets, infrastructure, property, people, livelihoods, species or ecosystems, environmental functions, services, resources in place or settings that could be affected. It is important to note that exposure can change over time, e.g., because of land use changes.

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

The benefits of developing CCRA's include raising awareness of the consequences of climate change, identification and prioritisation of risks, identification of possible adaptation responses while also tracking changes in risk and monitoring and evaluating the effectiveness of adaptation measures.

Taking all this into account, and following a competitive tender process, on behalf of the midlands sub-region, Offaly County Council proceeded to appoint KPMG Future Analytics as consultants to carry out Climate Change Risk Assessments. The scope of their works aligned closely with Technical Annex B of the Local Authority Climate Action Plans Guidelines. As per the guidelines, KPMG adopted a Tier 1 or qualitative approach (based on available information and supports screening of climate change related hazards and risks) in their methodology to developing the CCRA.

While adopting their individual Climate Change Adaptation Strategy in 2019, each local authority would have done significant work in developing a CCRA at that time. Using national and international guidance and best practice, the LA CAP CCRA builds upon that body of work, bridging the information gap from 2019 to present day while taking two distinct approaches within the CCRA by determining "current climate risks and impacts" while also assessing "future climate risks and impacts".

Firstly, KPMG developed a profile of County Offaly within the wider midlands' region, looking at physical and environmental characteristics together with socioeconomic characteristics. They documented observed changes in Offaly's climate which reflected trends across the rest of Ireland. They also developed a climate hazard profile for Offaly detailing significant climate and weather events over a forty-year period from 1982-2022. This showed that severe windstorms were the most frequent weather event occurring "frequently" or every 1 to 2 years. The next most frequent climate and weather event type was river flooding occurring at a "frequent" rate of 1 to 2 years and followed next by heatwave which had a "common" frequency or every 2 to 10 years.

Next KPMG looked at the exposure, vulnerability and impacts of "current climate risks" such as those experienced during Storm Ali in 2018 where 2450 citizens were left without power. Heavy snowfall in 2018 due to Storm Emma resulted in road closures and transportation disruption across the county, and hot temperatures in 2022 affected rail lines in the county leading to reduced speed limits for trains affecting commuters.

The CCRA report provides a detailed analysis of the key impacts and key exposures (and key vulnerabilities) in a general physical/social/environmental context and also a more specific local authority service delivery context across the eight main climate hazards identified for Offaly i.e., Heatwave, Drought, Cold Spell, Heavy Snow, Severe Windstorm, Pluvial Flood, River Flood and Groundwater Flood. Using all this data, the following Current Climate Impact Matrix was developed.

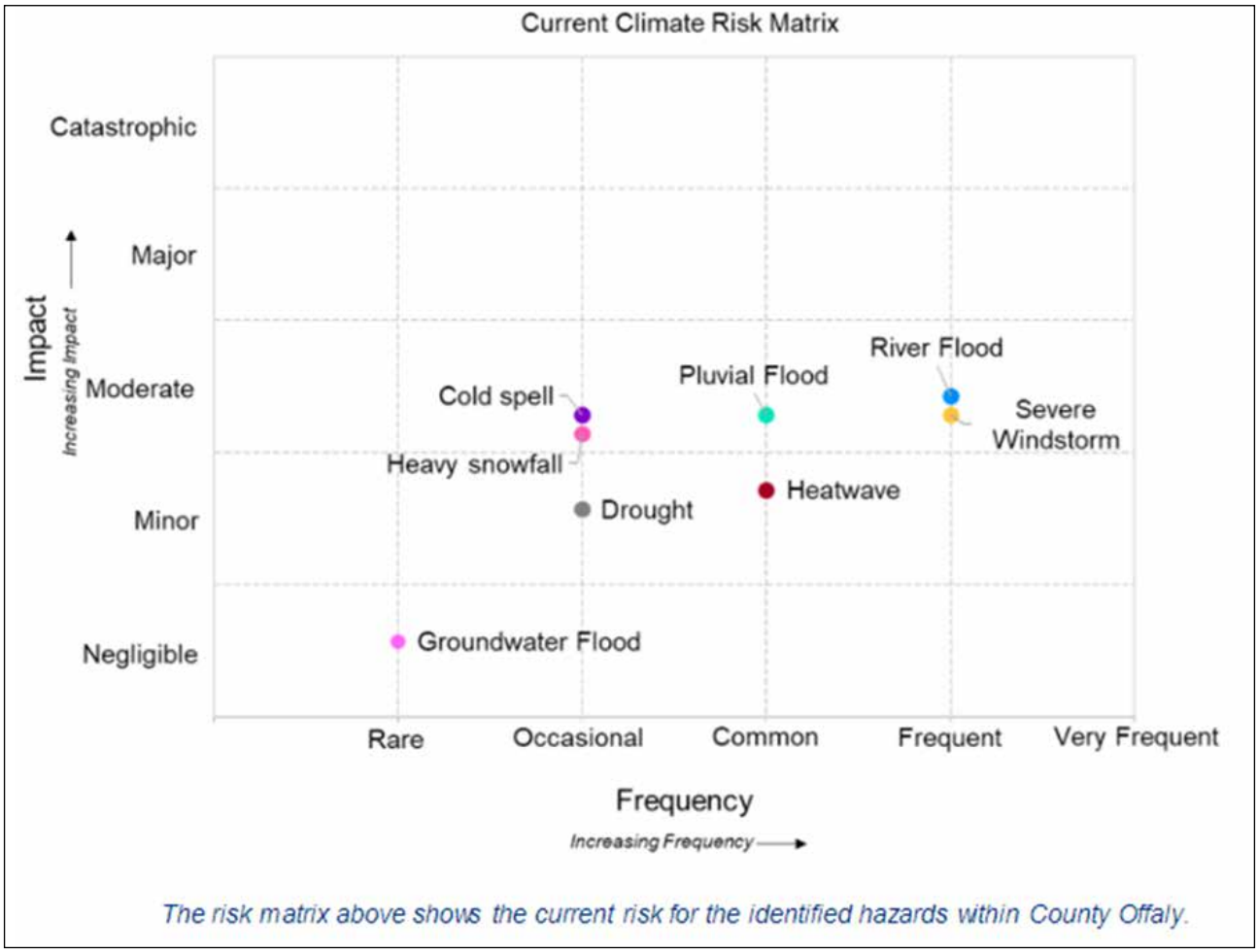


Figure 2.1: *Risk Matrix showing current risk level for identified hazards within County Offaly.*
Source: Offaly County Council Climate Change Risk Assessment, 2023.

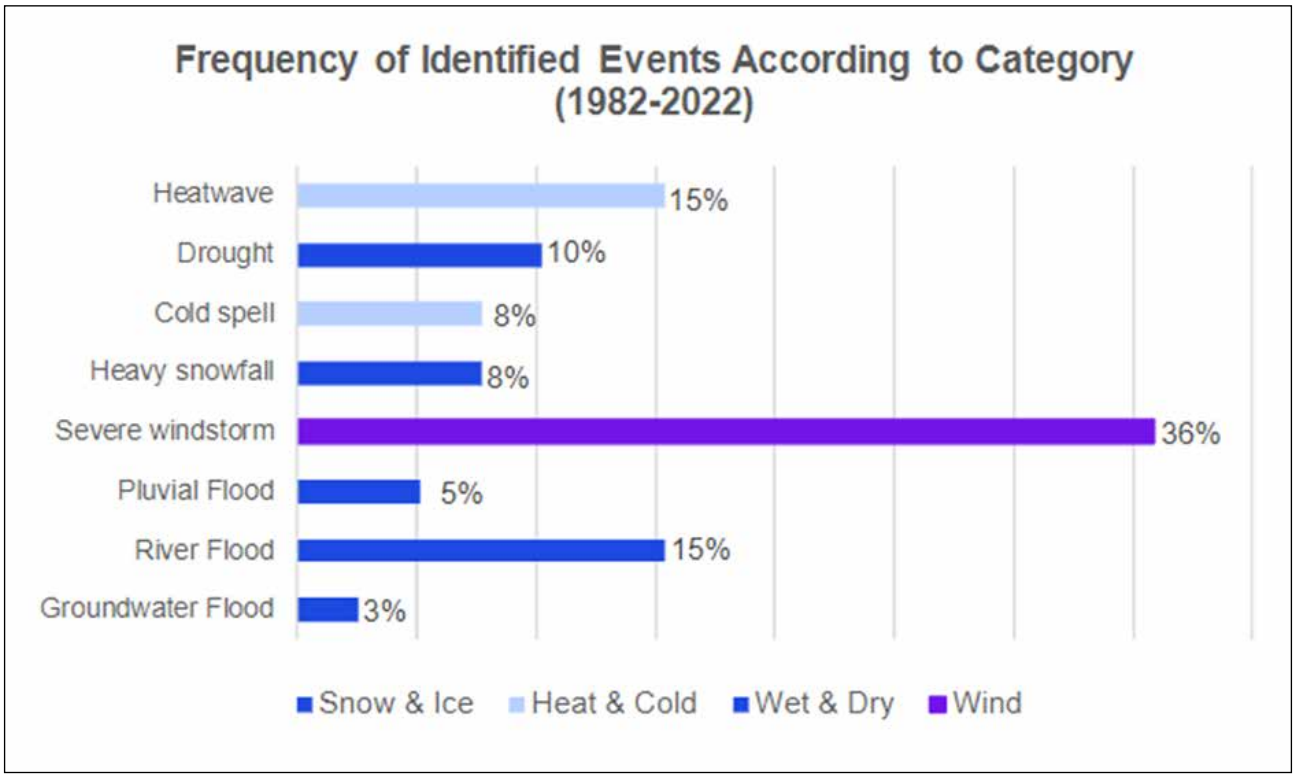


Figure 2.2: *Frequency of Identified Climate Events according to category in Offaly.*
Source: Offaly County Council Climate Change Risk Assessment, 2023.

Next KPMG looked at climate projections for County Offaly to 2050 and examined our "future climate risks and impacts". It is noted that climate risks may increase, decrease or emerge in the future due to a change in either the frequency and severity of climate hazards and/or changes in exposure and vulnerability.

Again, the eight main climate hazards identified were projected to 2050 with projected changes in heatwaves and drought, together with pluvial flooding and river flooding all expected to increase in frequency while cold spells and heavy snowfall predicted to decrease in frequency. High levels of uncertainty remain regarding the changes in frequency of severe windstorms and underground flooding. The consultants also looked at the changes in exposure and vulnerability associated with future changes in significant climate event frequencies.

Changes in our Climate Impact Matrix may look like this:

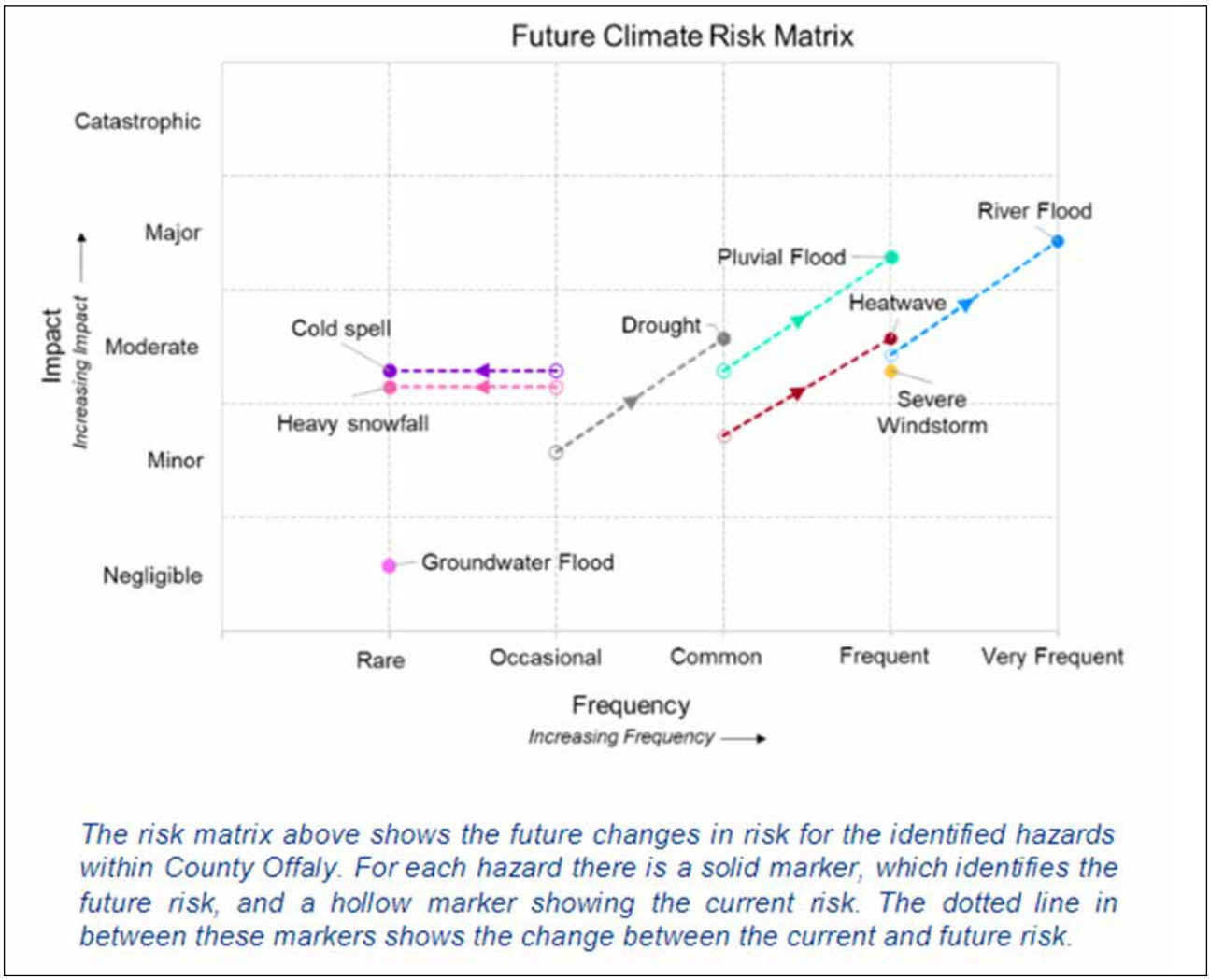


Figure 2.3: *Risk Matrix showing future possible change between current risk and future risk in County Offaly.*
Source: Offaly County Council Climate Change Risk Assessment, 2023.

