

# Donegal County Council Climate Action Plan Plan Making Phase Consultation

Consultation to support

Donegal County Council's

Climate Action Plan

# 1.0 Introduction

Other

Through the Climate Action and Low Carbon Development (Amendment) Act 2021, Ireland is now on a legally binding path to net-Zero emissions no later than 2050, and to a 51% reduction in emissions by the end of this decade. The Act provides the framework for Ireland to meet its international and EU climate commitments and to become a leader in addressing climate change.

On 28th of July, the Irish Government approved Sectoral Emission Ceilings which set maximum limits on greenhouse gas emissions for each sector of the Irish economy to the end of the decade.

Sector Reduction 2018 2030 **Electricity** 75% 10.5 MtCO<sub>2eq</sub> 3 MtCO<sub>2eq</sub> **Transport** 50% 12 MtCO<sub>2eq</sub> 6 MtCO<sub>2eq</sub> **Buildings (Commercial & Public)** 45% 2 MtCO<sub>2eq</sub> 1 MtCO<sub>2eq</sub> **Buildings (residential)** 40% 7 MtCO<sub>2eq</sub> 4 MtCO<sub>2eq</sub> **Industry** 35% 7 MtCO<sub>2eq</sub> 4 MtCO<sub>2eq</sub> **Agriculture** 25% 23 MtCO<sub>2ea</sub> 17.25MtCO<sub>2eq</sub>

Table 1: 2030 Sectoral Emission Targets relative to 2018 levels

Achieving these targets will be challenging and will require fundamental changes in many parts of Irish life. In rising to the challenge, we will be able to improve the health, welfare and security of all our people, while also protecting our environment and delivering new opportunities in terms of employment and competitiveness.

50%

2 MtCO<sub>2eq</sub>

1 MtCO<sub>2eq</sub>

As required by the 2021 Act, Donegal County Council is preparing their first Local Authority Climate Action Plan (LA-CAP) which must be adopted by the Elected Members before 23rd February 2024.

# 1.1 Local Authority Climate Action Plans

Local Authorities will have a particularly important role in the delivery of both climate mitigation and adaptation. This is reflected in the provisions of the Climate Action and Low Carbon Development (Amendment) Act, 2021, which requires each Local Authority to prepare a (LA CAP), specifying the mitigation and the adaptation measures to be adopted by the Local Authority.

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

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

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

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

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

# 1.2 Development of the LA-CAP

The development of the Climate Action Plan will follow a number of stages as explained in the graphic below.

**Plan Making** 

Building the
Evidence Base
(October 2022 to June
2023)

Baseline Emission
Inventory
Climate Change Risk
Assessment
Stakeholder
Engagement Planning
Policy Mapping

Phase
(June 2023 to
September 2023)

Pre-draft engagement
Developing the vision,
objectives, actions, and
key performance
indicators

SEA/AA Reports

Public Consultation on
draft LA-CAP (October
to December 2023)

Climate Action
Plan adopted
(February 2024)

Consideration of
submissions
Finalising LA-CAP
Adoption of LA-CAP by
Elected Members

(February 2024)

# 1.3 Consultation during the Plan Making Phase.

We are all in this together, so Donegal County Council are looking for input into the drafting of our LA-CAP, to help us shape appropriate actions that will facilitate and enable effective climate action at a local and community level.

Submission can be made online or by post. All submissions must be received before 12pm on Monday, 31<sup>st</sup> July 2023. Everyone is welcome to make a submission (including youth groups, children and those representing children).

- To make a submission online, please go to the Council's online consultation portal at **consult.donegal.ie**; or
- via email to <u>climateready@donegalcoco.ie</u> (please insert following in 'Subject Title' bar: **Pre-draft Consultation**.

To assist in highlighting the issues and opportunities for Donegal County Council the following sections provide an overview of our emission and climate risk profile and some key themes and questions. It would be helpful if submissions focused on one or more of these key themes, however, general comments are also welcome.

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

# 1.3 Stay Informed

You can keep up to date on the progress of our Climate Action Plan through visiting <a href="https://www.donegalcoco.ie">www.donegalcoco.ie</a>

# 2.0 Our Vision & Mission Statement

Donegal County Council have for considerable time been taking a range of actions across all functions and services to tackle climate change and are uniquely positioned to provide robust leadership in climate action and to create a low carbon climate resilient, biodiversity rich and environmentally sustainable county.

It is important that our Plan has a unifying Vision which reflects a desired and shared perspective of a climate resilient and climate neutral future, that will unite all key stakeholders and inspire action.

