



Chapter 12

Climate Action

“To promote, support and direct effective climate action policies and objectives that seek to improve climate outcomes across the settlement areas and communities of County Louth helping to successfully contribute and deliver on the obligations of the State to transition to low carbon and climate resilient society through the encouragement and integration of appropriate mitigation and adaptation considerations and measures into all development.”

12 CLIMATE ACTION

12.1 INTRODUCTION

This chapter outlines the approach to climate adaptation and mitigation which has been taken in this Plan. One of the strategic objectives of the Plan is to transition to a low carbon and climate resilient County through a combination of mitigation and adaptation measures in response to climate change.

Section 10(2)(n) of the *Planning and Development Act 2000 Act (as amended)* requires Plans to include objectives that promote measures to reduce the overall quantity of anthropogenic greenhouse gas emissions and to address the necessity of adaptation to climate change.

12.2 WHAT IS CLIMATE CHANGE?

Climate Change is a long-term shift in global or regional climate patterns and may also be referred to as ‘global warming’. Climate is described as the average weather prevailing in an area over a period of time. Climate Change is a significant change in weather patterns such as rainfall, temperature, and / or wind, which continue over an extended period of time (i.e. over decades or longer). The Earth’s climate is constantly changing. Climatic fluctuations are known to occur from natural causes including the Earth’s orbit and tilt, volcanic eruptions and variations in solar energy. However, in more recent times, there are growing concerns that natural fluctuations in climate are being overtaken by rapid human-related activities which are negatively influencing climate variability and giving rise to serious implications for the rate of global warming.

The scale of the challenge presented by climate change is evident across the globe through the devastating, destructive and extreme weather events linked as effects to global warming.

There is a strong level of awareness and understanding of the need to take urgent and radical climate action through a combination of mitigation and adaptation measures.

Ireland’s climate is changing in line with global trends and the impacts of this change are expected to continue and intensify into the near future.

Climate Change Mitigation is defined as ‘a human intervention to reduce the sources or enhance the sinks of greenhouse gases’ (IPCC, 2014), i.e. tackling the cause of climate change. Climate Change Adaptation is defined as ‘the process of adjustment to actual or expected climate and its effects. In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities. In some natural systems, human intervention may facilitate adjustment to expected climate and its effects’ (IPCC, 2014) i.e. dealing with the inevitable effects and impacts of climate change.

Louth County Council acknowledges the global understanding that the lives we currently live are not sustainable. The catastrophic cost the world is suffering as a result of climate change is jeopardising future generations.

By signing up to the Climate Action Charter (part of Ireland’s Climate Action Plan) on 29th October 2019, Louth County Council has agreed to play its part at a local level in guiding communities, businesses and developers in mitigating and adapting the way we live and work to create a more sustainable, climate resilient and carbon neutral existence.

Spatial planning plays a crucial and central role in both short-term and long-term climate change adaptation and mitigation measures.

12.3 STATUTORY CONTEXT

12.3.1 Planning and Development Act 2000 (as amended)

Section 10(2)(n) of the Act refers to compulsory objectives in a development plan for the promotion of sustainable settlement and transportation strategies in urban and rural areas including the promotion of measures to:

- Reduce energy demand in response to the likelihood of increases in energy and other costs due to long-term decline in non-renewable resources;
- Reduce anthropogenic greenhouse gas emissions; and
- Address the necessity of adaptation to climate change, in particular, having regard to location, layout and design of new development.

12.4 INTERNATIONAL LEGISLATION AND POLICY CONTEXT

12.4.1 United Nations Framework Convention on Climate Change (UNFCCC) (1992)

This was an international environment treaty adopted on 9th May 1992 and entered into force on 21st March 1994 following ratification. It acknowledged that change in the earth’s climate and its adverse effects are a common concern of humankind and its ultimate objective summarised is the stabilisation of greenhouse gas (GHG) concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.

It asked those industrialised countries to adopt policies and measures on mitigation and to report periodically.

12.4.2 Kyoto Protocol 1997

This protocol which was adopted on 11th December 1997 and owing to complex ratification didn’t enter into force until 16th February 2005, operationalises the principles of the United Nations Framework Climate Change Convention by mandating industrialised nations (developed countries) to limit and reduce their GHG emissions in accordance with agreed individual targets. Under the principle “common but differentiated responsibility and respective capabilities,” the protocol recognised the developed nations being the main contributors to the release of carbon dioxide (CO₂) and other GHG into the atmosphere. Developing nations were asked to voluntarily comply.

12.4.3 The Paris Agreement 2015

This legally binding agreement which has 195 signatories was agreed on 12th December 2015 and came into force on 4th November 2016. It includes commitments from all major emitting countries to keep global temperature rise this century to well below 2°C above pre-industrial levels, while pursuing ways to limit the increase to 1.5°C. The treaty also creates a framework for the transparent monitoring, reporting, efforts and contributions of countries' individual and collective climate goals to lessen global warming.

The agreement also aims to strengthen the ability of countries to deal with the impacts of climate change.

The Katowice package adopted at the UN climate conference (COP24) in December 2018 contains common and detailed rules, procedures and guidelines that operationalise the Paris Agreement.

Figure 12.1 UN Sustainable Development Goals 2015



12.4.4 United Nations Sustainable Development Goals (SDGs) 2015

The 17 SDGs at the heart of the 2030 Agenda for Sustainable Development address the environmental, economic, and social challenges that the world needs to tackle by 2030. Adopted by all United Nation Member States in 2015, SDG 13 refers to climate action and the need to

take urgent action to combat climate change and its impacts.

Ireland supports initiatives both within the Paris Agreement and the UN SDGs, to support less developed countries in achieving these objectives.

12.4.5 The 2013 EU Strategy on Adaptation to Climate Change

Welcomed by EU member states, this strategy aims to make Europe more climate-resilient focusing on 3 key objectives:

- Promoting action by Member States and supporting adaptation in cities through the Covenant of Mayors for Climate and Energy initiative (CMCE created following the adoption of the 2020 EU Climate and Energy Package);
- ‘Climate-proofing’ action at EU level; and
- Better informed decision-making.



12.4.6 EU 2020 and 2030 Climate & Energy Framework

The 2020 climate and energy package are a set of binding legislation to ensure the EU meets its targets for the year 2020. These targets included:

- 20% reduction of GHG emissions (from 1990 levels);
- 20% of EU energy from renewables (Under EU Renewable Energy Directive 2009/28/EC, Ireland is committed to produce from renewable sources at least 16% of all energy consumed by 2020); and
- 20% improvement in energy efficiency.

The Sustainable Energy Authority of Ireland (SEAI - the official source of energy data for Ireland) published its 2020 update for Renewable Energy in Ireland Report on 19th April 2020. Using 2018 data, it suggests Ireland is not on track to meet its 2020 renewable energy target of 16% as only 11% of energy came from renewable sources and a projected 13% by 2020. On the 5th March 2020, the SEAI published its Energy-Related CO₂ Emissions in Ireland report. The report showed that energy-related CO₂ emissions declined slightly in 2018, even as energy use increased. This was due to changes in the mix of fuels used - more renewable energy and less coal used. However, the overall reduction was not enough to keep Ireland on track to meet long term decarbonisation goals. The 2019 National Projections Report also reported that on the current trajectory, Ireland’s energy efficiency achievement in 2020 is likely to be 16%, compared to the binding 20% energy savings target by the EU. The SEAI reports however use 2018 data that pre-dates the Government’s Climate Action Plan 2019, which has the potential to turn the trends around and get Ireland back on track for 2030 – 2050.

The 2030 framework includes EU-wide targets and policy objectives for the period 2021-2030 which include:

- At least 40% cuts in GHG (from 1990 levels);
- At least 32% share for renewable energy; and
- At least 32.5% improvement in energy efficiency.

12.4.7 The European Green Deal (EGD)

Presented on 11th December 2019, the deal sets out how to make Europe the first climate-neutral continent by 2050, boosting the economy, improving people's quality of life, caring for nature and leaving no one behind. It sets out a roadmap with actions to boost the efficient use of resources by moving to a clean, circular economy, restore biodiversity and cut pollution.