To increase resilience, Offaly County Council will need to proactively plan for and adapt to the current and future climate change risks identified throughout the CCRA.

County-Wide Baseline Inventory

Developing and understanding baseline emissions is critical to informing each local authority's climate action plan. Understanding the local energy and emissions landscape and specific local characteristics is the only way to create an informed approach to impactful mitigation actions and ensure that local authority resources are focused on the emission sectors relevant to their local authority.

An Offaly county-wide BEI can give good quality "snap-shoot in time" in relation to GHS emission data across several sectors such as;

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

Following a competitive tendering process, again on behalf of the five Midland Counties forming the CARO Midlands & Eastern sub-region, Offaly County Council appointed Fehily Timoney as consultants to produce 5 individual County-Wide BEI assessments using a similar consistent approach across the sub-region. The scope of their works was aligned with Technical Annex C of the Local Authority Climate Action Plan Guidelines and each of the five midland counties acknowledged that a Tier 1 or Top-Down approach to the assessment report would best fit their current experience levels in BEI development, analysis and data manipulation. It is envisaged that over time and for future iterations of LA Climate Action Plans, knowledge and expertise will have increased sufficiently to develop Tier 2 or Tier 3 BEI assessment reports in-house.

The BEI assessment carried out by Fehily Timoney evaluates and determines the baseline GHG emissions from various societal sectors in the county in 2018, which allows Offaly County Council to measure the emission reductions required to achieve the emission reduction target of 51% by the year 2030.

The national emission reduction target of 51% by the end of 2030 is based on the GHG emissions reported for the end of 2018, in the national GHG emissions inventory. Accordingly, the data collated and analysed to inform the Offaly BEI is relative to the baseline year of 2018, or the nearest year possible to 2018.

It should be noted that different sectors have differing emission reduction targets i.e., residential 40%, Industrial processes 35%, agriculture 25% while the public sector has a 51% emission reduction target aligning with national targets figures.

The results of the county-wide BEI assessment report shows that during the baseline year of 2018 Offaly generated 1.45m tCO2-eq. This can be broken down as follows:

Sector	2018 Emissions tCO_2-eq	Percentage Breakdown
Residential	251,999	17%
Commercial and Industrial*	100,043	7%
Industrial Processes	9,787	1%
Agriculture	686,677	47%
Transport	251,102	17%
Waste and Wastewater	14,154	1%
LULUCF **	137,115	9%
Total	1,450,877	100%

Table 2.1: *The results of the county-wide BEI assessment report, GHG Emissions per sector for the baseline year 2018.*
(Source: Baseline Emissions Inventory Report for County Offaly, 2023)

Within the county-wide BEI assessment report, each sector is broken down to give further insight into emission sources i.e., fuel types for space heating in dwellings under residential sector, vehicle types under transport sector, livestock type under agriculture sector etc.

Again, the benefit of having a BEI assessment report developed prior to commencing our Climate Action Plan drafting is that we are working off good quality evidence base which allows us to understand the contribution of different activities, identify problem sources and determine where best to focus mitigation efforts, identify opportunities and design effective actions to help reduce emissions.

The headline results of our county-wide BEI assessment highlight that agriculture accounts for 47% of county-wide emissions which may have been expected from a rural county with almost a quarter of a million cattle/dairy cows and another quarter million sheep/pigs/poultry combined, resulting in 92% of livestock emissions coming from cattle/cows. Emissions from livestock account for 73% of overall agricultural emission with

the remaining 27% coming from managed soils. Under LULUCF, grasslands emit almost a further quarter million tCO^2-eq.

The real standout figure contained in the Offaly BEI assessment is that 17% of total emissions coming from the residential sector (251,999 tCO^2-eq). Our consultants confirmed that the midland region has the highest proportion of residential emission in the country, with Offaly having the highest levels in the midlands. Residential emissions are placed second highest in Offaly, while all other midland counties had Transport as their 2nd highest.

This may be a result of the predominance of fossil fuels, including turf and peat briquettes, used for residential space heating throughout Offaly in the baseline year of 2018.

This also highlights a potential area for prioritisation of actions within the local authority climate action plan with respect to reducing residential sector emissions by such measures as housing retrofit programmes, renewable energy roll out, geothermal heating, district heating and addressing fuel poverty issues in line with national policies and objectives.

The county-wide BEI assessment speaks to the local authority's in-direct role in emission reduction i.e.

3) In-direct influence on County-wide emissions (collaboration, facilitation, awareness, promotion with private sector, etc.).

It also allows the local authority to gauge the overall impact of their own direct emissions on a county-wide scale.

Offaly County Council Direct Emissions

As per the governments Climate Action Plan 21, the public sector will lead by example, inspiring the necessary climate action in wider society to reduce Irelands GHG emissions by 2030. An overall sectoral target of 51% reduction in GHG has been set for the public sector and as a local authority, Offaly County Council are accountable for reducing their direct GHG emissions in their administrative area;

1) Direct emissions for local authority operations and services (public lighting, fleet, local authority owned and operated buildings and facilities)

For many years each public body, including Offaly County Council have been reporting their energy usage and subsequent GHG emissions annually to SEAI under their Monitoring & Reporting (M&R) programme. This is a mandatory energy and emissions declaration that each local authority must complete each year. It allows each local authority to track their energy consumption, energy efficiencies and GHG emissions and identify trends over time.

Coming from the Climate Action & Low Carbon Development (amended) Act 2021 and subsequent Climate Action Plan 2021, new ambitious energy efficiency and GHG emission reduction targets have been given a legal footing. Local Authorities must increase energy efficiency by 50% and reduce GHG emissions by 51% by the end of year 2030.

The baseline year for energy efficiency targets is 2009, while the baseline year for emission reduction is 2016-2018. The emission reduction target is an "absolute" target i.e. no matter the number of new buildings under the remit of the local authority, or the increase in staff numbers or an increase in public lights installed or vehicles purchases/leased the target of 51% reduction on 2018 emission levels remains constant, which in the case of Offaly County Council is a limit of no more than 1,507 tCO2.

While the energy efficiency results are dependent on a number of different metrics, Offaly County Council has successfully continued on the path to achieving increased energy efficiency over the past number of years. For example, national energy efficiency targets for the public sector were initially set at 33% by the end of year 2020, Offaly County Council successfully exceeded that target by achieving 35.5% energy efficiency. This trend continues as initial data for energy efficiency from the SEAI M&R portal to end of year 2022 indicate a rate of 40.2% increase in energy efficiency to the baseline year.

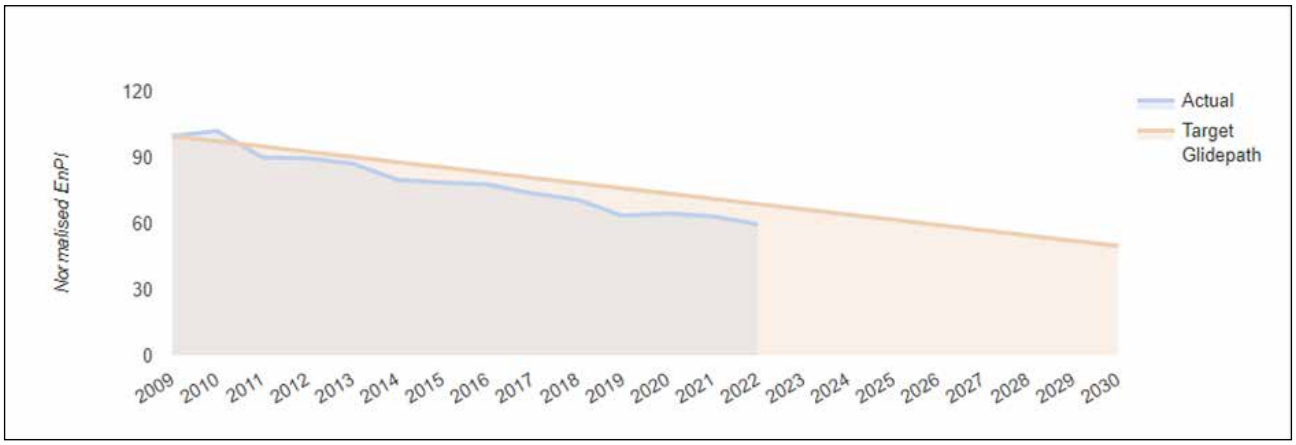


Figure 2.4: *Energy Efficiency Improvement (2009-2020), progress from baseline to 2020 target. (Source: Offaly County Council PB-00377 Energy and Decarbonisation Pathway to 2030)*

This increase in energy efficiency has been aided by the decarbonising of the national grid due to the increases in renewables used and a decrease in fossil fuel usage.

As part of our evidence-base gathering, we have broken down the organisation's main sources of emissions to:

- Grid Electricity
- Transport fuels
- Natural Gas
- Oil Heating

We have also identified the organisation's significant energy users and continue a schedule of energy "deep dives" into our main buildings by way of SI426 Energy Audits. These individual building energy audits provide a pipeline of projects to deep retrofit each building to significantly increase energy efficiency and reduce GHG emissions.

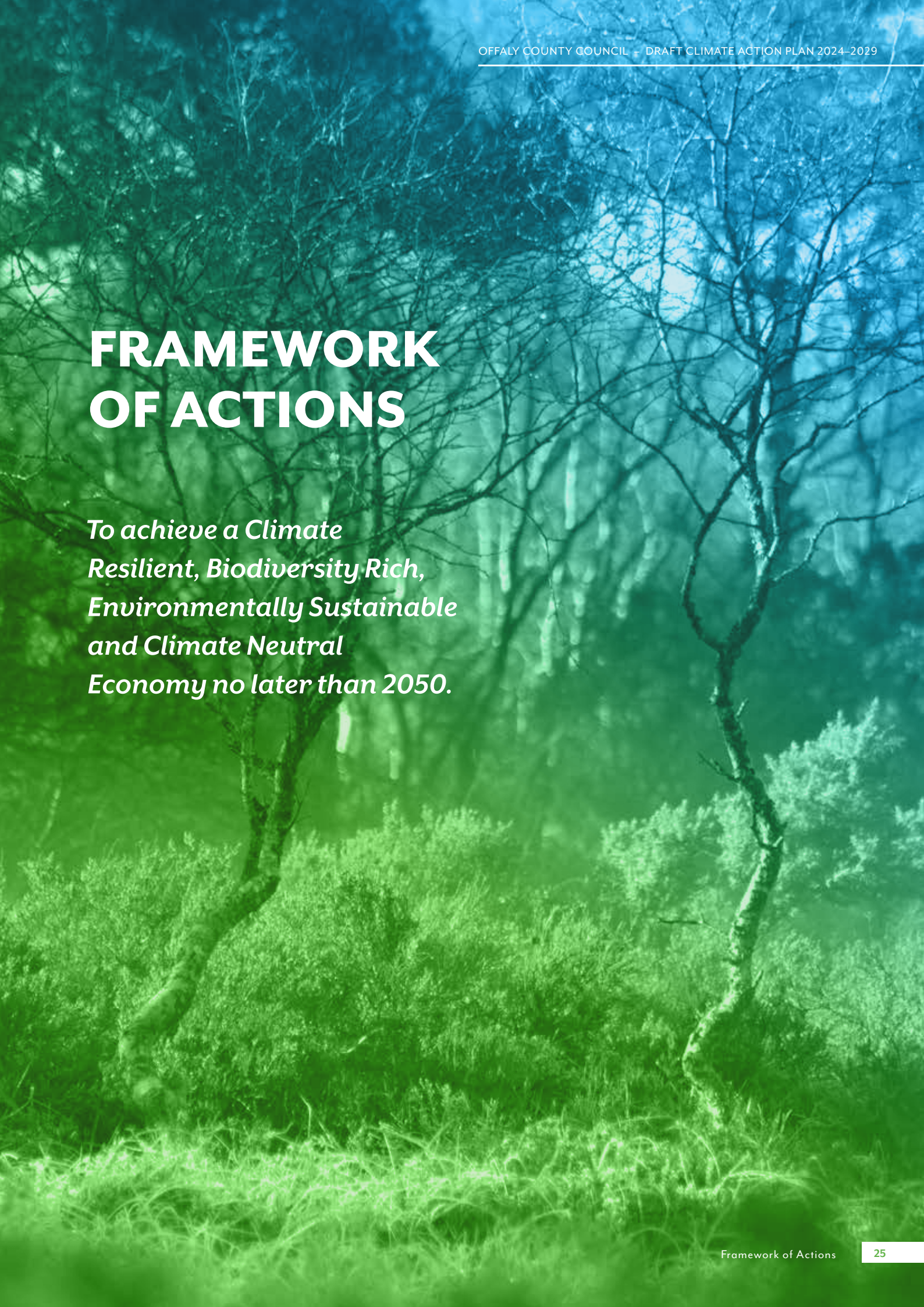
Having signed up to the SEAI Pathfinder Programme in 2023, Offaly County Council will take a large step towards tackling the organisations thermal heating emissions over the programme life of three years.