Our indicative Vision is:

# To be a Climate Resilient, Biodiversity Rich, Environmentally Sustainable and Carbon Neutral Donegal by no later than the end of 2050.

The Vision for our Plan recognises Donegal County Council pivotal position to deliver on national policy at community level, while understanding that climate actions and impacts from climate change will not be the same for all sectors. The Vision is therefore supported by a number of key strategic goals:

- 1. Achieving carbon emission reduction target for 2030; progressing to the 2050 target for carbon neutrality and reducing climate impacts
- 2. Enabling a 'just transition' ensuring no household, community or business is disadvantaged by decarbonisation measures, paving the way for sustainable economic growth.
- 3. Cultivating decarbonisation co-benefits across key sectors in the county ensuring alignment with the sustainable development agenda.
- 4. Providing supports to communities and organisations and foster collaboration; leading the transition to an inclusive net zero economy.

Our indicative Vision Statement defines where we would like to lead the County, our Mission Statement takes an action-oriented focus, speaking to the grounded purpose of Donegal County Council in delivering and mainstreaming effective climate action across all services and functions.

Our indicative Mission Statement is:

To deliver transformative change and measurable climate action across Donegal County Council within our own organisation and services, through leadership, example and mobilising action at a local level.

We are looking for your input into our Vision & Mission Statements to help us shape the Goals and Objectives of our Climate Action Plan.

- 1. Do you agree with our Vision Statement and have you suggested improvements or alternative?
- 2. Do you agree with our Mission Statement and have you suggested improvements or alternative?

# 3.0 The Challenge

# 3.1 Climate Change

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

To tackle climate change, the level of greenhouse gases entering and already in our atmosphere need to be reduced and removed. In addition, we must further increase our resilience to current and future climate change impacts. As part of global and national efforts, we must meet the National Climate Objective 2050.

Our Climate Action Plan will set out how the local authority aims to achieve its role within the National Climate Objective over the next 5 years and beyond toward 2050. It will act as a key instrument that strengthens the links between national and international climate policy and the delivery of effective climate action at local and community levels, through place-based climate action.

### 3.2 Local Climate Risks

In line with global trends, the frequency and intensity of some hazards (e.g., coastal, river and pluvial flooding, coastal erosion, heatwaves and drought) will increase while others will remain the same (e.g., severe windstorms). These changes are projected to continue and intensify with a wide range of impacts for Donegal and Donegal County Council. Donegal will also change in terms of its population and developments which will potentially affect the exposure and vulnerability of people and assets within the County.

# Highlights of Observed Climate Change for Ireland and Donegal

# Sea Level Rise



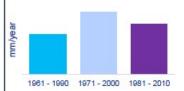
Sea levels in Ireland have risen by approximately 2-3mm per year since the early 1990s according to satellite measurements\*\*



Highest temperature on record for County Donegal, recorded on July 28th 2018 at Glenties Hactchery

# Rainfall

Average annual rainfall at Malin Head has increased by 1.5% for the most recent period (1981-2010) compared to the 1961-1990 baseline.\*



# $0.5^{\circ}C$

Average temperature increase for the period 1981-2010 when compared to the 1961-1990 baseline.\*

4 of the wettest years recorded were in the last 10 years based on records extending back to 1955\*



In 2017, 63 mm of rainfall fell over a 6 hour period resulting in damages to roads and bridges in Donegal and the Inishowen peninsula in particular.

Figure 3.1: Observed Climate Changes for Ireland and Co. Donegal

### 3.3 Local Emission Profile

Understanding where our GHG emissions are coming from at a local level provides an evidence base for developing our Climate Action Plan and appropriate actions that is meaningful for the local context.

We have prepared a Baseline Emission Inventory Report based on local and national data from 2019, on energy production and consumption and other GHG emissions in the County including insights into Donegal County Council own emissions. The summary findings of the report are presented in the figure below with more detail available on the *Baseline Emissions Report* which can be accessed **here**.

The GHG emissions for County Donegal in 2019 totalled 1,970 ktCO₂e, about 3% of the national total. Donegal County Council's emissions are included in the inventory below.