It outlines investments required financing tools available, and explains how to ensure a just and inclusive transition.

In order to meet the goal to become climate neutral by 2050 as part of the European Green Deal, the European Union (EU) Commission proposed on 4th March 2020 to bring about the first European Climate Law and legally bind the target of net zero greenhouse gas emissions by 2050.

The Climate Law also addresses several necessary steps to achieve the 2050 target 2 as follows:

- Based on a comprehensive impact assessment, the Commission will propose a new EU target for 2030 greenhouse gas emissions reductions. This part of the Law will be amended once the impact assessment is completed.
- The Commission proposes the adoption of a 2030-2050 EU-wide trajectory for greenhouse gas emission reductions, to measure progress and give predictability to public authorities, businesses and citizens.

The aim of this law is to ensure all EU policies contribute to this goal and that all sectors of the economy and society play their part. The target would then also be incorporated later through sectoral legislative proposals.

12.5 NATIONAL, REGIONAL AND LOCAL POLICY CONTEXT

The following sets out the relevant policy documents at a National, Regional and Local level.

12.5.1 National Climate Change Adaptation Framework (2012)

This non-statutory framework was Ireland's first climate change adaptation framework, providing a strategic policy focus aimed to reduce Ireland's vulnerability to climate change, by ensuring adaptation actions were taken across key sectors at national and at a local level. Twelve sectors were identified in which adaptation climate change plans were to be prepared.

This framework also recognises the importance of the role of planning and development with full engagement of key stakeholders to deliver the climate change objectives and adaptation action at a local level.

12.5.2 National Policy Position on Climate Action and Low Carbon Development 2015

This policy establishes the fundamental national objective of achieving transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050. Published in April 2014, it provides an advanced policy direction from NCCAF for the Government to adopt and implement plans to enable Ireland to move to a lower carbon economy by 2050. The National Policy Position envisages that policy development will be guided by a long-term vision based on:

- An aggregate reduction in carbon dioxide (CO₂) emissions of at least 80% (compared to 1990 levels) by 2050 across the electricity generation, built environment and transport sectors; and
- In parallel, an approach to carbon neutrality in the agriculture and land-use sector, including forestry, which does not compromise capacity for sustainable food production.

The National Policy Objective underlines the need to take a long-term view, having regard inter alia to current and future obligations under EU or international agreements, as well as the economic imperative for early and cost-effective action.

12.5.3 2015 Energy White Paper

The White Paper, published in 2015, on Energy Policy - [‘Ireland’s Transition to a Low Carbon Energy Future 2015-2030’](#) sets out a framework to guide energy policy in the period to 2030. In order to meet national, EU and international targets, this paper recognises the thorough transformation the Irish energy system requires.

12.5.4 Climate Action and Low Carbon Development Act 2015

This Act was a national landmark in the development of climate change policy in Ireland. It provides the statutory basis for the national objective laid out in the National Policy Position to move towards and achieve a low carbon, climate resilient and environmentally sustainable economy by 2050. It brought about the compulsory need to produce and submit for approval, to the Government, a series of successive National Adaptation Frameworks (NAFs) which will guide policy in relation to the reduction of GHG emissions and climate change adaptation.

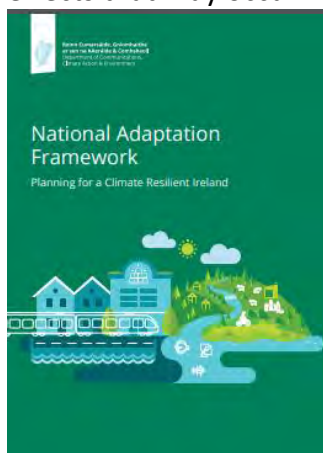
In accordance with Section 8 of the Act, the 18th January 2016 saw the establishment of a Climate Change Advisory Council (CCAC) which is independent in performance function, provides advice and recommendations as well as reporting of progress to meeting the national objective.

These plans and frameworks must also ensure that the national objective is achieved by the implementation of measures that are cost effective.

12.5.5 National Adaptation Framework (NAF 2018)

Developed under the *Climate Action and Low Carbon Development Act 2015* and adopted on 19th January 2018, this is Ireland’s 1st statutory national adaptation strategy that builds on the work carried out under NCCAF 2012, outlining a whole of Government and society approach to climate change adaptation in Ireland.

The NAF aims to reduce the vulnerability of the State to the negative effects of climate change and to avail of any positive effects that may occur.



Several Government departments will be responsible for preparing sectoral adaptation plans, for example the *'Climate Change Sectoral Adaptation Plan for Built and Archaeological Heritage'* (2019). Local authorities are also tasked with addressing climate change at a local level through the preparation of their local climate change adaptation strategies. Like the NMP, the NAF will be reviewed every 5 years.

In accordance with Action 8 of the NAF and Action 9 NMP, 4 Local Authority Climate Action Regional Offices (CAROs) were established in 2018 to drive climate action at regional and local level in Ireland. They are each operated by a Local Authority and support the preparation of local adaptation strategies.

12.5.6 Climate Action Plan (CAP)

The *Climate Action Plan* is a Government plan which was published 17th June 2019 and designed to enable Ireland to meet its EU climate change commitments, through carbon proofing government policies and establishing carbon budgets. It provides 183 individual policy actions over 12 sectors to tackle climate change along with timelines for delivery, to reduce carbon emissions by 30% between 2021 and 2030 and towards achieving zero emissions by 2050. Detailed progress reports are published quarterly to ensure delivery and accountability.

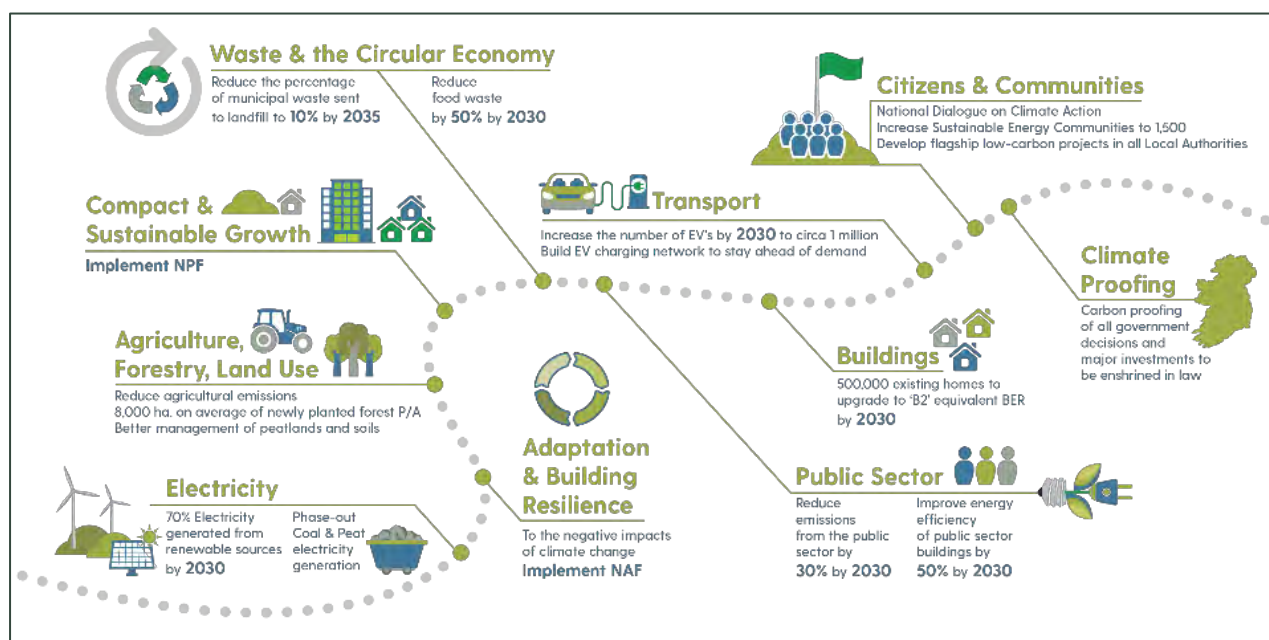
The Climate Action Delivery Board led by the Department of an Taoiseach will monitor progress and identify areas of concerns and challenges. The actions in this plan, if implemented, places Ireland in a better and more confident position in realising and meeting their 2030 and 2050 targets.