Progress is being made on decarbonising our fleet with the purchase of 5 EV's to replace diesel equivalents, and the operation of two new Velocity Patching Units on Hydro-treated Vegetable Oil (HVO). The fleet manager is also currently trialing the use of HVO fuel, which produces 90% less carbon than regular fossil fuel, in a number of larger road maintenance vehicles.

Stakeholder Engagement

As part of the "Initiation" stage of the statutory plan making process, Offaly County Council's Climate Team embarked on an extensive schedule of pre-draft stakeholder engagement activities. This included internal stakeholder engagement within the organisation, which commenced in January 2023, and external stakeholder engagement commencing in April 2023 with the individuals, businesses, agencies and groups in the wider community. The purpose of this early engagement was to encourage stakeholders to "Have Your Say" in the formation and development of their climate action plan.

Engagement took the form of individual meetings, group meetings, presentations, workshops, print media, social media, local radio and written submission to our dedicated email address. Offlay County Council have produced a Stakeholder Engagement Report and this document is supplementary to the LA CAP.



FRAMEWORK OF ACTIONS

To achieve a Climate Resilient, Biodiversity Rich, Environmentally Sustainable and Climate Neutral Economy no later than 2050.

Plan Vision

To achieve a Climate Resilient, Biodiversity Rich, Environmentally Sustainable and Climate Neutral Economy no later than 2050.

Plan Mission

Offaly local authorities will demonstrate leadership by achieving our emission and energy targets by 2030. In doing so we will lead, support and advocate for the broader society to increase their capacity in building climate resilience and increase climate awareness towards achieving a low carbon society.

The framework of actions contained in this Plan are divided into 6 areas of thematic focus. Each thematic focus stands alone while also being cross thematical. Under each thematic focus there is an overarching strategic goal for that focus area. This strategic goal is further broken down into listed specified objectives. In order to achieve these objectives, SMART actions are proposed for implementation during the 5 year life of the Plan. Actions contained under each thematic objective will have an internal, external or combined focus and will have a mitigation, adaptation or combined effect.

In developing this Plan, every effort was made to align with international, national, regional and sectoral commitments on climate action. This Plan also gives commitment to consider any relevant updated actions, measures or recommendations that may arise in updates to the national Climate Action Plan or similar over the lifetime of the Plan. Listed below are some of the plans considered in the development of this CAP:

- Climate Action and Low Carbon Development Acts 2015-2021
- Climate Action Plan 2021 & 2023
- Offaly County Development Plan 2021-2027
- EU Just Transition Fund (JTF)
- National Biodiversity Action Plan 2017-2021
- National Adaptation Framework
- Offaly Climate Change Adaptation Strategy
- Draft River Basin Management Plan 2022-2027
- Delivering Effective Climate Action
- Regional Spatial Economic Strategy for the Eastern and Midlands Region
- Sustainable Development Goals

Framework of Actions

Governance and Leadership							
Climate Change considerations are mainstreamed and integrated successfully into all functions and activities of Offaly County Council ensuring operational protocols, procedures and policies implement an appropriate response in addressing the diversity of impacts associated with climate change.							
Obj. No.	**Action**	**Adaptation / Mitigation / Combined**	**KPI**	**Lead Dept**	**Partners**	**Timeframe**	**Dependencies**
1.1	To demonstrate leadership in climate action						
	As leaders on climate action, local authorities will need to demonstrate strong ownership of agreed targets and the capacity to integrate climate action into the core policymaking, prioritisation, and budgetary processes of their organisations.	Combined	Adaptation & mitigation policies and measures contained within LAP's, Team Plans and PDP's	Planning	DHLGH, HR, Planning Staff	Annually	Central Government
	Nominated climate and sustainability champion at senior management level	Combined	Member of SM Team nominated	Corporate	SM Team	2024	
1.2	To ensure climate action is mainstreamed into all activities and operations						
	Promote and support carbon adaptation and mitigation policies, objectives, and standards of the Offaly County Development Plan 2021-2027, having due regard to environmental sensitivities such as European sites, biodiversity, air and water quality.	Combined	Number of planning applications received in line with policies and objectives	planning	Other LA Sections, Agents, Developers, DHLGH	Annually	All Sections, developers
	To seek funding for a feasibility study to investigate and propose measures to address energy poverty and emission production due to widespread reliance on peat burning as domestic heat source	Mitigation	Feasibility study completed	Climate Team	MD staff, Housing	2026	Funding
	Collaborate with other Irish signatories to the EU Missions Adaptation to Climate Change on funding applications	Adaptation	No. of funding applications submitted	Climate Team	SCC, GCC, LCC, CCC, DCC	Annually	Funding calls
	Develop a Green Public Procurement Strategy for Offaly County Council	Combined	Strategy in place	Finance	All sections	2024	
	Promote green procurement, in order for goods, services and works to support environmental and wider sustainable development objectives, to assist in balancing cost effectiveness and sustainable development and to represent both short-term and long-term value for money.	Combined	% of contracts using GPP criteria	All sections	OGP	short	Procurement

1.3	To build capacity within OCC to deliver effective climate action						
	Ensure capacity and training, within the local authority, to deliver on climate action targets is enhanced / maintained by providing relevant climate action training to local authority staff when required.	Combined	% of Planning Staff received refresher CA training	HR	HR	Annually	HR
	Set an example through implementing blended working practices and facilitate home working in order to reduce employees' travel time and distance travelled	Mitigation	Number of blended working days used per year	All sections	HR, IS, LGMA	short	Management
	Facilitate departments in moving to online forms and public consultations and reduce paper-based processes	Mitigation	New forms should be made available electronically and filled in online rather than printable versions	All departments	submit.com	2027	
1.4	To identify opportunities that may arise from the challenge of climate change						
	Utilisation and Promotion of the Data Centre Integration Report	Mitigation					Budget, Marketing and Resources
	Implementation of Offaly Economic and Development Strategy, in particular Green Technology.	Combined					Resources
	Offaly Library Service will deliver on all Climate Action related targets as outlined in the new National Public Library Strategy 2023-2027, The Library is the Place: Information, Recreation, Inspiration. (*Note Appendix 2 for SDG cross referencing*)	Combined	No of targets delivered	Library Service	DRCD, Library Development Committee, LGMA	2023 -2027	Staffing resources, budgets, expertise and support
	Offaly Library Service will deliver on all Climate Action related targets as outlined in future Library Development Plan 2024-2028, in preparation	Combined	No of targets delivered	Library Service	DRCD, Library Development Committee, LGMA	2024-2028	Staffing resources, budgets, expertise and technical support

Governance and Leadership, Offaly CAP 2024-2029
Contributes to 8 out of the 17 goals

Built Environment

Increased capacity for climate resilient structural infrastructure that is centred on the effective management of climate risk, informed investment decisions and positive contribution towards a low carbon society.

Obj. No.	Action	Adaptation / Mitigation / Combined	KPI	Lead Dept	Partners	Timeframe	Dependencies
2.1	To increase the efficiency and reduce GHG emissions of council buildings in line with 2030 targets						
	Continue to retrofit local authority social housing stock under the National Retro Fit Programme; 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 in accordance with relevant protected structures regulations.	Mitigation	No. of dwellings retrofitted	Housing	DHLGH	Annually	DHLGH funding, Match funding availability, Availability of trades
	Conduct energy audits across our corporate buildings as appropriate, using Gap to Target tool to inform energy project implementation	Mitigation	No. of energy audits complete	Energy Action Team	MD's, Libraries, Housing, Fire service	Annually	Funding from sections
	Upgrade of corporate buildings via Pathway project towards achieving 2030 targets, 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 in accordance with relevant protected structures regulations.	Mitigation	No. of corporate buildings retrofitted under Pathway	Climate Action	Climate Team, Energy Team, MD Staff	2024- 2030	
	Assign Energy Engineer to lead energy efficiency projects and campaigns	Mitigation	Resource assigned into dedicated role	Climate Action	Facilities manager, Housing, MD Staff	2024-2029	Own resources to fund position, savings generated
	Complete retrofitting LED heads to public lights as per the national PLEEP programme contract, having due regard for the impact the spectrum of light used will have on protected nocturnal species such as bats.	Mitigation	% of public lights retrofitted	Road Design	TII, RMO,	2024	Availability of contractor under PLEEP contract
	Investigate the potential for and funding sources to develop our approach to affordable net zero energy retrofits	Mitigation	Funding application submitted	Energy Action Team	Climate Team, Facilities Manager, Building managers	2024-2029	Funding available

2.2	To align with energy directives and successfully achieve 2030 targets						
	Guided by the Energy Performance of Building Directive (planned for adoption in mid-2023) deploy suitable solar energy installations on all new public and non-residential buildings with a useful floor area over 250m^2 by 31 December 2026, on all existing public and non-residential buildings undergoing a major or deep renovation with a useful floor are over 400m^2 by 31 December 2027, and on all new residential buildings by 31 December 2029.	Mitigation	Implementation plan agreed	Energy Action Team	Climate Team, Facilities Manager, Building Managers	2024-2029	Funding available
	Planned and future construction of new corporate buildings to contribute towards achievement of OCC's Climate targets	Mitigation	% of Capital building work contracts using energy efficiency criteria			Ongoing	Staffing resources, budgets, expertise and support
	Implement Building Information Modelling to Housing Capital projects	Mitigation	Carbon Saving	Housing		2025	
	Develop a corporate buildings register in line with relevant energy efficiency Directives	Mitigation	Register developed	Energy Team	Facilities manager, MD staff, Libraries, Fire staff	2025	
	Develop a multi-year implementation plan for IS Department to increase energy efficiencies across the organisation	Mitigation	Implementation plan agreed	IS Section	Energy Action Team, Corporate, Facilities Manager, Building managers	2024	
2.3	To increase use of nature-based solutions and enhance biodiversity in all developments						
	Pilot a biodiversity inclusive design for a social housing estate with green roofs, green walls, wetlands & pond SUDS, green carparking, nest boxes in facades, grasslands, and wildlife friendly shrubs and trees in open spaces	Combined	Pilot project designed and delivered with results published	Heritage & Biodiversity	Housing Section	2025	Potential funding gaps
	Build climate resilience and improve energy performance of architectural and archaeological heritage in public and private ownership through schemes such as BHIS, HSF, HTI, IWTN and Community Monuments Fund.	Combined	Number of sites per year funded through each of the schemes.	Heritage & Biodiversity	SEAI, Heritage Council, Energy Team	2024-2029	Funding
	Incorporate SUDS/NWRM/NBS in all capital work funding applications	Combined	No. of application incorporating SUDS	Regeneration Team	Housing, MD Staff, Climate Team	Annually	Department funding
	Implement nature-based solutions, such as bioswales and permeable pavements, using a multi-disciplinary team to guide planning, installation and monitoring to improve stormwater management and enhance local biodiversity.	Combined	% of new developments with green infrastructure incorporated	Heritage & Biodiversity	Housing Section	2024-2029	

2.4	To reduce the need for new construction by repurposing existing buildings						
	Address Vacancy & Dereliction - under URDF and Vacancy Property Refurbishment Grant schemes	Mitigation	No. of properties brought into use by OCC and no. of private grants administered	Regeneration Team	MD Staff, Housing	Annually	Department funding
	Refurbishment of derelict building as greener option than new builds & brown field sites	Mitigation	No. of properties brought back into use	Regeneration Team	Housing, MD Staff,	Annually	Department funding
	Apply for funding under various funding streams to facilitate the regeneration of communities and town / village centres, under the Urban and Rural Regeneration and Development Funds and Town and Village Renewal Schemes.	Combined	No. of funding applications successful	Regeneration Team	MD Staff, Housing, Heritage	Annually	Department funding
	Vacant/Derelict Properties - Incorporating energy efficient designs into the refurbishment and retrofitting of buildings	Mitigation	No. of properties retrofitted	Regeneration Team	Housing, MD Staff, Energy Team	Annually	Department funding

Built Environment, Offaly CAP 2024-2029
Contributes to 10 out of the 17 goals

Transport

Increase the resilience of roads and transport infrastructure that is centred on the effective management of climate risk, informed investment decisions which contribute towards a low carbon society.