Emissions Caterogy	County Donegal Emissions (ktCO <sub>2</sub> e)	National Emissions <sup>1</sup> (ktCO <sub>2</sub> e)
Agriculture	767 (39%)	22,134 (34%)
Commercial services	123 (6%)	4,618 (7%)
Industrial Processes	22 (1%)	2,267 (3%)
LULUCF	287 (15%)	6,657 (10%)
Manufacturing	59 (3%)	6,737 (10%)
Residential	419 (21%)	9,552 (15%)
Transport	255 (13%)	12,196 (19%)
Waste	37 (2%)	991 (2%)
TOTAL	1,970 (100%)	65.152 (100%)

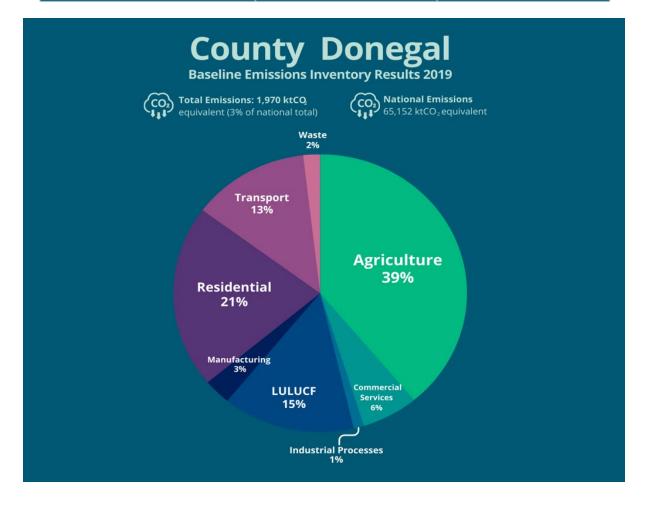


Figure 3.2: Baseline Emission Inventory for County Donegal

# 4.0 Climate Action

# **4.1 Climate Action: Our Homes**

Emission from Our Homes covers GHG emissions from space and water heating, as well as from electricity consumption. There are also non-energy emissions in Our Homes, such as from food, waste, shopping and other household-related factors that are not included in this category.

Climate Action, like many things, begins at home. We spend much of our time there and we would all like them to be as comfortable and efficient as possible. All homes use electricity and most of the homes in Donegal use fossil fuels for space & water heating.

At a national level, the Residential sector accounts for about 15% of total energy-related emissions, with the average dwelling emitting 5 tCO<sub>2</sub> per annum<sup>1</sup>.

At a local level, the energy and emissions from the Residential sector in Donegal has been calculated to be 419 ktCO2e, which equates 21% of the total greenhouse gas emissions for the County.

Heating accounted for 79% of these emissions, while electricity consumption accounted for 21%. Residential heating in Donegal comes primarily from fossil fuels such as oil, coal and peat.

The Climate Action Plan 2023 targets a 40% reduction in GHG emissions from the Residential sector and a 75% reduction in emissions from electricity production by 2030. The generation of renewable energy and retrofitting of our buildings, including our homes, will significantly contribute to these reduction targets.

Key measures identified in the National Climate Action Plan 2023 to meet these targets include:

- Increasing the energy efficiency of existing buildings and putting in place policies to deliver zero-emission new builds and continue to ramp up our retrofitting programme.
- Retrofitting up to 120,000 dwellings to BER B2 by 2025 and up to 500,000 by 2030.
- Putting heat pumps into 45,000 existing and 170,000 new dwellings by 2025 and up to 400,000 existing and 280,000 new dwellings by 2030.
- Introducing a new tax incentive to encourage small-scale landlords to undertake retrofitting works while tenants remain in situ.
- Generating up to 0.8 TWh of district heating by 2025 and up to 2.5 TWh by 2030.
- Accelerating the delivery of onshore wind, offshore wind, and solar.
- Supporting at least 500 MW of local community-based renewable energy projects and increased levels of new micro-generation and small-scale generation.
- Phasing out and ending the use of coal and peat in electricity generation.
- Developing a Green Electricity Tariff by 2025 to allow people to use lower cost renewable electricity at times of high wind and solar generation.

<sup>&</sup>lt;sup>1</sup> https://www.seai.ie/publications/Energy-in-Ireland-2020.pdf

Donegal County Council are retrofitting our own public buildings and social housing stock, including the removal of fossil fuel systems and installation of renewable energy systems. We are also supporting our communities through various funding programmes and partnerships such as the Community Climate Action Fund, SEAI's Community Energy Grant, SEC bridge financing and the GAA Green Clubs programme (CAMOG). Our planning function also has a key role to play with new buildings and renewable energy projects.

We are looking for your input into our Local Authority Climate Action Plan to help us shape appropriate actions to support emissions from Our Homes.