This key document also places Ireland at the forefront of international efforts to achieve Sustainable Development Goal 13 – the need to take urgent action to combat climate change and its impacts.

Several key measures identified in the plan have already been delivered including the signing up of all 31 Local Authorities in Ireland to the Climate Action Charter.

On 19th December 2019, the Government approved the publication of the General Scheme for the *Climate Action (Amendment) Bill 2019*. The Bill aims to enshrine in law the approach outlined in the CAP.

Figure 12.2 Climate Action Plan – to tackle Climate Breakdown



Source: Eastern and Midland Climate Action Regional Office (CARO)

12.5.7 Climate Action Charter (CAC)

The *Climate Action Charter* for Louth was signed in 2019. The charter acknowledges that Climate Change is happening and that actions must be taken to mitigate and adapt to our changing climate. We as a Nation must be more sustainable in our actions and ensure that Climate Action is at the heart of all our national, regional and local strategies, policies, plans and decisions. Each Chapter in this County Development Plan must be read with this *Climate Action Charter* at its core. We must plan and develop our County with climate action including adaptation, mitigation and improvement at its core. As a nation and County we must reduce negative climate impacts and promote climate improvement/mitigation and be climate resilient in our planning. The actions detailed in the Charter underpin all policies, objectives, goals and strategies of this plan and all other strategic plans whether they are local, regional or national.

12.5.8 Louth Climate Change Adaptation Strategy 2019-2024 (CCAS)

This *Louth Climate Change Adaptation Strategy 2019-2024* forms part of the National Adaptation Framework (NAF) which was published in response to the provisions of the *Climate Action and Low Carbon Development Act 2015*. Louth's CCAS has been developed in line with the Department for Communities Climate Action & Environment (DCCA) *Local Authority Adaptation Strategy Development Guidelines* and was adopted by Louth County Council elected members on 16th September 2019. It is a collaborative approach to climate change across the Eastern and Midlands Region. It sets out Louth's measures to adapting and protecting its functional area and citizens from the current and future effects of climate change and is based around 6 thematic areas.

NSO 8 is also in line with the Sustainable Development Goal on climate change:

“To realise the NSOs that include compact growth, sustainable mobility and transition to a low carbon and climate resilient society, Project Ireland 2040 has dedicated a Climate Action fund and a ten-year capital investment plan.”

They are supported by specific objectives and adaptation actions to achieve their desired outcomes. The CCAS seeks to inform or ‘climate proof’ existing plans and policies produced and implemented by Louth County Council.

12.5.9 Project Ireland 2040 (National Planning Framework - NPF)

This is the Government’s high-level strategic plan for shaping the future growth and development of our country out to the year 2040. This framework recognises the importance of climate action and the link with the planning process, which provides an established means through which to implement and integrate climate change objectives, including adaptation at a local level.

It sets out a single vision, a shared set of goals in the form of 10 National Strategic Outcomes (NSO) of which no. 8 identifies the transition to a low carbon and climate resilient and environmentally sustainable economy by 2050.

This objective will shape investment choices over the coming decades in line with the National Adaptation Framework.

New energy systems and transmission grids will be necessary for a more distributed, renewable-focused energy generation system, harnessing both the considerable on-shore and off-shore potential from energy sources such as wind, wave and solar and connecting the richest sources of that energy to the major sources of demand.

12.5.10 Regional Spatial and Economic Strategy (RSES) – Eastern and Midland Regional Assembly (EMRA)

The RSES recognises the global challenge that is climate change and EMRA is committed to the region becoming a low-carbon, circular and climate resilient region. The RSES supports the implementation of the NPF (Project Ireland 2040) through the provision of appropriate policy responses in the form of Regional Policy Objectives (RPO). The RSES sets out 16 Regional Strategic Objectives (RSOs) which are aligned with international, EU and national policy. The RSOs are sorted into 3 categories namely Economic Opportunity, Healthy Placemaking and Climate Action.

Under Climate Action the RSES identifies 6 RSOs:

RSO 6 – Integrated Transport and Land Use;

RSO 7 – Sustainable Management of Water, Waste and other Environmental Resources;

RSO 8 – Build on Climate Resilience, **RSO 9** – Support the Transition to Low Carbon and Clean Energy;

RSO 10 – Enhanced Green Infrastructure; and

RSO 11 – Biodiversity and Natural Heritage.

European and National funding provision will assist in the realisation of the RSES RSOs. EMRA will also work closely with the newly appointed Climate Action Regional Offices (CAROs) who shall ensure coherence and coordination with the RSES when formulating regional climate change adaptation plans.

The RSES also sets out 5 specific Climate Change RPOs for the Eastern and Midlands Region (RPO 7.30 – RPO 7.34).

Key features of the programme include:

- Commitment to supporting the European Green Deal;
- Offshore Wind Sector;
- Town Centres First;
- Transition to a low carbon future;
- Climate Governance;
- Increased emphasis on protection of Biodiversity and natural heritage; and
- Accelerating the electrification of the transport system.

12.5.11 Programme for Government 2020

The Programme for Government places significant emphasis on climate action and places climate action at the heart of the incoming Government’s ambitions. Central to the programme is a commitment to an average 7% reduction in overall greenhouse gas emissions from 2021-2030.

The programme commits to a 10-fold increase in the national retrofitting programme, with the target of bringing at least 500,000 Irish homes up to a minimum B2 standard this decade.

The climate action brief within the Programme for Government is wide ranging and touches on virtually every aspect of society and the economy.

One of the keys aspects is a commitment to net zero emissions by 2050 enshrined in a new Climate Action Bill.

There is also a commitment to update the *Climate Action Plan* annually and report progress quarterly.

The Programme for Government targets a review of renewable energy legislation with a view to accelerating the process for onshore wind, solar and offshore wind, while legislation is also being brought in to actively curb carbon intensive industries including gas extraction, shale gas importation, LPG gas storage and turf extraction.

12.6 CLIMATE ACTION STRATEGIC OBJECTIVES

Climate action mitigation and adaptation strategies have been integrated into the Policies of the Plan. The following Policy Objectives support the overarching Strategic Objectives.

Policy Objective

CA 1	To promote, support and direct effective climate action policies and objectives that seek to improve climate outcomes across the settlement areas and communities of County Louth helping to successfully contribute and deliver on the obligations of the State to transition to low carbon and climate resilient society through the encouragement and integration of appropriate mitigation and adaptation considerations and measures into all development.
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Policy Objective

CA 2	<p>Work to translate, support and implement strategic objectives of the <i>National Planning Framework</i> and the <i>Eastern and Midland Regional Spatial and Economic Strategy</i> to create an enabling local development framework that:</p> <ul style="list-style-type: none"> • Promotes and integrates important climate considerations in local development and planning decisions; • Supports national climate policy and targets of the Climate Action Plan (as revised and updated) and the delivery of the national transition objective.
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Policy Objective

CA 3	<p>Actively implement policies that support and encourage sustainable compact growth and settlement patterns, integrate land use and transportation, and maximise opportunities through development location, form, layout and design to secure climate resilience and reduce carbon dioxide and greenhouse emissions.</p>
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Policy Objective

CA 4	<p>Support the work of Louth County Council in:</p> <ul style="list-style-type: none"> • Developing a robust comprehension of the key risks and vulnerabilities of the County to the negative impacts of climate change; • The implementation of adaptation and mitigation actions of the strategy aimed at building climate resilience across local communities;and • Promoting the integration of effective adaptation and mitigation considerations into decision making processes.
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Policy Objective

CA 5	<p>To actively promote and encourage nature-based approaches and green infrastructure solutions as viable mitigation and adaptation measures to reduce greenhouse gas emissions, increase the adaptive capacity of ecosystems and optimize the multifaceted benefits through:</p> <ul style="list-style-type: none"> • Conservation, promotion and restoration of the natural environment; • Integrating an ecosystem services approach and promote healthy living environments through enhanced connection with nature and recreation/amenity; • Enhancing biodiversity in urban and rural settings; • Assist with water and flood risk management; and • Carbon storage or sequestration.
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Policy Objective

CA 6	<p>To capitalise on the economic opportunities for County Louth that arise in association with the environmental and technological advances required to support the transition to a low carbon and climate resilient economy and in particular, opportunities arising from the implementation and translation of the European Green Deal and the post COVID-19 recovery plan Next Generation EU, to national policy.</p>
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Policy Objective

CA 7	Promote and encourage positive community led climate action initiatives and projects that seek to reduce emissions, improve energy efficiency, enhance green infrastructure and encourage awareness on climate change issues.
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Policy Objective

CA 8	To seek to identify projects or initiatives that will assist in meeting national climate and energy targets and to seek funding or support any funding applications for the implementation of these initiatives from available sources including the Department of Environment, Climate & Communications Climate Action Fund.
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12.7 CLIMATE ACTION MITIGATION AND ADAPTATION

Climate action mitigation and adaptation are distinct but complementary activities.