Obj. No.	Action	Adaptation / Mitigation / Combined	KPI	Lead Dept	Partners	Timeframe	Dependencies
3.1	To migrate the Council fleet towards low carbon fuels and electric vehicles						
	Migration of the Offaly County Councils Corporate Fleet to Low Emission fuels (Electric/HVO); having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, and local air quality during any necessary development to facilitate the change.	Mitigation	% of vehicles using low emission fuel within fleet	Roads Section	OCC	Annual	Ability to source a continuous fuel supply and the increased operational costs which will need to be borne by each Departments Budget.
	Formulation of a County/Regional EV Strategy for the delivery of Zero Emission Electric Vehicle Infrastructure, having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality, and cultural heritage.	Mitigation	Strategy Completed	Roads Section	LCC/RCC/LCC/WCC/ZEVI	Q1/2024	Funding from ZEVI
	Delivery of the Surface Dressing program using lower carbon approaches (HVO fuel)	Mitigation	Number of kilometres of surface dressing delivered using low emission fuelled vehicles	Roads Section		Annual	Ability of the older fleet mainly the Phoenix to operate on HVO
3.2	To provide infrastructure and support modal shifts to low carbon methods of transport						
	Delivery of the Grand Canal Greenway and/or other Greenways and associated Trailheads to facilitate modal shift.	Combined	Number of kilometres of greenway delivered	Roads Section	TII/Waterways Ireland	2029	Funding and availability of Contractors
	Continued Delivery of the Offaly County Councils Active Travel Programs to facilitate modal shift, having due regard to environmental sensitivities such as traffic and transport constraints and aspects, the receiving water environment, local air quality, biodiversity, and European sites.	Mitigation	Number of active travel projects delivered through national active travel funding	Roads Section	NTA	Annual	Availability of Contractors
	Provide safe, equitable and accessible infrastructure for pedestrians and cyclists	Combined	No. of measures implemented	Roads Section	NTA	Annual	Availability of Contractors
	Acquire the NTA's Smarter Travel Mark. Demonstrate robust communications, policies, facilities, incentives and supports in favour of sustainable commuting and business travel.	Mitigation	Active Travel Mark acquired	Roads Section	Facilities manager, Corporate Services	2024	

	Encourage the use of sustainable transport modes for essential business-related trips, and provide staff with education, advice and supports to avail of sustainable options for such trips, for example through making Leap cards available for business travel or setting up a business account with a shared mobility provider	Mitigation	No. of engagements	Roads Section	Climate Team	Annual	
3.3	To work in partnership with public transport providers to expand networks and connections						
	Expand Public Transport networks in partnership with public transport operators and large employers	Mitigation	No. of new routes	Roads Section	TII, Private operators, NTA	2024-2029	Collaboration with other state agencies and private operators
	Improve and integrate Bus Services across County Offaly in order to facilitate modal shift.	Mitigation	% increase in services	Roads Section	Local Link/NTA/ZEVI	Annual	Funding and alignment of the many stakeholders' expectations.
	Promote Park and ride facilitates and investigate expansion to other areas in the county	Mitigation	No. of facilities	Roads Section	Local Link/NTA	2024-2029	
	Encourage the use of car-pooling / lift-sharing among those employees who have no viable alternatives to travel than via car, e.g., using dedicated carpool parking spaces	Mitigation	No. of carpool journeys	Roads Section	Climate Team, Corporate Services	Annual	Availability of corporate pool car available
	Promote and support National Campaigns such as Marchathon & Walktober to help promote modal shifts	Mitigation	Number of campaigns promoted	Roads Section	Staff engagement	Annual	Funding/staff resources
	Inter-modal transit hubs e.g., accessible interchange stations where passengers can switch modes to continue journeys	Mitigation	Inter-modal hub created	Roads Section	Climate Team, MD Staff, CIE	2024-2029	Collaboration with other state agencies and private operators

3.4	To increase the resilience of roads and transport infrastructure						
	Adaptation and Implementation of a Carbon Calculator for Roads Projects	Mitigation	Carbon Calculator developed and adopted	Roads Section	DOT/NTA/TII	2024/2025	Funding
	Implementation of new technologies for road maintenance delivery via two new Velocity Patchers.	Mitigation	Kilometres of roads serviced	Roads Section		Annual	Funding
	The use of new technologies for weed control and the removal of glyphosate materials.	Mitigation	Cease using glyphosate for routine weed control	Roads Section		Annual	Funding
	The implementation of 'Climate Adaptation Strategy for Regional and Local Roads', having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, and local air quality.	Adaptation	Development, adoption, and implementation of strategy	Roads Section	DOT	Annual	Funding

Transport,
Offaly CAP 2024-2029
Contributes to 8 out of the 17 goals

Natural Environment and Green Infrastructure

Fostering meaningful approaches to protecting natural and key cultural assets through an appreciation for the adaptive capacity of the natural environment to absorb the impacts of climate change, while also endorsing, investing and promoting green infrastructure in Offaly.

Obj. No.	Action	Adaptation / Mitigation / Combined	KPI	Lead Dept	Partners	Timeframe	Dependencies
4.1	To enhance biodiversity, protect natural assets and foster environmental sustainability						
	Develop and implement a Heritage Plan to record, conserve and raise awareness of all aspects of built, natural and cultural heritage in the County. Ensure actions of each plan complement each other.	Adaptation	Local Heritage Plan adopted every five years and actions implemented	Heritage & Biodiversity	Heritage Council	2024	Funding and staff resources
	Develop and implement a local Biodiversity Action Plan to protect and enhance local biodiversity, including climate relevant measures, having due regard to the need to appropriately protect, conserve and enhance important habitats and species and European sites, and support the maintenance and improvement of water quality in line with the aims of the Water Framework Directive.	Combined	Local Biodiversity Action Plan adopted every five years and actions implemented	Heritage & Biodiversity	NPWS	2024	Funding and staff resources
	Develop and implement pesticide reduction policy for the County Council - 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.	Mitigation	Policy completed and adopted through the relevant process	Heritage & Biodiversity	Various LA Section	2024	Adoption of alternatives
	Resource and implement relevant actions of the National Biodiversity Action Plan 2023-2030 (currently at draft stage) the Biodiversity Climate Change Sectoral Adaptation Plan 2019	Combined	Relevant actions CCSAP Biodiversity and NBAP identified (2023) and implemented (annually to 2028)	Heritage & Biodiversity	NPWS	2024-2029	Funding
	Develop integrated programme to address Invasive Alien Species through education and/or selected actions as appropriate. This programme shall be developed by a competent ecology team and shall have due regard to the need to appropriately manage and prevent the spread of invasive species.	Adaptation	Strategy developed. Top species of concern for County identified. Education/Management/eradication programme designed and in place as appropriate.	Heritage & Biodiversity	NPWS	2024-2029	Funding
	Conduct a county wetland survey and implement recommendations in terms of conservation and restoration of wetlands. Recommendations shall be developed by a competent ecology team and shall have due regard to the need to appropriately protect, conserve and enhance important habitats and species and European sites, and support the maintenance and improvement of water quality in line with the aims of the Water Framework Directive.	Adaptation	Wetland survey complete	Heritage & Biodiversity	NPWS	2026	Staff resources
	Implement a Countywide pollinator conservation initiative, creating and maintaining pollinator-friendly habitats based on most up to date scientific advice from AIPP, with a multi-disciplinary working group team responsible for planning, installation, and monitoring.	Adaptation	County Plan created and implemented. Number of sites included. Actions recorded with NBDC/AIPP	Heritage & Biodiversity	MD Offices	2026	Funding

	Develop citizen science project to target climate sensitive species	Adaptation	Number of workshops held to train volunteers	Heritage & Biodiversity	Local 3rd Level institutions, PPN, Community Groups	2026	Funding
	Increase climate themed events for national events such as National Heritage Week and National Biodiversity Week.	Adaptation	Number of events for each event with a climate theme.	Heritage & Biodiversity	Heritage Council	Annual	
	Produce and make accessible species-specific guidelines and pilot exemplars of animal aided design to integrate provisions for biodiversity in new development and retro fits, including bee-bricks, bat, swift and sparrow boxes, darkened areas for bats and areas suitable for pollinators, use green roofs and walls for biodiversity.	Adaptation	Species guidelines for planners complete for top 5 species of concern, based on regional priorities; number of exemplar projects developed.	Heritage & Biodiversity		2028	Staff resources
	Use Green Schools & Heritage in Schools programmes to promote biodiversity and climate issues in schools.	Combined	Number of schools participating	Heritage & Biodiversity	An Taisce, EAO	Annual	Continued participation
4.2	To reduce negative impacts associated with extreme weather events						
	Prepare strategic wildfire management plan for high-risk areas such as bogs and Slieve Blooms having appropriate regard to the need to support the achievement of conservation objectives and protect and enhance important habitats or the qualifying interests of any protected sites.	Adaptation	High risk areas identified. Strategic wildfire management plan produced and implemented.	Heritage & Biodiversity	Fire Services	2027	Funding staff resources
	Continued participation on the EU NBS EduWorld project, to enhance NBS knowledge at all education levels.	Combined	Participation until project completion	Climate Team	Green Offaly, Schools, Biodiversity Officer	2026	
	Explore and encourage innovative technologies to reduce flood and heat risk within urbanised areas	Combined	Tech project launched	Climate Team	IS Dept, 3rd Level College	2027	Partners available to collaborate
	Ensure all new development is assessed in relation to the requirements of the OPW Guidelines for Planning Authorities - The Planning System and Flood Risk Management	Adaptation	% of planning permissions compliant with OPW flood risk guidelines	Environment	OPW	Annual	Staff Resources
	Assess all new development for the implementation of natural water retention measures	Adaptation	No. of planning permissions assessed for NWRMs	Environment	LAWPRO, NPWS, EPA, LA Sections	Annual	Adoption of NBS principles within the organisation
	Provide Council staff with relevant training in NBS solutions	Adaptation	Training provided	Climate Team	EI, IPA	Annual	Training courses and providers available.

	Conduct tree cover survey. Devise and adopt tree management policy. Implement recommendations regarding canopy cover	Adaptation	Survey complete, policy adopted, canopy cover increased	Heritage & Biodiversity	Climate Team	2024	Adoption of ambitious canopy targets
	Conduct audit of all local authority archives and collections. Carry out risk assessments and ensure disaster management plans completed and actioned with targets to fit local circumstances. For archives and collections in private ownership, provide support and training as required for nationally and internationally important collections, in collaboration with collection owners	Adaptation	Number of local archives listed. Number of Archive collections with risk assessments complete.	Heritage & Biodiversity	Heritage Council, private collectors	2025	Funding

Natural Environment and Clean Infrastructure, Offaly CAP 2024-2029
Contributes to 11 out of the 17 goals

Community Resilience & Transition

To support empowered and cohesive communities with a strong understanding of climate impact, increased resilience to impacts of climate change with capacity to champion climate action at local level. Support and promote the principles of a "Just Transition" while availing of relevant JT funding.

Obj. No.	Action	Adaptation / Mitigation / Combined	KPI	Lead Dept	Partners	Timeframe	Dependencies
5.1	To collaborate with communities to enhance effectiveness of climate related programmes						
	Offaly LCDC will ringfence a portion of the Community Enhancement Programme	Mitigation	Funding Provided	Community & Culture	LCDC, DRCD, Finance Dept	Annually	DRCD Funding, LCDC Approval
	Organise capacity building training on all aspects of climate and biodiversity for community groups, including sharing of experiences and use of exemplar projects and demonstration sites	Combined	Number of training courses, number of people trained.	Heritage & Biodiversity	PPN, HR, Climate Team, CARO, LASNTG	Annual	Funding, training programme development
	Conduct a feasibility study for a Church Hill "Climate Park" investigating biodiversity enhancement, community power, river park, rain playground	Combined	Study complete	Climate Team	PPN, Community Section, residents	2025	Funding for study/design
	Offaly County Councils Tidy Towns Network holds a minimum of three annual meetings to promote biodiversity and climate action awareness to Tidy Towns Groups and to support entries in the Tidy Towns National Competition	Mitigation	Number of meetings held and number of attendees	Community & Culture	Offaly County Council Tidy Towns Groups Heritage Dept	Annually	Staff Resources, Funding
	Offaly County Council supports three Community Groups in the Annual Pride of Place Competition. A key element of the judging is the groups implementation of climate action measures.	Mitigation	Number of groups entering competition annually	Community & Culture	National Pride of Place Organisation Community Groups	Annually	Staff Resources, Funding
	Raise awareness and provide climate action training and workshops through the Public Participation Network for community, voluntary groups and marginalised groups.	Combined	Number of information sessions provided, and number of emails issued to groups	Community & Culture	PPN, OCC, OLDC, Community & Voluntary Groups, Climate Team	Annually	Staff Resources, Funding

	Offaly Library Service is committed to programming educational events and information sessions promoting awareness of climate action, the environment and sustainable development.	Combined	No. of events	Library Service	Climate Team	Annually	Staffing resources, budgets, expertise and support
	Age Friendly Programme - Provision of digital skills training for older people.	Mitigation	Number of people supported	Community & Culture	Age Friendly Ireland	Annually	Dept Funding
	Offaly LCDC will support expressions of interest for funding from community and voluntary groups who are seeking funding to carry out climate action projects through the LEADER Programme	Combined	Number of projects approved for funding	Community & Culture	Offaly LCDC OLDC DRCD	Annually	DRCD Funding
5.2	To build climate action capacity within communities						
	Disadvantaged groups and areas are encouraged to implement climate actions as part of the SICAP Programme	Mitigation	Number of groups supported	Community & Culture	OLDC Climate Action Team PPN	Annually	DRCD Funding
	Offaly County Council supports Laois/Offaly Local Link to provide Rural Transport to Ukrainian refugees throughout towns and villages in Offaly coordinated by the Community Response Forum	Mitigation	Reduction in emissions	Community & Culture	Community Response Forum Laois/Offaly Local Link Offaly County Council	Ongoing	Dept Funding
	Administer Community Climate Action Fund	Combined	% of CCAF allocated	Climate Team	C&C, PPN,	2023-2026	Community Groups, DECC Funding
	Support Sustainable Energy Communities by way of signed MoU with SEAI regarding the provision of bridge funding.	Mitigation	No. of bridge funding applications approved	Energy Action Team	SEAI	Annual	Internal funding available
	Annual Funding towards community mitigation actions	Mitigation					
	Provision of 300 native trees to Tidy Towns and Community Groups as part of Annual National Tree Week	Mitigation	Number of trees provided by Coillte	Community & Culture	Coillte Tidy Towns Groups	Annually	Coillte, National Tree Council, Offaly County Council.
	Engage with the appointed Offaly Teagasc adviser on their free climate action Signpost Advisory programme	Combined	No. of engagements	Climate Team	Env. Section	Annual	Signpost officer appointed for Offaly
	Develop project combining heritage and creative arts to address climate anxiety.	Adaptation	Project designed and implemented	Heritage & Biodiversity	Creative Ireland, creative Communities Coordinator	Annual	Funding
	Develop citizen science project with communities on a climate related subject.	Combined	Number of workshops held to train volunteers	Heritage & Biodiversity	Local 3rd Level institutions, PPN, Community Groups	2026	Funding