12.7.1 Climate Change Mitigation

Climate Change Mitigation is defined as ‘a human intervention to reduce the sources or enhance the sinks of greenhouse gases’ (IPCC, 2014) i.e. tackling the cause of climate change.

There is an onus on each of us to mitigate the magnitude of long-term climate change by taking actions to reduce greenhouse gas emissions, and to increase the capacity of carbon sinks such as forests.

Climate mitigation is to the forefront of this Plan with the aim of achieving a reduction in greenhouse gas emissions across the key sectors. Climate mitigation has the capacity to provide significant health and economic benefits such as improved health, new 'green' jobs, improved competitiveness, cleaner air and more efficient public transport systems in cities, new technologies, energy-efficient buildings and secure supplies of indigenous energy.

The Strategic Environmental Assessment (SEA) in Volume 5 of this Plan appraises the likely significant environmental effects of this Plan and the reasonable alternatives considered.

The climate change mitigation pathways presented in Chapter 4 of the Climate Action Plan 2019 entail a coherent set of abatement measures across the five sectors that contribute most to our greenhouse gas emissions: Agriculture, Transport, Electricity, Built Environment, and Industry/Enterprise.

This section of the Plan identifies each of the policy objectives, which contribute towards achieving each of the targets set for the aforementioned sectors.

Separate to the policies which align with the targets set down for the five sectors, the Plan contains a specific policy objective to support the implementation of the Climate Action Plan 2019 and to consider a variation to the Plan should this be required in future.

Policy Objective

CS 6	To support the implementation of the EU Green Deal, National Climate Action Plan 2019, Programme for Government 2020, Louth Climate Change Adaptation Strategy 2019-2024 and the Climate Action Charter through the Plan and to consider, if appropriate, a variation of the development plan to ensure the consistency with the approach to climate action recommended in any revised Development Plan Guidelines as adopted.
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12.7.1.1 Electricity

As noted within the *Climate Action Plan 2019*, electricity accounted for 19.3% of Ireland’s greenhouse gases in 2017 and it is therefore important that we decarbonise the electricity that we consume by harnessing our significant renewable energy resources. Such development will reduce dependence on fossil fuels and external sources, improve energy mix and provide a secure and resilient supply, reduce greenhouse gas emissions creating environmental benefits and protect against climate change.

The Council recognises the range of new and developing technologies that can contribute to minimising greenhouse gas emissions, providing a secure and stable energy supply and securing a greater proportion of our energy from renewable sources.

The Council recognises the significant contribution that wind, solar and biomass energy can make as a clean sustainable solution to energy requirements and its vital role in helping achieve national targets in relation to fossil fuel reductions and consequently greenhouse gas emissions.

The policy objectives contained within the Plan and which contribute to achieving the Climate Action Plan targets on Electricity are set out in Table 12.1 at the end of this chapter.

12.7.1.2 Built Environment

The built environment is broadly defined as the artificial, man-made structures in which we live, work and play. All artificial surfaces, including buildings, roads, pavements etc. come under the heading of the built environment. The built environment accounted for 12.7% of Ireland’s greenhouse gases in 2017 (*Climate Action Plan 2019*).

New buildings only account for a small percentage of the built environment and a strategy for bringing older existing buildings up to correct standards has become a key focus of the *Climate Action Plan 2019*. The policy objectives contained within the Plan and which contribute to achieving the Climate Action Plan targets regarding the Built Environment are set out in Table 12.2.

12.7.1.3 Transport

The transport sector accounted for 19.8% of Ireland’s greenhouse gases in 2017. The dispersed settlement pattern and low population density evident across much of the country, has contributed to a high proportion of journeys being made by private car and has created a barrier to sustainable public transport provision. In order to reduce greenhouse gas emissions within the transport sector, there is a requirement to drive more compact, connected development and to migrate towards low emission vehicles.

As well as contributing to the production of greenhouse gases, air pollution emitted from transportation contributes to poor local air quality, in the form of increased micro-particulates and nitrogen oxides, which reduces people’s quality of life and harms their health.

The Census 2016 confirmed that the car remains the dominant mode of transport in County Louth with over 63% of workers driving to work and over 50% of students travelling to school or college by car. Mitigation policies (set out in Table 12.3 at the end of this chapter) have therefore been incorporated into the Plan to ensure that the transportation sector is addressed within the overall climate action strategy and alignment with the Climate Action Plan 2019 targets.

The Plan supports the target for increased Electric Vehicles (EV’s) in Ireland within the Development Management Guidelines laid out in Chapter 13. These guidelines require that in all car parking areas provision shall be made for charging points for Electric Vehicles, including the necessary wiring and ducting.

12.7.1.4 Agriculture, Forestry and Land Use

Agriculture generates a third of Ireland’s total greenhouse gas emissions and is the single largest contributor to Ireland’s overall Greenhouse Gas emissions, accounting for over 30% of the total. Ireland’s production systems are already at the higher end of efficiencies in terms of efficiency per unit production. This highlights the challenges faced by the sector to identify further cost-effective measures to limit emissions.

The Development Plan has a key role to play in terms of land use and the interaction with climate action.

Deforestation is one of the major contributors to climate change, and currently accounts for 17% of global greenhouse gas emissions. Conversely, forestry provides a range of opportunities to mitigate rises in greenhouse gas levels:

- afforestation/reforestation;
- forest management;
- reduced deforestation (land use change from forest to non-forest);
- increased use of wood products;
- Use of forest products for bioenergy to replace fossil fuel use; and
- Support anaerobic digestion to reduce the anthropogenic climate warming impact of agricultural waste and produce biogas, which is not considered a fossil fuel.

The total carbon reservoir in Irish forests currently exceeds one billion tonnes of carbon dioxide. Most of this is in the soil. Table 12.4 sets out the specific targets contained within the Climate Action Plan 2019 and the corresponding policy objectives within this Plan which will contribute to achieving these national targets.

12.7.1.5 Enterprise

The largest share of enterprise emissions comes from the manufacturing sector, mostly chemicals, food processing, beverages, and cement, but it is a relatively small sector in Ireland with 74 companies. These are covered by the EU Emissions Trading System (ETS). The EU ETS focuses on emissions that can be measured, reported and verified with a high level of accuracy and covers carbon dioxide (CO₂), nitrous oxide (N₂O) and perfluorocarbons (PFCs). Emissions from enterprise that fall outside the EU ETS are highly diverse, with a large proportion arising from Small Medium Enterprises (SMEs). There are various options available to reduce emissions within the sector.

These include increase in the uptake of low-carbon and energy efficient technology, and a transition to low carbon energy supplies. The policy objectives contained within the Plan and which contribute to achieving the Climate Action Plan targets on Enterprise are set out in Table 12.5 at the end of this chapter.

12.7.2 Climate Change Adaptation

Climate Change Adaptation is defined as ‘the process of adjustment to actual or expected climate and its effects. In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities. In some natural systems, human intervention may facilitate adjustment to expected climate and its effects’ (IPCC, 2014), i.e. dealing with the inevitable effects and impacts of climate change.

The 2018 Intergovernmental Panel on Climate Change (IPCC) Special Report on Global Warming concluded that the impacts and costs 1.5°C of global warming will be far greater than expected. The past decade has increased ferocity and frequency of storms, forest fires, droughts, coral bleaching, heat waves, and floods around the world with just 1°C of global warming. The IPCC reported that 1.5°C could be reached in as little as 11 years and almost certainly within 20 years without major cuts in CO₂ emissions. Climate-related risks to health, livelihoods, food security, water supply, human security, and economic growth are projected to increase with global warming of 1.5°C and will increase further if we reach 2°C.

At a local level, Met Éireann projections indicate an increase of 1°C –1.6°C in mean annual temperatures, with the largest increases seen in the east of the country.

Highest daytime temperatures are projected to rise by 0.7°C–2.6°C in summer and lowest night-time temperatures are projected to rise by 1.1°C–3°C in winter.




Met Éireann’s down-scaled simulations show significant projected decreases in mean annual, spring and summer precipitation amounts by mid-century. The projected decreases are largest for summer, with reductions ranging from 0% to 13% and from 3% to 20% for the medium-to-low and high emission scenarios, respectively. The frequencies of heavy precipitation events show notable increases of approximately 20% during the winter and autumn months. The number of extended dry periods is projected to increase substantially by mid-century during autumn and summer.



The projected increases in dry periods are largest for summer, with values ranging from 12% to 40% for both emission scenarios.¹

Louth County Council has compiled a Climate Risk Register as part of the County Louth Climate Change Adaptation Strategy 2019-2024. This register outlines specific impacts of climate change resulting from various climate hazard events such as heat wave conditions, extreme precipitation, extreme wind events and extreme cold and/or snow events. A summary of these risks are outlined in Figure 12.3.

¹ <https://www.met.ie/climate/climate-change>

Figure 12.3 – Climate Risk Register Summary

<p>Electricity</p>		<ul style="list-style-type: none"> • Damage to underground utility services located under or adjacent to roads during extreme cold or snow events; • Increased frequency of fallen power and communication overhead lines caused by storm activity.
<p>Built Environment</p>		<ul style="list-style-type: none"> • Requirement to re-house families impacted by flooding during periods of extreme precipitation; • Increased frequency of damage to council housing stock by storm activity; • Damage to housing stock such as burst pipes caused by freezing conditions.
<p>Transport</p>		<ul style="list-style-type: none"> • Deterioration of road surfaces due to prolonged exposure to high temperatures during heat wave conditions; • Increased deterioration of roads as a result of ground movement/shrinkage during heat wave conditions; • Increase in damage to transport infrastructure including flooding of roads and damage to bridge structures and potential landslides during periods of extreme precipitation; • Increase in river levels bursting banks and causing flooding of roads & footpaths, or rivers so high so as to prevent surface water drainage freely flowing away from road surfaces during periods of extreme precipitation; • Increased frequency of road blockages caused by fallen trees and power lines and damage to road signage, street furniture and public lighting during storm conditions; • Increased frequency of roads closed by snow; and • Increased road and bridge infrastructure deterioration due to freeze/thaw conditions.

<p>Agriculture, Forestry & Land Use</p>		<ul style="list-style-type: none"> • Increase in frequency and intensity of fires in forested areas, upland areas, gorse and bog areas and amenity/ recreational areas during heat wave conditions; and • Reduced availability of water sources to combat fires during heat wave conditions.
<p>Natural Environment</p>		<ul style="list-style-type: none"> • Wild fires in areas of high biodiversity and habitat value during heat wave events and drought conditions; • Increased demand for bathing waters during heat wave events and drought conditions; • Reduced flow in rivers and streams during heat wave events and drought conditions • Increase in Invasive species best suited to higher temperatures and drier conditions; • Increased surface run-off resulting in nutrients being washed into rivers, streams, and lakes during extreme precipitation events; • Changes to river morphology (e.g. bank erosion) caused by increased flow rates during extreme precipitation events; • Loss of biodiversity and habitats in flooded areas caused by extreme precipitation events; and • Low temperatures will result in an increase in polluting carbon sources being burned, which will have a consequence for air quality and public health.

12.7.3 Adapting to Climate Change within Louth

12.7.3.1 Integrated Land Use Planning

Spatial planning land use policy has a crucial role to play in ensuring compact and sustainable growth of our cities, towns, and villages. Integrated land use planning and transportation are fundamental to reducing car dependency and achieving reductions in carbon emissions.

This is a particular focus in this Plan whereby climate action is embedded in the land use planning and transport policies.

The Core Strategy focuses on delivering upon the overriding objective of both the NPF and the RSES in achieving compact growth in urban areas.

An analysis of appropriate brownfield and infill sites with potential capacity to deliver new homes was completed for Drogheda, Dundalk, Ardee and Dunleer and the remaining Level 3 settlements. Delivering compact growth is acknowledged as being a crucial aspect in achieving a greater uptake of sustainable modes of transport.

This reduces the reliance on the car by facilitating easier access to public transport corridors and encourages cycling and walking.

Policy within the Plan is particularly focused on prioritising targeted population and economic growth to the designated Regional Growth Centres of Drogheda and Dundalk.

The aim is to promote their continued sustainable and compact growth as regional drivers to city scale, with a target population of 50,000 by 2031 supported by improvements to sustainable transport links and the requisite infrastructure to enable the towns grow to their full potential.

The Core Strategy encourages higher densities and increased building heights in areas close to public transport routes.

The need to reduce one off rural housing in the countryside is key to ensuring settlement patterns align with climate action principles.

The Plan acknowledges that as we strive to mitigate against the impacts of climate change it is important that future development patterns reduce our carbon footprint, protect our environment and promote more sustainable ways of living. To this end the Plan directs rural generated housing demand to rural villages in the first instance.

12.7.3.2 Green Infrastructure

Green infrastructure has a significant role to play in transitioning to a low-carbon society and economy and to mitigate the significant risks associated with rising energy costs and climate change adaptation. Green Infrastructure can include a number of facets such as uplands, wetlands, woodlands, rivers, lakes, and coastal areas, all of which have a pivotal role in terms of climate adaptation.

The Council has in place a comprehensive Green Infrastructure Strategy, which aims to strengthen and/or create wildlife corridors between interconnecting core areas for the benefit of biodiversity, enhanced outdoor recreational opportunities, visual amenity and general wellbeing.

The Council recognises the important role green infrastructure such as greenways play in climate mitigation and adaptation.

The principles of a green infrastructure approach to land use planning has been embedded as a cross cutting theme in the policies and objectives of this Plan.

The Plan supports the existing green infrastructure network of County Louth and includes a noteworthy policy to prepare specific Green Infrastructure Strategies for the Regional Growth Centres of Drogheda and Dundalk.

12.7.3.3 Greenways

The Council has invested significantly in Greenways. The Great Eastern Greenway is a 7 kilometre trail that runs from Carlingford to Omeath along the southern shore of Carlingford Lough. It is proposed to further extend this greenway to Newry and Dundalk and increase the length of the trail to approximately 55 kilometres.

To the south of the County phase one of the Boyne Greenway, in Drogheda, has been completed. This stretch of greenway runs from Dominic's Park on the south bank of the River Boyne to the Battle of the Boyne Visitor Centre at Oldbridge. Future phases of this Greenway include an extension from Drogheda to Mornington. It is anticipated that the extended route will pass through Drogheda and follow the southern edge of the Boyne east of the town and out to Mornington.

Most recently, Louth County Council has secured €200,000 worth of funding to improve the Northside Greenway at Mell in Drogheda. The funding has been allocated under the Outdoor Recreation Infrastructure Scheme, a joint initiative between the Department of Rural and Community Development and Fáilte Ireland.

12.7.3.4 Flood Risk Management

Flooding is the most common natural hazard and third most damaging globally after storms and earthquakes. Climate change is expected to increase flood risk through more frequent heavy precipitation, increased catchment wetness and sea level rise.

Spatial planning aims to reduce the harmful effects of flooding by limiting the impact of a flood on human health and economic infrastructure. This is accomplished by planning appropriate land use of floodplains. The role of the Strategic Flood Risk Assessment (SFRA) is pivotal in this regard in informing the policy objectives and land use zoning objectives of the Plan.