5.3	To support the development of green enterprise, employment and efficiencies						
	Support the North Offaly Development Fund to promote Rhode Business Park – 13 serviced sites with access to National Grid and encourage energy companies and companies testing new technologies to avail of the facilities.	Combined	No. of new businesses in Rhode Business Park		Offaly Innovation and Design Centre CLG	2029	Midlands Regional Enterprise Plan Committee, Midlands Regional Transition Team, overseas offices of Enterprise Ireland and IDA, Department of Enterprise, Trade and Employment, private sector promoters. Resources.
	Support the Junction Business Innovation Centre, Tullamore – Coworking hub for businesses developing Green Energy Technologies, Software and Design businesses.	Combined	No. of businesses supported	LEO	Enterprise Ireland, Dept.	Annually	Resources.
	Support Green for Business programme assisting enterprises to improve sustainability in their businesses	Combined	No. of businesses supported by Green for Business program	LEO	Enterprise Ireland	Annually	Engagement from local businesses, resources.
	Support LEAN Programmes, assisting enterprises to improve efficiencies and reduce waste in their businesses	Mitigation	No. of businesses on Lean programs	LEO	Enterprise Ireland	Annually	Engagement from local businesses, resources
	Local Enterprise Office Offaly are assisting businesses in Offaly to increase their digitalisation via the Digital Start programme, the Trading Online Voucher and the You're the Business scheme. We support Offaly businesses in enabling economic activities to go digital resulting in the reduced need for travel/transport, cutting carbon emissions.	Mitigation	No. of businesses using these schemes	LEO	Enterprise Ireland	Annually	Engagement from local businesses, resources
	Support the vision of Offaly as an alternative to Dublin, promote Offaly as a place offering a work life balance.	Mitigation	No. of businesses/workers relocating to Offaly	LEO	Green Offaly	Annually	Resources
	Offaly Innovation and Design Centre CLG (The Junction, e-Hive and stream BIRR) and Technological University of the Shannon are committed to the development of cooperation opportunities towards the provision of Higher Education programmes in County Offaly.	Combined	No. of programs on offer	LEO	TUS,	Annually	Resources
	Promoting and Supporting Green Business Practices in County Offaly - LEO Offaly encourage and educate local businesses on adopting sustainable practices such as energy efficiency, waste reduction, and resource conservation. This is done through workshops, training programmes, and providing access to resources and information on eco-friendly practices.	Combined	No. of businesses on such programs	LEO	Enterprise Ireland	Annually	Dependent on business owners taking the time to participate, Resources

	Offering Grants and Incentives - LEO Offaly can provide financial support through grants to local businesses to implement climate-friendly measures. This can include funding for energy-efficient equipment, eco-friendly product development and contribution to the circular economy.	Combined	No. of grants awarded	LEO	Enterprise Ireland	Annually	Resources

Sustainability and Resource Management

Sustainable policies and measures are devised influencing positive behavioural changes, supporting climate actions and endorsing approaches for successful transition to low carbon, Bio and climate resilient society.

Obj. No.	Action	Adaptation / Mitigation / Combined	KPI	Lead Dept	Partners	Timeframe	Dependencies
6.1	To promote sustainability across internal practices, external business and communities						
	Monitor & enforce waste regulations through working with WERLA	Mitigation	% of planned inspections in RMCEI Plan completed	Environment	WERLA, DECC, NWCPO, NWMPO	Annual	Coordination of priorities with WERLA
	Support voluntary groups with their litter clean ups throughout the year, including the provision of litter pickers, bags and gloves and removing all collected bags of litter	Mitigation	No. of clean up days supported	Environment	An Taisce	Annual	Continuation of National Spring Clean programme
	Provide solar compaction bins where possible	Mitigation	No. of new solar bins installed	Environment	DECC, MD's	Annual	Funding for solar bins from DECC
	Seek funding to conduct a Geothermal Mapping Project for all of Offaly to identify potential areas where the use of renewable geothermal heating is economically feasible.	Mitigation	Study complete	Climate Team	EU Funding schemes, GSI, Green Offaly	2025	EU Funding calls
	Seek funding for a County Wide Energy Master Plan	Mitigation	Study Complete	Energy Team	SEAI	2025	Funding availability
	Investigate the potential for a District Heat Network and smaller neighbourhood district heating schemes	Mitigation	Study complete	Energy Team	SEAI, Climate Team	2025	Funding availability
	Develop a Sustainable Event guide and policy for implementation for internal OCC and external organisers use	Combined	Policy developed	Climate Team	MD Staff, IS, Comms Officer, HSO	2024	
	Promote litter/waste awareness initiatives in accordance with the Councils Litter Management Plan 2022-2024 and the National Waste Management Plan	Mitigation	No. of awareness initiatives	Environment	DECC, MD's	Annual	Grant funding from DECC
6.2	To explore opportunities arising from sustainability practices and material reuses						
	Develop clear and targeted communications campaigns to ensure easy access to information on what can be recycled. Use positive and engaging messages that will resonate with citizens (e.g., cost savings, sustainability and job creation)	Mitigation	No. of campaigns	Environment	Climate Team	Annual	Civic amenity operators
	Support litter projects in local communities through the provision of supplies and financial support if possible	Mitigation	No. of community groups supported	Environment		Annual	

	Provide funding support and collaboration as per signed SLA with Kildare County Council to the Scientific Assessment of Alternatives to Herbicide Use in the Maintenance of Amenity Public Open Space project	Adaptation	Final report published, project completion	Climate Team	Env. Section, Biodiversity Officer, MD Staff	Annual	Appointment of PhD Student
	Increase water fountains across the County to reduce single use plastic waste	Adaptation	no. of fountains installed	Climate Team	Libraries, MD Offices	Annual	Suitable locations identified
6.3	To promote a circular economy by awareness raising to reduce waste						
	Develop portal on internal intranet to Reuse internal resources and goods wherever possible	Mitigation	Intranet page developed	IS Department	Climate Team	2024	
	Mandate strong covers for smartphones/tablets to reduce unnecessary broken devices	Mitigation	% of devices with covers	Information Systems	Climate Action	2024	Senior Managers

Sustainability and Resource Management, Offaly CAP 2024-2029
Contributes to 8 out of the 17 goals

DECARBONISING ZONE (DZ)

Tullamore, as Offaly's designated Decarbonising Zone, will show real leadership in delivering climate, biodiversity and sustainability actions through innovation, technology, creativity, and empowering community engagement...

"DZ's are spatial areas identified by each local authority to act as demonstration testbeds of what is possible for Decarbonising and climate action at a local and community level"

In February 2021 Circular Letter LGSM01-2021 referring to Action 165 of the national Climate Action Plan 2021 required each local authority to identify one spatial location or area ((i) urban areas with a population not less than 5,000 persons, (ii) rural areas with an area not less than 4km² or (iii) other locations/areas that can demonstrate decarbonisation at a replicable scale) that would be subject to a plan for a Decarbonising Zone (DZ).

This initial DZ can be used as a test bed of what is possible for decarbonising, addressing local low carbon energy, greenhouse gas emissions, adaptation, climate, and biodiversity actions at local and community levels, to help support and realise national climate ambition. Successful demonstrator projects should be replicated and scaled up across the local authority administrative area. The range of projects should embrace advancements in technology, be specific to the emissions and climate characteristics of the spatial area covered by the DZ and identify appropriate project stakeholders, partners, and sponsors.

Projects, measures, and initiatives should address a variety of measures including:

- Electricity sourcing
- Heat management
- Enhancing building energy efficiency
- Reducing needs for travel and shifting travel modes towards active and public transport
- Carbon sequestration
- Energy storage and management systems.

A DZ should also address the wider co-benefits of air quality, improved health, biodiversity, waste, water, circular economy, fuel energy poverty, skills, employment, citizen climate awareness and positive behavioural change.

With a "place-based focus," by the delivery of climate actions which offers opportunities beyond emission reductions, for example, an ambitious innovative DZ plan can create places that are sustainable, resilient and inclusive where people enjoy living, working and doing business.

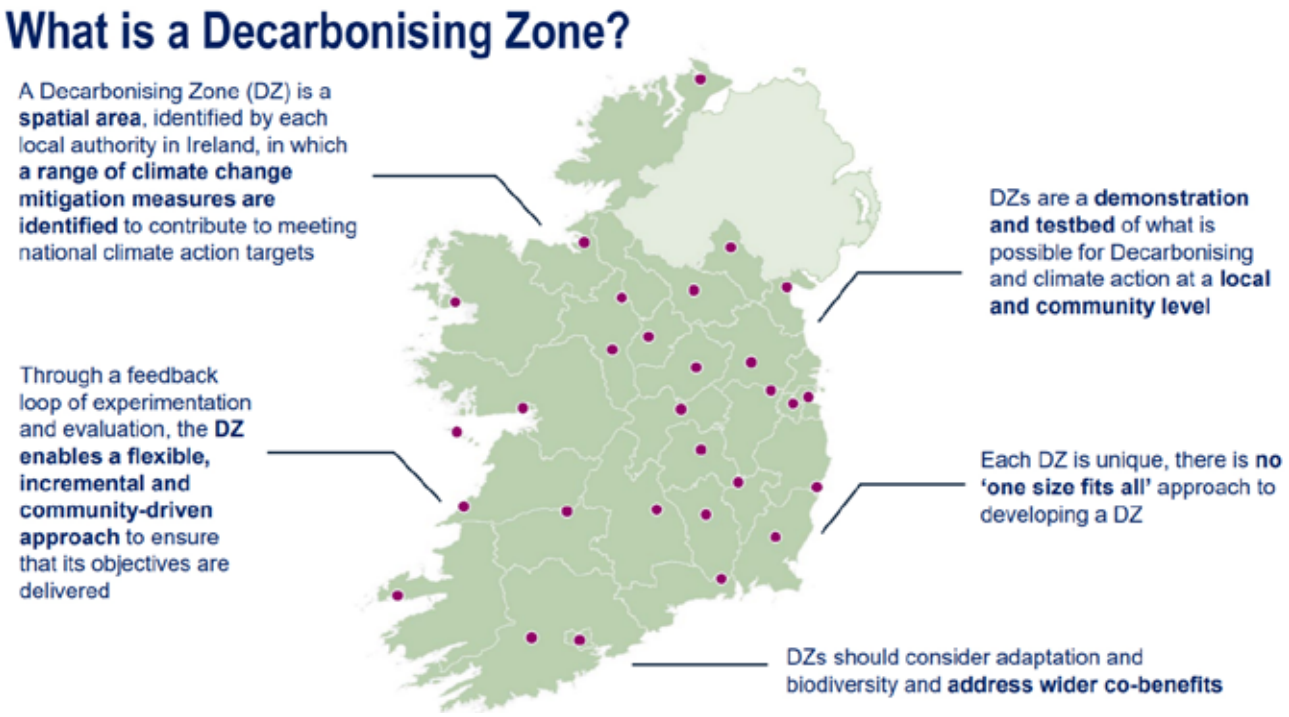


Figure 4.1: *Explanation and locations of Decarbonising Zone's (Source, CARU 2023)*