The Plan is informed by the Strategic Flood Risk Assessment (contained within Volume 5) and guided by robust policies and objectives in relation to Flood Risk Management, designed to ensure that future development, in areas at risk of flooding shall conform to 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (2009). The baseline for the SFRA has been derived from the Office of Public Works (OPW) catchment and Flood Risk Assessment and Management (CFRAM) data, the Preliminary Flood Risk Assessment and Management (PFRAM) data and the Areas of Further Assessment (AFA).

The SFRA acknowledges that with climate change, the frequency, pattern and severity of flooding is expected to change and become more damaging, so the likely impact of climate change on fluvial and coastal flood extents has also been appraised. The strategic land-use planning decisions taken within this Plan have been fully informed by the findings of the SFRA.

Louth County Council has been working closely with the OPW with regard to planned flood relief schemes within the County.

These schemes require significant capital investment. Having been allocated funding, the Council is seeking to deliver on the Drogheda & Baltray Flood Relief Scheme, Dundalk, Blackrock & Ardee Flood Relief Scheme and the Carlingford & Greenore Flood Relief Scheme over the lifetime of this Plan.

12.7.3.5 Urban and Rural Regeneration

Urban and rural regeneration has the potential to greatly enhance the climate resilience of towns and villages. Regeneration projects can help to inject new life into declining urban and rural areas, stimulating both social and economic regeneration.

Urban regeneration in particular focuses on reorganising and upgrading the existing built environment instead of planning new greenfield development. The valuable contribution made by urban and rural regeneration projects is reflected in the Governments Rural & Urban Regeneration and Development Fund.

A key requirement for eligibility under both schemes is the contribution a project will make in assisting the transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy.

The Plan emphasises the importance of regeneration areas within the County and identifies a number of regeneration areas in Drogheda, Dundalk and Ardee. The areas identified have the potential to deliver sustainable compact growth while achieving a transition to a competitive, low carbon and climate-resilient economy. Louth County Council has also successfully secured funding for the following regeneration projects to date; and

- Ardee Regeneration & Ardee Castle;
- Westgate Vision Drogheda;
- Long Walk Quarter;
- Living in Carlingford-Visiting Carlingford.

Each of these schemes will contribute to creating climate resilient development and enhance their respective town and village centres.

The Plan acknowledges the important role played by urban and rural regeneration projects with regards climate action and this is reflected in specific regeneration policies and zoning objectives.

12.7.3.6 Renewable Energy

Louth County Council has been proactive in promoting renewable energy within the County. The Council has also sought to lead by example in utilising renewable energy resources. In 2017 PV panels were installed on a section of roof of the Council office building in Dundalk. The PV panels generate 11KW of electricity and are expected to generate some 8,500KW hrs of electricity or some 3% of the annual energy use within the building.

The Council was also a key partner in the Dundalk 2020 Project and has participated in the EU Funded Concerto Project as a result. Dundalk was Ireland's first sustainable energy community under SEAI's Sustainable Energy Communities (SEC) Programme.

Dundalk 2020 involved collaboration between local authorities, agencies, professional organisations, businesses and local community groups, with the aim of reducing energy use, achieving energy-efficiency targets and installing renewable energy where feasible. Dundalk 2020 is regarded as an exemplar project for future similar projects across Ireland.

The Council acknowledges the role of the Plan in developing renewable energy projects within the County. Since the adoption of the *Louth County Development Plan 2015-2021*, the Council has granted planning permission for a number of solar farms within the County. These include Solar PV Energy Developments at Dunleer, Willville and Beaulieu House Estate, Drogheda.

The Council recognises the range of new and developing technologies that can contribute to minimising greenhouse gas emissions, providing a secure and stable energy supply and securing a greater proportion of our energy from renewable sources.

In particular, the Council recognises the significant contribution that wind energy can make as a clean sustainable solution to energy requirements and its vital role in helping achieve national targets in relation to fossil fuel reductions and consequently greenhouse gas emissions. The Council will also support and facilitate the development of solar energy, encourage passive solar design, solar PV, and solar water heating in new buildings and in retrofitting buildings.

The policy objectives set out within this Plan support the key renewable energy sources such as wind, solar and bioenergy, subject to environmental considerations.

Table 12.1 – National Climate Action Plan Targets versus Louth County Development Plan 2021-2027 Policy Objectives – Electricity

Climate Action Plan 2019: Targets	Louth County Development Plan Policy Objectives	
<p>Reduce CO2 eq. emissions from the sector by 50 –55% relative to 2030 Pre-NDP projections.</p> <p>Deliver an early and complete phase-out of coal- and peat-fired electricity generation.</p> <p>Increase electricity generated from renewable sources to 70%, indicatively comprised of:</p> <ul style="list-style-type: none"> • at least 3.5 GW of offshore renewable energy • up to 1.5 GW of grid-scale solar energy • up to 8.2 GW total of increased onshore wind capacity. 	<p>IU 56</p>	<p>To encourage the development of wind energy, in accordance with Government policy and guidance and the 'Wind Energy Development Guidelines' (2006) or any revisions thereof which may be issued during the lifetime of the Plan.</p>
	<p>IU 60</p>	<p>To support the development of off shore windfarm developments subject to normal planning considerations, including in particular the impact on areas of environmental or landscape sensitivity.</p>
	<p>IU 64</p>	<p>To support the development of solar energy infrastructure in the County including commercial scale ground mounted solar PV “Solar Farms” subject to environmental safeguards and the protection of natural and built heritage features, biodiversity and views and prospects.</p>
	<p>IU 49</p>	<p>To support international, national and County initiatives for limiting and reducing emissions of greenhouse gases through energy efficiency and the development of renewable energy sources at suitable locations, utilising the natural resources of the County, in an environmentally acceptable manner subject to normal proper planning considerations including in particular the impact on areas of environmental or landscape sensitivity.</p>
	<p>IU 50</p>	<p>To co-operate with the appropriate authorities both north and south of the border in the provision of all-island renewable energy.</p>
	<p>IU 51</p>	<p>To support initiatives aimed at reducing the level of energy consumption within the County.</p>
	<p>IU 52</p>	<p>To produce a Renewable Energy Strategy for County Louth within one year of adoption of the Revised Wind Energy Guidelines. This strategy shall have regard to ‘A Methodology for Local Authority Renewable Energy Strategies’, (SEAI) and shall be compliant with the requirements of the SEA & Habitats Directives.</p>
	<p>IU 53</p>	<p>To support the identification, in conjunction with EMRA, of Strategic Energy Zones, areas suitable to accommodate large energy generating projects within the Eastern and Midland Region.</p>

Climate Action Plan 2019: Targets	Louth County Development Plan Policy Objectives	
<p>Reduce CO2 eq. emissions from the sector by 50 –55% relative to 2030 Pre-NDP projections.</p>	<p>IU 55</p>	<p>To support the implementation of the EU Green Deal, Climate Action Plan 2019 (or any subsequent plan), Programme for Government 2020, Climate Change Adaptation Strategy for County Louth and the Climate Action Charter and facilitate measures which seek to reduce emissions of greenhouse gases.</p>
<p>Deliver an early and complete phase-out of coal- and peat-fired electricity generation.</p>	<p>IU 69</p>	<p>To support and promote the development of bio-gas production and networking technologies at suitable locations and subject to normal planning and environmental considerations.</p>
<p>Increase electricity generated from renewable sources to 70%, indicatively comprised of:</p> <ul style="list-style-type: none"> • at least 3.5 GW of offshore renewable energy • up to 1.5 GW of grid-scale solar energy • up to 8.2 GW total of increased onshore wind capacity. 	<p>IU 70</p>	<p>Facilitate and promote District Heating installation where practical through the County, while protecting residential amenity.</p>
	<p>HOU 30</p>	<p>To encourage building design and layout that maximises daylight and natural ventilation and incorporates energy efficiency and conservation measures that will improve the environmental performance of buildings in line with best practice.</p>
	<p>IU 73</p>	<p>To support the sustainable development of hydroelectric projects on rivers and lakes where they do not have an ecological impact on any sites of EU or national designation and/or impact negatively on freshwater species and the free passage of fish.</p>
	<p>IU 74</p>	<p>To support the development of wave and tidal energy in suitable waters off the coast of County Louth subject to the protection of important marine habitats and acceptable visual and environmental considerations.</p>
	<p>IU 75</p>	<p>To promote and facilitate the development of small scale electricity generation installations and green technologies which do not negatively impact on environmental quality, landscape, wildlife and habitats and residential amenities.</p>
<p>IU 78</p>	<p>To support and facilitate the reinforcement and development of enhanced electricity and gas supplies, and associated networks, to serve the existing and future needs of the County and Region. This will include the delivery of the necessary integration of transmission network requirements facilitating linkages of renewable energy proposals to the electricity and gas transmission grid, in a sustainable and timely manner, subject to appropriate environmental assessment and the planning process.</p>	