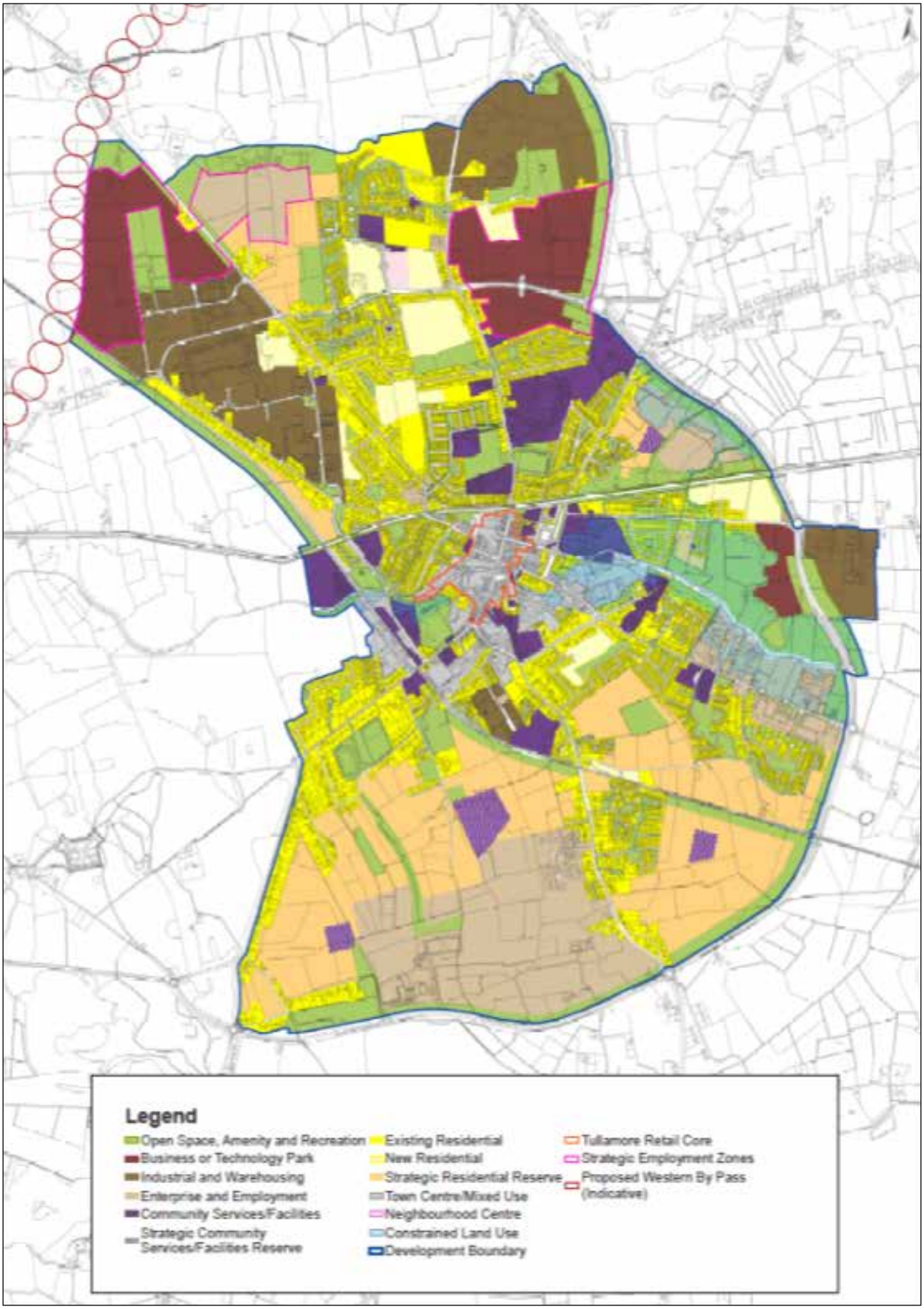


Figure 4.2: *Tullamore Decarbonising Zone*

Offaly DZ Selection

As part of the Offaly DZ designation process, 6 locations were identified and evaluated. These locations covered both urban areas and rural areas. Following extensive discussions with relevant stakeholders, the Chief Executive chose Tullamore Town as the designated DZ for Offaly. This decision was reached after careful consideration of many criteria such as potential opportunities and specific characteristics under the headings of transport, industry, buildings, heat management, green spaces, electricity management and Just Transition. Similarly, each of the other 4 CARO Midland Sub-Region local authorities all designated their County Towns as DZs.

DZ Vision Statement & Core Objectives

The vision of our designated Decarbonising Zone aligns to that of Offaly's LA CAP:

Vision Statement

To Achieve by 2050 a Climate Resilient, Biodiversity Rich, Environmentally Sustainable and Climate Neutral economy.

Mission Statement

Tullamore, as Offaly's designated Decarbonising Zone, will show real leadership in delivering climate, biodiversity and sustainability actions through innovation, technology, creativity, and empowering community engagement, thus demonstrating local place-based successes that can be scaled up and replicated across the county and region.

The overarching objective of the DZ will be to deliver on decarbonising targets, but this can be complemented by other supportive objectives such as:

- Delivering adaptation measures to build resilience and combat against negative impacts of climate risk.
- Support, promote and enhance nature-based solutions and biodiversity.
- Stimulate and capitalize on co-benefits and economic opportunities presented from mitigation, adaptation, and biodiversity enhancement.
- Develop and nurture strong networks, partnerships and collaboration across government, private sector and communities in pursuit of local solutions and interventions.
- Mobilise local, sectoral and national investment and resources in pursuit of local solutions and interventions.

Baseline Emission Inventory

Similar to the County-wide Baseline Emission Inventory (BEI) assessment report and Climate Change Risk Assessment reports, Offaly County Council procured DZ BEI assessment reports for the 5 CARO Sub Region counties, in order to deliver 5 individual spatially based Tier 3 DZ BEI reports using a consistent approach and methodology across the sub region undertaken by one consultancy firm, which in this case was KPMG Future Analytics.

Again, Offaly County Council as the lead authority in the procurement process were assisted by colleagues from the Midlands &Eastern Region CARO office. Climate Action representatives from the 5 midlands sub region counties worked closely together with the consultants to develop a project scope in line with the DECC published Local Authority Climate Action Plan Guidelines Technical Annex C: Climate Mitigation Assessment and Technical Annex D: Decarbonising Zones. 2018 was used as the baseline year for BEI assessment, which was purposefully chosen to align with Ireland's national targets which are set against a 2018 baseline year. The BEI assessment report is an overview of Tullamore DZ's total carbon emissions at a specific point in time, and can be read as a supplementary Technical Annex document to the LA CAP.

Emissions from the following sectors were considered in the KPMG DZ BEI: Residential, Commercial & Public Sector, Transport, Waste, Energy/Electricity and Industrial Processes. The report shows total carbon emissions of approximately 129,609 tCO^2e for 2018, or 8.87 tCO^2e per capita, and broken down per sector as shown below:

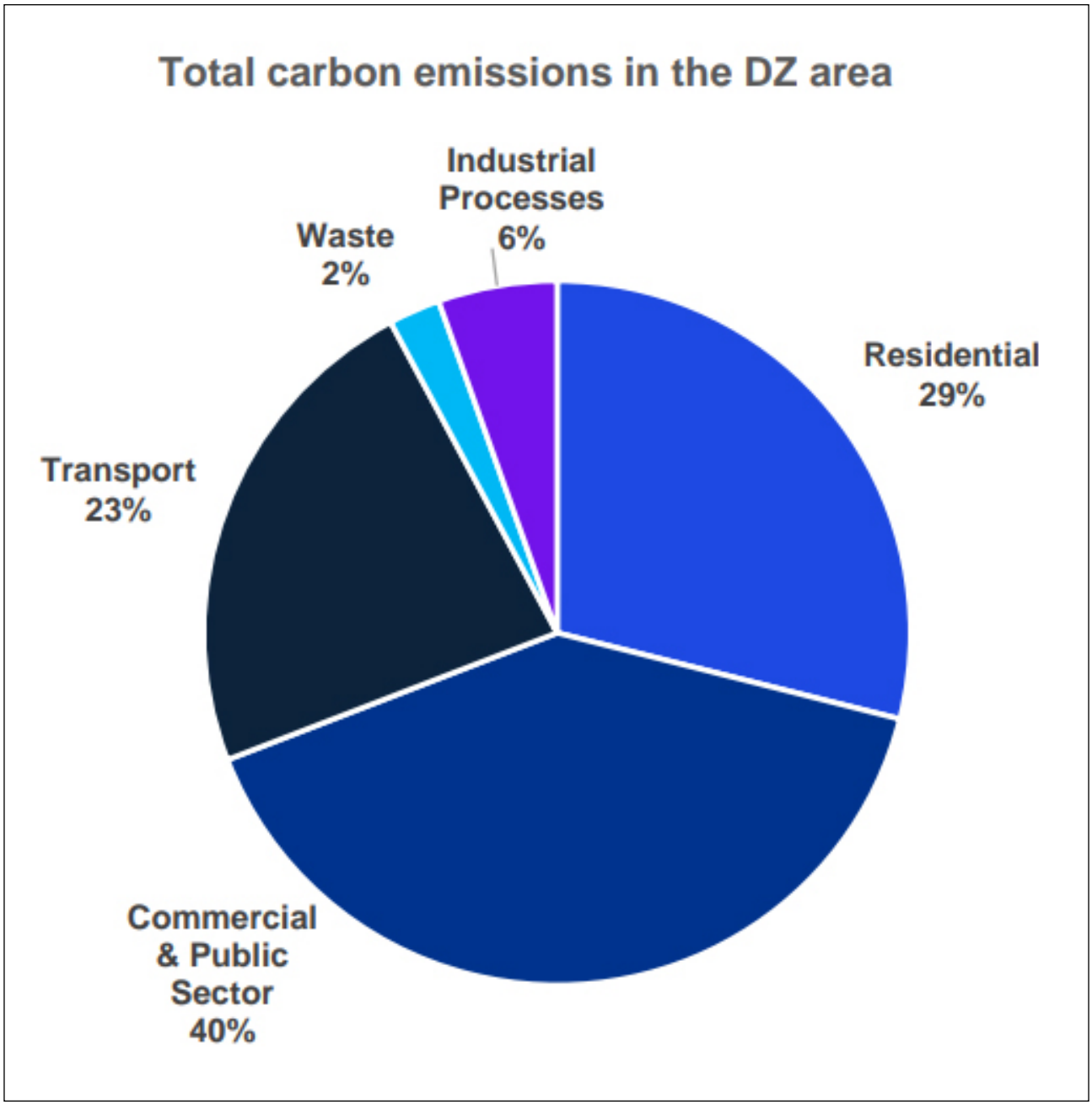


Figure 4.3: *Total carbon emissions in the Decarbonising Zone area.*
Source: Offaly County Council Decarbonising Zone Report, 2023

The Commercial & Public Sector is highlighted as being the largest emitter of emissions in the Tullamore DZ. These emissions are typically from fuel combustion for space and hot water heating in buildings. The second highest emitter is the Residential Sector, again driven by the use of fossil fuels for space heating in dwellings. The next highest emitter is the Transport sector with 23% of the total emissions within Tullamore DZ.

These baseline results identify areas of concern with regards to emissions while also highlighting the opportunities to make greatest inroads towards sectoral targets.

Figure 4.4: *Climate Action Plan 2023 (CAP23), specific targets per sector.*
Source: Climate Action Plan 2023 (CAP23), Changing Ireland for the better.

Stakeholder Engagement

Following receipt, review and analysis of the DZ BEI assessment report, Offaly County Council commenced a stakeholder mapping and engagement process. Internal stakeholders together with external stakeholders such as local Industry, business owners, transport providers, educational agencies, Tidy Towns, Chamber of Commerce, energy providers, sector advisors, professional bodies and community groups were identified and contacted in relation to drafting of the LA CAP and more specifically the DZ within the overall plan.

Register of Opportunities

From early engagement with internal and external stakeholders, a portfolio or pipeline of interventions, projects and actions involving mitigation, adaptation and biodiversity measures started to develop. This portfolio of projects is referred to as the "Register of Opportunities" (ROO). This portfolio of projects includes decarbonising innovations, new technologies, behavioural changes, new approaches, policy innovation and skills development.

Opportunity	Time Horizon	Focus	Cost Range	Possible Funding
Just Transition Fund	2024-2029	External	High	JTF
Tullamore Local Area Plan	2024	External	Medium	Own Resources
Urban Regeneration and Development Fund (URDF1 2018, URDF2 2020) Department of Housing, Planning and Local Government. (URDF1) A:Urban Greenway B:Store Steet & Harbour Street (URDF2) A: O'Connor Square to Church Street, Urban Garden, RWH B: High Street to Tanyard New Street Link C: Meath Lane Civic Space D: Tullamore Regeneration Framework Entire Town Centre	(URDF1) 2025 2024-2029 (URDF2) 2026 2025 2024 2024	External	High	DHPLG
Outdoor Public Space Scheme 2021, Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media		External	High	DTCAGSM
Community Recognition Fund 2023		External	Low	Own Resources/ GMA
Town and Village Renewal, Department of Rural and Community Development		External	High	DRCD
Outdoor Recreational Infrastructure Scheme, Department of Rural and Community Development		External	High	DRCD
Additional Outdoor Infrastructure Fund, NTA 2021		External	Medium	NTA
Weatherproofing and outdoor dining		External	Medium	Failte Ireland
Active Travel, National Transport Authority Tullamore ABTA Tullamore Cycle Network Phase 1 Tullamore Urban Greenway	2024 2025 2025	External	High	NTA
Tullamore River enhancement	2024-2029	External	Medium	Own Resources/ GMA
Bike Share Scheme	2024-2029	External	Low	Own Resources
Car Share Scheme	2024-2029	External	Low	Own Resources
Tullamore Sustainable Energy Community	2024-2029	External	Low	SEAI
EU City Facilities Funding	2024	Internal	Medium	EUCF
EU Mission on Climate Adaptation Funding	2024-2029	Internal	Medium	EU Missions
Derryclure Landfill Wetland Project	2026	Internal	Medium	Own Resources
Town Centre Civic Amenity Site	2026	External	Medium	Own Resources
Green Energy/Technology Hub	2025	Internal	Medium	Own Resources
Team Tullamore Climate/Sustainability/Energy/Biodiversity initiatives	2024-20209	External	Medium	Own Resources
Tullamore DZ Branding	2024	External	Low	DECC
Pedestrian bridge at Spollenstown	2025	External	High	NTA
Low carbon road material trials	2024-2029	Internal	Medium	TII
Tullamore "Smart" town	2025	External	Medium	DECC/EU funding

Table 4.1: *Register of Opportunities for Offaly's Debarbonising Zone.*

The opportunities progressed, and any associated activities and development (such as energy, active travel, recreation, waste management, peatland, wetland or water body related development) shall have due regard to the need to protect sensitive aspects of the receiving environment, including local human receptors; European sites and biodiversity; heritage features, protected structures and the context in which such features sit; and the receiving water, soils and local air quality environment.

Any opportunities progressed that result in the development of renewable energy development, such as wind turbine development or solar panel development, shall specifically have due regard to the need to protect sensitive aspects of the environment from the typical effects of such development, including avifauna effects or landscape and visual related effects, including glint and glare.

The County Council will advocate and exert influence to ensure that opportunities progressed that lead to the development of additional electricity network infrastructure, including linear cable infrastructure development, by electricity network operators, does not contravene relevant planning and environmental protection criteria or cause significant negative environmental effects.

Any opportunities progressed that support urban regeneration or town or rural renewal, shall have due regard to the need to ensure cultural heritage features, including protected structures, are appropriately conserved.