Table 12.2 – National Climate Action Plan Targets versus Louth County Development Plan 2021-2027 Policy Objectives – Built Environment

Climate Action Plan 2019: Targets	Louth County Development Plan Policy Objectives	
<p>Reduce CO₂ eq. emissions from the sector by 40–45% relative to 2030 pre-NDP projections.</p> <p>Sharply reduce fossil fuel use, given the current heavy reliance on gas, oil, coal and peat in the sector.</p> <p>Increase the number of Sustainable Energy Communities to 1,500.</p> <p>Complete the rollout of the Support Scheme for Renewable Heat (SSRH), including support for biomass and anaerobic digestion heating systems.</p>	IU 54	To support Sustainable Energy Communities and Local Community Group Initiatives to develop clean energy opportunities within the County.
	IU 84	To support the implementation of National and County initiatives for limiting emissions of greenhouse gases by incorporating energy efficiency measures into the design of new buildings and retrofitting of existing buildings.
	IU 85	To ensure that all new buildings in the County achieve the Nearly Zero-Energy Buildings (NZEB) standard in line with the Energy Performance of Buildings Directive (EPBD) and having regard to the Guidelines for Sustainable Design and Energy Efficiency in Buildings.
	IU 87	To promote innovative new building design and retrofitting of existing buildings where possible, and encourage the design and construction of buildings that are functionally adaptable, to improve building energy efficiency, energy conservation and the use of renewable energy sources, in accordance with national policy and guidance.
	CS 2	To achieve compact growth through the delivery of at least 30% of all new homes in urban areas within the existing built up footprint of settlements, by developing infill, brownfield and regeneration sites and redeveloping underutilised land in preference to greenfield sites.
	CS 5	To support the implementation of the EU Green Deal, National Climate Action Plan 2019, Programme for Government 2020, Louth Climate Change Adaptation Strategy 2019-2024 and the Climate Action Charter through the Plan and to consider, if appropriate, a variation of the development plan to ensure the consistency with the approach to climate action recommended in any revised Development Plan Guidelines as adopted.
	CS 20	To direct rural generated housing demand to rural villages and rural nodes in the first instance and ensure that one off housing in the open countryside is only permitted where there is demonstrable compliance with the criteria for rural housing as provided for in the Development Plan.
	SS 5 & SS 22	To support increased building heights at appropriate locations in Drogheda and Dundalk, subject to the design and scale of any building making a positive contribution to its surrounding environment and streetscape.

Climate Action Plan 2019: Targets	Louth County Development Plan Policy Objectives	
<p>Reduce CO2 eq. emissions from the sector by 40–45% relative to 2030 pre-NDP projections.</p>	<p>HOU 10</p>	<p>To continue to support the creation of sustainable communities throughout the County for people across all the life stages by facilitating the creation of attractive neighbourhoods where there are strong links and connections to local services, community facilities and employment areas and where walking, cycling, and public transport is prioritised.</p>
<p>Sharply reduce fossil fuel use, given the current heavy reliance on gas, oil, coal and peat in the sector.</p>	<p>HOU 15</p>	<p>To promote development that facilitates a higher, sustainable density that supports compact growth and the consolidation of urban areas, which will be appropriate to the local context and enhance the local environment in which it is located.</p>
<p>Increase the number of Sustainable Energy Communities to 1,500.</p>	<p>HOU 16</p>	<p>To support increased building heights in appropriate locations in the Regional Growth Centres of Drogheda and Dundalk.</p>
<p>Complete the rollout of the Support Scheme for Renewable Heat (SSRH), including support for biomass and anaerobic digestion heating systems.</p>	<p>HOU 36</p>	<p>To discourage urban generated housing in rural areas and direct proposals for such housing to the towns and villages in Settlement Levels 1-4 in the County as set out in the Settlement Hierarchy in Table 2.4.</p>
	<p>TOU 21</p>	<p>To seek best-practice environmental management and climate proofing of tourism related developments and activities to include the circular economy, energy efficiency, waste management, procurement and recycling.</p>
	<p>IU 59</p>	<p>To favourably consider small scale wind energy development for auto-consumption purposes, that accord with the proper planning and sustainable development of the area including residential amenity, heritage, environmental and landscape impacts.</p>
	<p>IU 65</p>	<p>To encourage and support the development of solar energy infrastructure for on-site energy use, including solar PV, solar thermal and seasonal storage technologies.</p>
	<p>IU 66</p>	<p>To encourage and support the development and promote the use of heat pumps for heating domestic, commercial and recreational buildings and water subject to normal planning and environmental considerations.</p>
	<p>IU 67</p>	<p>To support and promote the development of projects that convert biomass to energy subject to proper planning and environmental considerations.</p>
	<p>IU 91</p>	<p>To encourage and support the utilisation of siting and landscape design features to minimise energy requirements.</p>

Table 12.3 – National Climate Action Plan Targets versus Louth County Development Plan 2021-2027 Policy Objectives – Transport

Climate Action Plan 2019: Targets	Louth County Development Plan Policy Objectives	
<p>Reduce CO2 eq. emissions from the sector by 45–50% relative to 2030 pre-NDP projections.</p> <p>Increase the number of EVs to 936,000.</p> <p>Build the EV charging network to support the growth of EVs at the rate required, and develop our fast-charging infrastructure to stay ahead of demand.</p>	MOV 10	To facilitate the switch to Electric Vehicles through the roll-out of additional electric charging points at appropriate locations within the County in association with relevant agencies and stakeholders.
	MOV 11	To facilitate the provision of electricity charging infrastructure for electric vehicles both on street and in new developments in accordance with car parking standards prescribed in the Development Management Guidelines in Chapter 13.
	NBG 51	To require the integration of climate change mitigation measures in any future spatial plans and climate change adaptation measures in proposed developments.
	MOV 1	To work with national transport agencies in supporting the delivery of a high quality, climate resilient and sustainable transport network in the County.
	MOV 2	To support the implementation of the 'National Climate Action Plan' 2019, and any subsequent plans, and in particular the measures included that will assist in achieving the target of CO2 emissions reduction by 2030 in the transport sector as set out in Section 10.2 of the 'Climate Action Plan'.
	MOV 3	To facilitate the integration of land use with sustainable transportation infrastructure in accordance with the requirements of RPO 8.1 in the RSES by supporting the creation of a critical mass of population and employment related development that would maximise investment in public transport infrastructure and create compact, sustainable settlements.
	MOV 4	To promote sustainable higher density development along public transport corridors.
	MOV 9	To support investment in sustainable transport infrastructure that will make walking, cycling or public transport more attractive and appealing, and facilitates accessibility for all, regardless of age, physical mobility, or social disadvantage.
	MOV 14	To encourage a modal shift from use of the private car towards more sustainable modes of transport including walking, cycling, and public transport.
SS 13	To support investment in public and sustainable transport infrastructure and services in Drogheda including the progression of the DART Expansion Programme which includes the electrification of the rail line and the extension of DART services to Drogheda.	

Climate Action Plan 2019: Targets	Louth County Development Plan Policy Objectives	
<p>Reduce CO2 eq. emissions from the sector by 45–50% relative to 2030 pre-NDP projections.</p> <p>Increase the number of EVs to 936,000.</p> <p>Build the EV charging network to support the growth of EVs at the rate required, and develop our fast-charging infrastructure to stay ahead of demand.</p>	SS 17	To work with the NTA, local landowners, and developers to implement an integrated pedestrian and cycle path network throughout Drogheda, recognising the highest priority to be given to cycling and walking over other modes of transport.
	SS 18	To develop a network of green areas throughout the town including the delivery of a greenway along the north and southern banks of the River Boyne stretching from Townley Hall to Baltray and Oldbridge to Mornington in County Meath while maintaining the integrity of the Boyne Natura 2000 sites.
	SS 21 & SS 4	To support sustainable high density development, particularly in centrally located areas and along public transport corridors and require a minimum density of 50 units/ha in these locations.
	SS 31	To work with the NTA, local landowners and developers to implement an integrated pedestrian and cycle path network throughout Dundalk.
	SS 32	To develop a network of green areas throughout the town, building on existing green infrastructure, and advancing the delivery of the Great Eastern Greenway along the coast incorporating the delivery of greenway and pedestrian infrastructure on both sides of the Castletown River, while maintaining the integrity of the Dundalk Bay Natura 2000 sites.
	HOU 22	To require residential developments to prioritise and facilitate walking, cycling, and public transport and to include provision for links and connections to existing facilities and public transport nodes in the wider neighbourhood.
	MOV 16	To support the DART Expansion Programme including new infrastructure and the electrification of existing lines along the northern rail line to Drogheda.
	MOV 28	To promote walking and cycling as a safe, convenient, healthy, efficient, and environmentally friendly mode of transport for all age groups.
	MOV 30	To provide, where possible traffic free pedestrian and cyclist routes particularly where such routes would provide a more direct, safer, and more attractive alternative to the car.
NBG 46	To develop linear parks, particularly along waterways, and to link existing parks and open spaces in order to provide green chains that promote permeability for pedestrians and cyclists in the Regional Growth Centres of Drogheda and Dundalk.	

Table 12.4 – National Climate Action Plan Targets versus Louth County Development Plan 2021-2027 Policy Objectives – Agriculture, Forestry & Land Use

Climate Action Plan 2019: Targets	Louth County Development Plan Policy Objectives	
<p>Deliver 16.5-18.5 MtCO₂eq. cumulative abatement.</p> <p>Achieve 26.8 MtCO₂eq. abatement through LULUCF actions over the period 2021 to 2030, comprised of:</p> <ul style="list-style-type: none"> an average of 8,000 ha per annum of newly planted forest, and sustainable forest management of existing forests (21 MtCO₂eq. cumulative abatement) at least 40,000 ha per annum of reduced management intensity of grasslands on drained organic soils (4.4 MtCO₂eq. cumulative abatement) better management of grasslands, tillage land and non-agricultural wetlands (1.4 MtCO₂eq. cumulative abatement) 	ENV 40	In accordance with the National Climate Action Plan 2019 (or any subsequent Plan) Louth County Council shall promote sustainable forestry development of appropriate scale within the County in order to address climate action directly through carbon sequestration and indirectly through the displacement of fossil fuel.
	ENV 33	To encourage forestry and forestry related development, as a means of diversifying from traditional agriculture activity with a preference for native species.
	ENV 31	To support national policy in relation to forestry in order to develop an internationally competitive and sustainable forest sector that provides a full range of economic, environmental and social benefits to society, subject to normal planning criteria.
	ENV 38	To retain and protect significant stands of existing trees/ hedgerows/woodlands, and seek increased planting of native trees, where appropriate, in new developments.
	ENV 32	To encourage the development of a well-managed sustainable forestry sector, which is compatible with the protection of the environment including the avoidance of likely significant effects on European sites (SACs and SPAs) and is planted, managed and harvested in accordance with the Forest Service Guidelines for Landscape, Forest Harvesting and Environmental, Archaeology, Biodiversity and Water Quality.
	EE 61	To facilitate the diversification of the agricultural sector by supporting alternative farm enterprises subject to the nature and use of any enterprise being compatible with the environment in which it is located.
	HOU 38	To reserve as decarbonisation zones, agricultural, open space, or recreational use, lands immediately surrounding or in the immediate vicinity of the development boundary of towns and villages in the County in order to prevent sprawl and a linear pattern of development, and to ensure there is a distinction between built up areas and the open countryside.
SC 15	To facilitate and encourage open space areas and greenway corridors to be planned for on a multi-functional basis incorporating measures to promote and protect ecosystems, climate change measures and to incorporate key landscape features including archaeological considerations into their design.	



Climate Action Plan 2019: Targets	Louth County Development Plan Policy Objectives	
<p>Deliver 16.5-18.5 MtCO₂eq. cumulative abatement.</p> <p>Achieve 26.8 MtCO₂eq. abatement through LULUCF actions over the period 2021 to 2030, comprised of:</p> <ul style="list-style-type: none"> an average of 8,000 ha per annum of newly planted forest, and sustainable forest management of existing forests (21 MtCO₂eq. cumulative abatement) at least 40,000 ha per annum of reduced management intensity of grasslands on drained organic soils (4.4 MtCO₂eq. cumulative abatement) better management of grasslands, tillage land and non-agricultural wetlands (1.4 MtCO₂eq. cumulative abatement) 	NBG 19	To ensure that an appropriate level of ecological assessment is carried out for proposals involving drainage, infill or reclamation of wetland habitats.
	NBG 20	To protect and enhance wetland sites that have been rated A (International), B (National), C+ (County), C and D importance in the Louth Wetland Surveys and any subsequent versions thereof.
	NBG 21	To support the implementation of recommendations included in the Louth Wetland Survey and any subsequent versions thereof.
	NBG 33	To assess the implications of proposed development on significant trees and hedgerows located on lands that are being considered for development, seeking their incorporation into design proposals where appropriate and in compliance with procedures detailed in Appendix 6.
	NBG 34	To increase native tree coverage in the County to also act as carbon sinks by promoting the planting of suitable native trees and hedgerows along public roads, residential streets, parks and other areas of open space.
	NBG 35	To encourage initiatives supporting private and community driven native tree and woodland planting schemes throughout the County, utilising available funding schemes.
	NBG 51	To require the integration of climate change mitigation measures in any future spatial plans and climate change adaptation measures in proposed developments.
	IU 31	To contribute towards the improvement and/or restoration of the natural flood risk management functions of flood plains subject to compliance with the environmental legislation and availability of resources.
IU 32	To ensure each flood risk management activity is examined to determine actions required to embed and provide for effective climate change adaptation as set out in the OPW Climate Change Sectoral Adaptation Plan Flood Risk Management applicable at the time.	

Table 12.5 – National Climate Action Plan Targets versus Louth County Development Plan 2021-2027 Policy Objectives – Enterprise

Climate Action Plan 2019: Targets	Louth County Development Plan Policy Objectives	
<p>Reduce Ireland’s ETS industry emissions by 10-15% by 2030, relative to 2030 projections.</p> <p>Enterprise must contribute to the more ambitious targets for buildings (20-25%) and transport (45-50%).</p>	<p>EE 23</p>	<p>To support the provision of co-working facilities and digital hubs that promote flexible working arrangements for established businesses, self-employed persons, and start up enterprises.</p>
	<p>IU 38</p>	<p>To secure the rollout of high quality broadband and telecommunication infrastructure throughout the County and facilitate its expansion in remote rural areas, in the interest of promoting economic growth, competitiveness and social inclusion.</p>
	<p>IU 37</p>	<p>To support the delivery and implementation of the National Broadband Plan.</p>
	<p>IU 84</p>	<p>To support the implementation of National and County initiatives for limiting emissions of greenhouse gases by incorporating energy efficiency measures into the design of new buildings and retrofitting of existing buildings.</p>
	<p>IU 85</p>	<p>To ensure that all new buildings in the County achieve the Nearly Zero-Energy Buildings (NZEB) standard in line with the Energy Performance of Buildings Directive (EPBD) and having regard to the Guidelines for Sustainable Design and Energy Efficiency in Buildings.</p>
	<p>EE 63</p>	<p>To ensure that all applications for industrial and enterprise development submit a carbon footprint calculation and demonstrates how the new buildings and processes/activities will seek to achieve the targets set out in the Climate Action Plan 2019 or any amendments to targets.</p>