Identifying Local Priorities

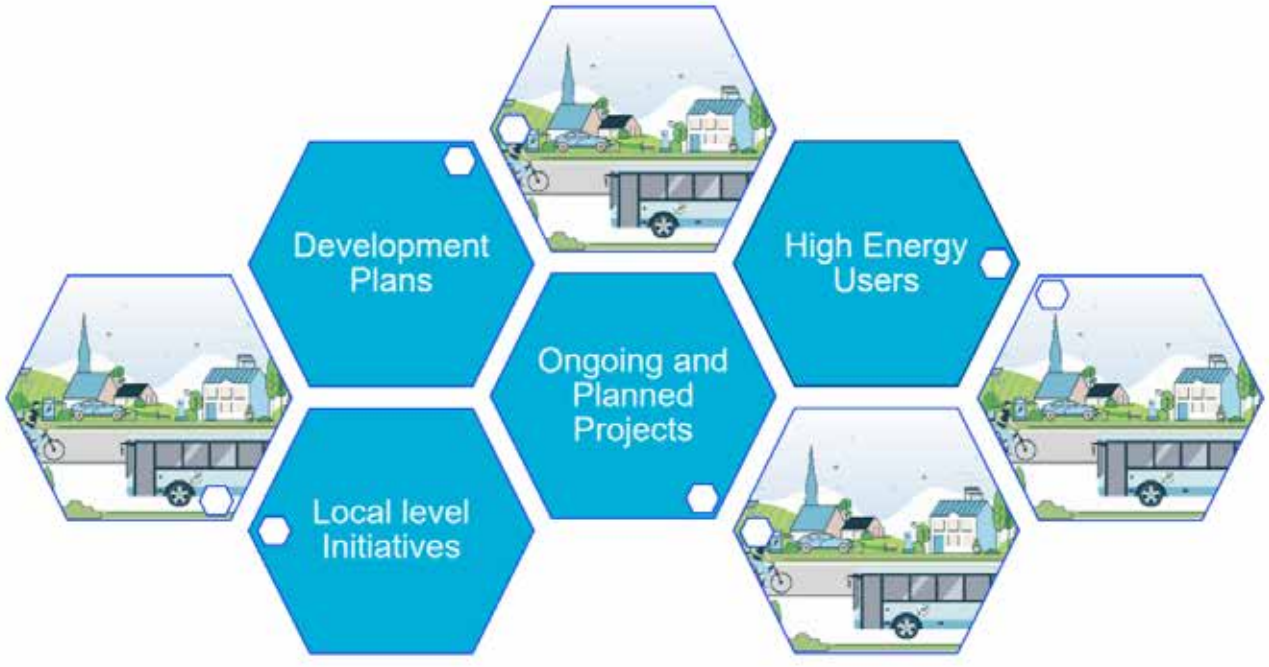


Figure 4.5: *Local priorities within the decarbonising zone.*

Not all interventions will require additional investment as incorporating targets into new developments, updating performance requirements in energy contracts or improved waste management need not come at significant cost.

The ROO will include projects, actions and measures that are directly delivered by the local authority, while others will span different sectors and services and must be delivered in collaboration with private sector organisations and or external public bodies.

The ROO is a non-exhaustive broad list of "opportunities" within the Tullamore DZ. As opportunities are identified and prioritized in line with national climate targets over the life of the LA CAP, further extensive stakeholder engagement, collaboration and co-creation will be required for each project.

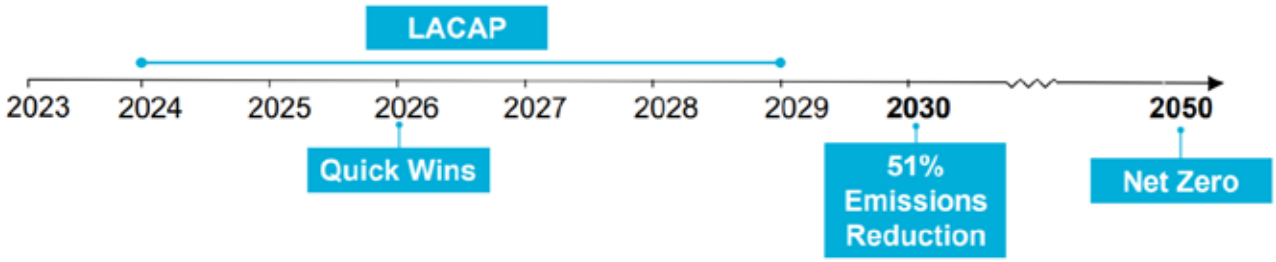


Figure 4.6: *Timeline of Offaly's Local Authority Climate Action Plan.*

This will be managed and monitored through an individual unique "implementation plan" for each measure. Implementation plans will differ from project to project, as will the internal and external stakeholders involved. The local authority is well positioned in a climate action leadership role and will use its powers of influence, facilitation, coordination, and advocacy to deliver strategic and focused changes that could lead to large scale emission reduction.

Figure 4.7: *Aligning projects as part of Offaly's LACAP.*

IMPLEMENTATION AND REPORTING

It is also clear that climate change is a transboundary challenge; it does not stop at political and geographical borders.

Planning for implementation

This Draft Climate Action Plan will be implemented by Offaly County Council. Whilst the plan requires a whole-of-Council approach, the ownership of the Draft Plan is held within the Offaly County Council Climate Action, Environment, Water and Transportation (CAEWT) Directorate. The Climate Action Plan is a standing item for discussion and review on the CAEWT Strategic Policy Committee (SPC) agenda, which meets on a quarterly basis ahead of reporting to the main council meeting.

A Climate Action Team was established by Offaly County Council in 2023. This team includes a Climate Action Coordinator, Climate Action Officer and Community Climate Action Officer. The role of this team is to mainstream climate action into the activities of Offaly County Council, monitor the implementation of the actions of the Climate Action Plan and to coordinate the reporting and evaluation of the Plan, following its approval by the Elected Members. The core Climate Action Team is supported by the wider climate action teams/subgroups/subcommittees/ section heads across the organisation, that have ownership of particular actions within the Plan. These include the following Departments/Sections – Facilities, Housing, Transportation, Environment, Planning, Regeneration, Corporate Services, IT, Libraries, Fire Services, Community, Biodiversity, Heritage, Fleet Management, Active Travel. The core Climate Action Team will also be the point of contact for the public to learn about climate action in the County.

Offaly 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 Laois, Westmeath, Longford, Roscommon, Meath, Kildare, Tipperary, Galway, the Midlands & Eastern Climate Action Regional Office, Midland 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 nOg, Green Offaly, Team Tullamore, etc. 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 Midlands CARO sub region, whereby they can collaborate closely on the implementation of the Climate Action Plans.

Following approval of the Plan, an Implementation Plan 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. Offaly County Council will align the timing of internal implementation reporting intervals with that of sectoral progress reporting requirements.

Funding and Partnerships

To lead by example and drive the transition to a climate neutral society, Offaly 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. Offaly 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. Offaly County Council will encourage and facilitate collaboration with the private sector and Third Level sector where possible.

Tracking Progress through Key Performance Indicators

Performance by Offaly 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 Offaly County Council engages with to communicate progress on the delivery of actions is through Sectoral Key Performance Indicators (KPIs). This informs the performance of the local government sector on climate action.

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

A key consideration for the local government sector on this strengthened role on climate action is accountability, and in particular the ability to track, measure and report on progress in delivering effective climate action at both local authority and sectoral levels. In this regard, KPIs will continue to play a significant role.

The CAROs along with the Local Government Management Agency (LGMA) collect data on an annual basis relating to a range of themes including:

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

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

Reporting Requirements and Arrangements

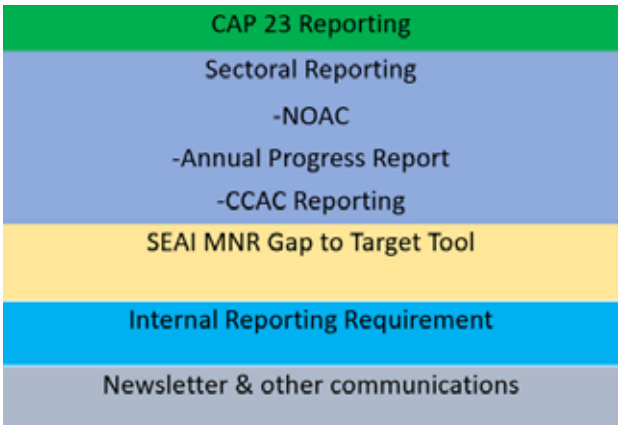


Figure 6.1: *Reporting requirements for implementation of the LACAP.*

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 a biannual basis. The Climate Action Team will report implementation progress to the Climate Action, Environment, Water and Transportation SPC on a quarterly basis, and to the full council meeting in July and December.

Monitoring and Reporting System (M&R)

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

Sectoral Performance

Offaly County Council will report annually on their performance on climate action by way of KPIs (as outlined in Section 6.2) to inform the performance of the local government sector on climate action, as part of the local government DECA 2030 Strategy.

National Climate Action Plan

Offaly County Council will in accordance with part 3(w) of the Local Authority Climate Action Charter, report annually 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.

Sustainable Development Goals

The 2030 Agenda was adopted by all 193 United Nations member states in 2015. It is a "plan of action for people, planet and prosperity" and provides an internationally agreed framework to balance the economic, social and environmental aspects of sustainable development. The Framework is made up of 17 Sustainable Development Goals (SDG's) and 169 targets with the overall objective of achieving a more sustainable, prosperous and peaceful future for all.

Ireland's National Implementation Plan for the Sustainable Development Goals 2018-2020 acknowledges 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." Following this Ireland's next National Implementation Plan for the Sustainable Development Goals 2022-2024 under Strategic Objective 2 focuses on integration of the SDG's in "Local Authority work to better support the localisation of the SDG's" and incorporate 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 and Agenda 2030 also highlights the particular role of local authorities and communities in sustainable urban development.

In accordance with the commitments set out in the SDG National Framework Plan 2022-2024 and in coherence with the National CAP23 each theme under the Framework of Actions in the Offaly CAP has been assessed for SDG impact at SDG target level. An individual assessment was carried out under each of the six themes. In addition to each theme being assessed the overall contribution of the Offaly CAP 2024-2029 to the progression towards meeting the 17 SDG's was evaluated. It can be seen in the SDG Wheel **Figure 6.2** that the Offaly CAP 2024-2029 will progress towards meeting 16 out of the 17 SDG's. The assessment also indicated that the Offaly Climate Action Plan 2024-2029 is contributing to the progression of 54 out of 169 total SDG targets.

***Figure 6.2**: SDG Wheel demonstrating the progression of the Offaly CAP 2024-2029 to meeting the SDG's*

The findings and information provided in **Figure 6.2** highlights the broad scope of the Offaly CAP 2024-2029 and the importance of progressing sustainable development locally in Offaly. It demonstrates that the impact extends beyond climate action and into other dimensions of sustainability such as economic, social and environmental.

In **Table 6.1** the top four SDGs in which Offaly's CAP 2024-2029 will contribute towards are SDG 7 Affordable and Clean Energy, SDG 11 Sustainable Cities and Communities, SDG 12 Responsible Consumption and Production and SDG 13 Climate Action. The Offaly CAP will also have a significant influence towards meeting SDG 15 Life on Land.

Table 6.1: The top 4 overall SDG's which Offaly CAP 2024-2029 is contributing to are:

	**SDG 7 Affordable and clean Energy**	The actions set out in the Offaly CAP 2024-2029 progress 4 out of 5 targets under SDG 7
	**SDG 11 Sustainable Cities and Communities**	The actions set out in the Offaly CAP 2024-2029 progress 8 out of 10 targets under SDG 11
	**SDG 12 Responsible Consumption and Production**	The actions set out in the Offaly CAP 2024-2029 progress 7 out of 11 targets under SDG 12
	**SDG 13 Climate Action**	The actions set out in the Offaly CAP 2024-2029 progress 4 out of 5 targets under SDG 13

The findings of the SDG assessment will strengthen coherence between Local Policy and National Policies in relation to sustainable development for all.

GREEN ENERGY

The commitment to decarbonisation, and the creation of cleaner and more sustainable energy forms has resulted in the cessation of peat harvesting for energy generation.

The Midlands has been the first Irish region to experience the impact of the decarbonisation programme and the transitioning process to a zero-carbon economy. Offaly has been particularly affected due to the links with fossil fuel energy generation. The commitment to decarbonisation, and the creation of cleaner and more sustainable energy forms has resulted in the cessation of peat harvesting for energy generation. This change is challenging as for decades peat derived energy generation contributed significantly to Offaly's economic base, its social fabric and the development of towns and villages in close proximity to industrial bogs and power stations.

Energy History

Offaly has a long-standing association with energy and power generation, arising from the inception of the Turf Development Board Ltd. in 1933, onto the establishment of Bord na Móna in 1946. The industrialised approach to developing the peatlands was significant in providing economic benefit for the midland communities and fostering vibrant communities. Offaly became a beneficiary of extensive peat-derived employment, from harvesting to the operation of various Power Stations. Three peat fires stations in Offaly with one just on the county boundary at Portarlington had a capacity of approximately 350MW. These were replaced by more modern stations at Shannonbridge and Edenderry in the early 2000s, with a combined maximum output of approximately 250MW.

The increase in environmental awareness, the increasing appreciation of the biodiversity and the environmental impact of milling and burning peat on a commercial scale has signalled an inevitable shift towards cleaner fuels. To address these challenges, Offaly County Council is looking towards Climate Action policies which present emerging opportunities arising from the transition to a low carbon economy and renewable energy.

Offaly County Council has been a forward-looking county with progressive wind policy, and consequently have accumulated significant expertise in the area of energy policy, energy planning and renewables. These dynamic capabilities provide a backdrop to facilitate and promote energy enterprise, with potential for collaborative initiatives.

Overview

Since the adoption of its first wind energy strategy in 2009, OCC has permitted a number of windfarms. Offaly has 538MW of operational or currently under-construction renewables (wind). 435MW of solar developments have been consented. Approximately 400MW of wind developments and approximately 690MW of solar developments are currently at various stages of the planning process i.e., from early public consultation to planning applications. Lumcloon Energy has two BESS (Battery Energy Storage Systems) operational in West Offaly – Shannonbridge 100MW BESS and Lumcloon has 100MW BESS. Both are the largest energy storage facilities in Ireland to date, representing leading European projects with €150m investment. A further 200MW of BESS is consented within the county. 125MW in Synchronous Compensators are consented in addition to 15MW of Methanisation plant and a 2MW pilot Hydrogen plant. The existing, consented and 'pipeline' of additional projects may raise the total to over 1.5 GW of renewable energy, storage and grid systems services facilities in Offaly.

Wind

The Offaly County Development Plan 2021-2027 included a County Wind Energy Strategy, a plan led approach to wind energy development in County Offaly and sets out areas 'open for consideration' for wind energy developments and considerations for the evaluation of wind energy planning applications.

Wind Energy Target by end of Plan Period: 466.3 MW

Solar Energy Target by end of Plan Period: 145 MW

Battery Storage Target by end of Plan Period: 445 MW

Table above demonstrates County Offaly's contribution to realising overall national targets (under the Climate Action Plan 2019) on renewable energy and climate change mitigation, and in particular wind energy production and the potential wind energy resource during the plan period.

Solar

Offaly County Council has permitted a number of solar energy projects, and provides guidance within the Offaly County Development Plan 2021-2027. Larger solar farms have potential to be built on agricultural land and leave room for dual land use so that farm practices, such as grazing, can co-exist with the ground mounted solar panels. These projects are much less visually intrusive than wind and some other forms of energy generation.

Geothermal

Deep geothermal resource in north Midlands with high potential as a renewable heat source. Rhode and Edenderry are centrally

above a geothermal hotspot. There is notable potential for the development of the technology in the vicinity to exploit:

- Space heating includes heating greenhouses, businesses, swimming pools and homes.
- Hot water for commercial and domestic properties.
- Electricity generation

Initial opportunity assessments to date have indicated that Shallow Geothermal Energy could be attractive to industries seeking efficient year-round thermal space heating. Further studies are required to establish what opportunities there are for the exploitation of Deep Geothermal Energy.

Anaerobic Digestion

Anaerobic digestion has an important role to play in Climate Action, as a technology with the ability to generate renewable energy, abate GHG emissions and recover organic nutrients and carbon for use on soil.

Anaerobic digestion is the controlled use of biodegradable organic materials to produce renewable energy in the form of biogas and organic fertiliser. Anaerobic digestion entails the conversion of feedstock (any organic non-woody material) by micro-organisms in the absence of oxygen into biogas and digestate. It is a natural process.

Anaerobic digestion facilities can process biodegradable organic wastes from the agricultural and food industry, other food waste, and suitable and sustainable energy crops grown specifically for energy production. Usable food wastes include rejected or out-of-date products from manufacturers or retailers and wastes from commercial and domestic kitchens. Manure and other possible biomass feedstocks are inserted into a large, sealed airless container. In this oxygen-free environment, bacteria will produce biogas.

Anaerobic digestion, through providing a means of recycling waste organic matter into organic fertiliser, reduces costs, diverts wastes from landfill, reduces CH4 emissions and generates a low-carbon renewable energy source. This mitigates climate change through reduction of GHGs. The produced biogas can be used to generate heat or electricity or both. Biogas can be upgraded to biomethane, which is suitable for injection into the natural gas network or compressed into containers for use as a fuel in other applications, such as road transport. Electricity can be generated, through a combined heat and power (CHP) gas engine, which can supply to the electricity grid or for local use.

Key climate action benefits of anaerobic digestion:

- Reduces greenhouse gas (GHG) emissions, relating to food production and livestock;
- Production of improved organic fertiliser, reducing the wider environmental impacts of producing artificial fertilisers;
- Produces renewable electricity and heat, reducing reliance on non-renewable energy generation;
- Reduces environmental pollution through better waste management;
- Provides a clean biomass and waste-recycling, improving resource-efficiency, and supporting the circular economy.

Energy Infrastructure

There is a strong electricity network traversing County Offaly. The existing transmission network is comprised of 400kV, 220kV and 110kV infrastructure. Offaly County Council has been proactive in seeking to identify collaborations that leverage the HV (high voltage) energy infrastructure which crosses the county, with strong nodes due in large part to the four former or existing power station sites, strategic land banks and renewables capabilities. These advantages are reflected in Offaly County Council targeted strategies to promote and support the growth of the renewable sector, while also seeking to work with land/asset owners such as ESB and Bord na Móna to maximise public benefit from those assets in the post-peat context.

Offaly County Council continue to actively examine the energy infrastructure, particularly the electricity transmission and distribution networks, view these key enablers of the transition to cleaner energy. Building on the post-peat legacy transmission infrastructure, Offaly County Council are actively engaging with network operators informing the development of policy development (e.g., DECC Private Wires Consultation) and ongoing grid enhancement planning (e.g., Shaping Our Electricity Future). It is clear that electricity infrastructure will become ever more important to the clean energy transition, from enabling comprehensive EV charging networks to industrial decarbonisation in the region.

Green Energy Enterprise

The pro-active approach to renewable energy in Offaly and the accelerated end-of-peat has provided Offaly with the opportunity to pivot, applying capabilities and energy infrastructure to foster new and emerging green energy and enterprise initiative. As the emerging 'Green Energy County', Offaly is facilitating new opportunities through providing a favourable ecosystem for innovation and entrepreneurship. Offaly County Council is also working with other bodies to identify economic development opportunities in green technology.

Building on the energy heritage built up through the peat-generation era, Offaly County Council supported by the Just Transition Fund have developed a unique initiative at the former Rhode Power Station.

Offaly County Council and partners are advancing the development of Rhode Green Energy Park (RGEP), a leading energy enterprise prototype. Situated on the site of the former Rhode Power Station, it is ideally located to become a seedbed for enterprise and a regional focal point for the emerging energy sector through integrating renewable energy production with energy storage and transmission systems. RGEP is an innovative concept that may provide valuable insights to other former Power Station sites.

The Rhode Green Energy Park (GEP) is strategically located on the outskirts of Rhode, just 7 km from the M6 Dublin to Galway motorway. The green energy enterprise park has been established on the site of a former ESB Power Station and occupies approximately 5.3 ha with 13 serviced sites. The area has a strong heritage in energy production and is already home to a number of consented renewable energy generation proposals and facilities in the shape of wind, solar and flywheel battery storage. With the significant development of the business park infrastructure in place and various energy related infrastructure and prospective developments nearby, Offaly County Council identified the potential for a Green Energy Park at this location which can be a national exemplar of the transition from a historical dependency on fossil fuels to sustainable energy and energy innovation.

In 2020, Offaly County Council commissioned RPS Consultants to prepare an 'Opportunity Assessment Report' for Rhode Green Energy Park which has identified three strategic opportunity areas;

1. Energy decarbonisation/ innovation hub built around renewable energy, energy storage, hydrogen gas and electricity system integration.

2. Eco-Industrial Park model whereby large-scale energy intensive employment – for example in data centres, agri-food, horticulture, bio-economy – develops around the electricity and heat resources available.

3. Educational/ Innovation/ Centre of Learning for renewables and electricity grid: to improve awareness within the community of how the energy transition is happening, for collaboration with stakeholders across the Midlands Region and to create partnerships with University and Third Level Institutions.

In all of these concepts, the Rhode Green Energy Park concept is seen as a regional or national scale initiative. Offaly County Council have prioritised the development of Rhode Green Energy Park, an exemplar energy enterprise initiative, anticipated to provide learnings and leadership in developing decarbonisation roadmaps, particularly for similar post-peat regions undergoing energy transition.

The strategic opportunities offer considerable potential for decarbonisation through:

- development of hybrid renewable energy facilities in co-location with industries and enterprise within the Rhode Green Energy Park and renewable energy developments in the surrounding rural area; and

- unlocking mutual benefits and efficiencies for both energy producers and users by sharing outputs and by-products of their processes in a reliable, sustainable and cost competitive fashion and at the same time export renewable energy to the national grid to help transition to a low-carbon and climate resilient society.

Further exploring these decarbonisation opportunities, Offaly County Council engaged Siemens to conduct a leading research project exploring the potential and opportunities for the integration of a large energy users/data centres with renewable energy and green hydrogen in the Midlands.

The co-location of diverse renewable energy systems integrating into the national grid at Rhode Green Energy Park provides unique prospects for cutting edge innovation and demonstration hubs, supporting decarbonisation with Offaly, and providing wider learnings to others. Offaly County Council instigated and supported collaborations between industry, academia and stakeholders to explore opportunities such as a Green Hydrogen integration and demonstration hub, and large-scale energy user integration with renewables.

Offaly has transitioned from peat-fired electricity to green energy production. At present, the County has approximately 650MW of operational or permitted renewables. These include: wind, solar, hydrogen electrolysers, biomass methanisation, and synchronous compensator. The existing, consented and 'pipeline' of additional projects may raise the total to over 1.5 GW of renewable energy, storage and grid systems services facilities in Offaly.

Offaly County Council has sought to examine place for large energy users (industrial or data centre), and how these might be accommodated in arrangements that support decarbonisations. In an increasingly data-driven world, Offaly County Council has looked at how the region can provide the reliable, low-carbon sources of power generation required for data centre operators to meet their sustainability targets.

These studies have found that data centres and other large scale energy users could be, in part, powered by wind, solar or even green hydrogen from renewable sources, and any waste heat that is generated could be used to heat local homes, businesses, local industry and community buildings. This would compliment energy saving technologies being introduced at industry level through wider collaboration. There are also opportunities for data centres to anchor investment by being lead tenants of eco-industrial parks alongside green energy enterprises.

These research driven studies are providing Offaly County Council with key insights and a strong evidence-based roadmap supporting economic diversification way from peat through green energy enterprise, supporting decarbonisation through leveraging of the many emerging renewable energy projects emerging in Offaly. Initiatives like this are key actions supporting the stated strategic action with the Midlands Regional Enterprise Plan – "Transition to a climate neutral economy" which prioritises the transition to a zero-carbon region. Enterprise Ireland are supporting this change, prioritising the development of enterprise capability in the region for green and sustainability initiatives.

The Offaly Economic Strategy Action Plan 2022-2027 reinforces the commitment to green energy, citing "Rural Green" as one of six core focus areas. The rationale, as excerpt of which is cited below, aligns and supports the decarbonisation agenda within this Climate Action Plan.

> *"A green economy is one that provides economic opportunities and improved human well-being in harmony with the sustainable management of all natural resources. The transition to green rural economies is about improving people's lives and livelihoods in rural areas, balancing natural resource use with maintaining incomes, and trading the risks of making a change with the opportunities that change will bring."*

Ireland's EU Just Transition Fund will support Offaly's transition away from peat as a source of energy. The European Semester 2020 Country Report for Ireland (Annex D) identified that Ireland's transition away from carbon-intensive sources of energy towards more sustainable, renewable energy sources will have a significant impact in the Midlands Region and workers in the electricity-generating industry. Offaly County Council recognises the potential economic benefit of a transition from fossil fuel-based energy production through to investment in renewable energy, the promotion of the green enterprise sector and the creation of green collar jobs; all components of a local 'smart green economy'.

Reflecting the emerging megatrend in energy decarbonisation, Offaly County Council have sought to investigate the potential of renewable hydrogen. Renewable hydrogen (often referred to as "green hydrogen") has the potential to become a zero-carbon substitute for fossil fuels in many sectors of our economy considered hard to decarbonise, where other solutions such as direct electrification are not feasible or cost effective. Indigenously produced renewable hydrogen can play a significant role in enabling this transition as it does not emit carbon dioxide (CO2) when used.

Green hydrogen results when a renewable energy facility powers an electrolyzer that splits water into hydrogen and oxygen. Green Hydrogen has significant potential as a carbon-free fuel, combining water with excess renewable energy to create a zero-emission fuel. Additionally, Green Hydrogen can potentially integrate easily with fossil fuels and with the entire fossil fuel ecosystem.

Offaly County Council with North Offaly Development Fund secured funding under the GNI Innovation Fund (Gas Networks Ireland) for a project investigating the feasibility of creating a Green Hydrogen demonstration hub at Rhode Green Energy Park. Offaly County Council led a collaboration between industry and academia (Gas Networks Ireland, Bord na Móna, SSE Renewables, RPS, UCD Energy Institute & University of Galway) to examine the feasibility of integrating hydrogen derived from renewable energy in the Midlands with the gas network. The outcome of this study provided a detailed roadmap for the delivery of a Hydrogen demonstration project, a high potential avenue of enquiry which may prove significant in advancing Offaly's decarbonisation journey, with potential applications in areas such as transportation and district heating.

Offaly County Council will continue to explore the practical implementation of hydrogen, aligning with the National Hydrogen Strategy, seeking to avail of the early hydrogen innovation fund and similar to advance this transition.

Offaly County Council

DRAFT CLIMATE ACTION PLAN

2024–2029

Comhairle Chontae Uíbh Fhailí
Offaly County Council

CLIMATE ACTION

CONTACT

Áras an Chontae, Charleville Road,
Tullamore, Co. Offaly, R35 F893

(057) 934 6800
climate@offalycoco.ie