- 1. Have you considered retrofitting your home to make it more comfortable, healthy and energy efficient, and what has prevented you from proceeding?
- 2. What other ways have you considered reducing your GHG emissions in your home?
- 3. How can Donegal County Council help you reduce your emissions in your home?
- 4. What climate actions would you like to see in our Climate Action Plan to support emission reduction in Our Homes?

### 4.2 Climate Action: Our Communities and Businesses

Delivering on our climate action targets requires us all to come together in a strengthened social contract with a shared responsibility for climate change and accountability for taking climate actions in a manner that is transparent, appropriate, fair, and accessible to all. This will make it possible to realise the opportunities the 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.

The Local Authority Climate Action Plan(LACAP) aims to strengthen this social contract in Donegal to achieve significant reductions in emissions improving health, wellbeing, and the environment in our local communities. Collectively we can advance towards a fair, inclusive, and forward-thinking climate neutral economy that champions and supports social, environmental and economic interests. This transition towards a carbon neutral and climate resilient future will promote and create opportunities for new jobs and investment, warranting that no person is left behind in the transition.

Within the Non-residential emissions sector, there are three main categories: Commercial, Manufacturing, and Industrial Processes. Each category encompasses a unique set of activities and processes that contribute to greenhouse gas emissions.

- **Commercial Sector**: commercial entities such as businesses, offices, and industrial complexes require a lot of energy to operate, which often comes from fossil fuels. Energy consumption is largely driven by activities such as heating, cooling, ventilation, lighting, cooking, and refrigeration.
- Manufacturing Sector: manufacturing combustion processes involve a range of activities, such as heating, cooling, and processing materials, and often require the use of large machinery and equipment, particularly in industries such as iron and steel, non-ferrous metals, and chemicals.
- **Industrial Sector:** industrial processes include, but are not limited to, cement production, lime production, ceramics, solvent use, as well as the food and beverage industry.

At a national level, the non-residential sector (commercial + manufacturing + industrial) accounts for about 20% (13,622ktCO $_2$ e). At a local level, the energy and emissions from the non-residential sector in Donegal has been calculated to be 205 ktCO2e, which equates to 10% of the total greenhouse gas emissions for the County.

The national Climate Action Plan 2023 targets a 35% reduction in emissions by 2030 through changing how we produce, consume, and design our goods and services by breaking the link between fossil fuels and economic progress. Decarbonising industry and enterprise is key to Ireland's economy and future competitiveness.

- Decreasing embodied carbon in construction materials produced and used in Ireland by at least 30%.
- Reducing fossil fuel use from 64% of final consumption (2021) to 45% by 2025 and further by 2030.

- Increasing total share of heating to carbon neutral to 50-55% by 2025, up to 70-75% by 2030.
- Significantly growing the circular economy and bioeconomy.

Donegal County Council are already very active in support our communities and businesses in understanding climate change, implementing climate action (mitigation and adaptation) and promoting economic opportunities that the transition to a low carbon and resilience society can bring.

We are looking for your input into our Local Authority Climate Action Plan to help us shape appropriate actions to further support and mobilise climate action in our communities and local businesses.

- 1. Is your community or organisation planning/collaborating/researching with other stakeholders on climate action projects.
- 2. How can Donegal County Council support communities to mobilise and deliver climate action locally?
- 3. How can Donegal County Council support local businesses to mobilise and deliver climate action locally?

# 4.3 Climate Action: Transport

Emissions from Transport covers the combustion of fuel for all transport activity, including domestic aviation, road, railway, water-borne navigation and other transportation (which includes gas pipeline transportation). Domestic aviation emissions are included in the national inventory but make up less than 1% of transport emissions. International aviation and maritime navigation are reported as "memo items" in the national emission inventory. This means they are not counted as part of Ireland's national total emissions but are reported by Ireland to the UNFCCC and EU for information purposes.

At a national level, Transport accounted for approximately 19% of Ireland's greenhouse gas (GHG) emissions in 2019 (11 MtCO2e), with road transport responsible for 94% of those GHG emissions. Addressing transport emissions is an essential element of our transition to a low carbon Donegal County Council

At a local level, emissions from Transport in Donegal has been calculated to be 255 ktCO2e, which equates to 13% of the total greenhouse gas emissions for the County.

The dominance of private cars as the primary mode of transport in the County is reflected in the results, accounting for 98% of all Transport emissions, while light duty vehicles, heavy duty vehicles and buses accounted for 16% and 27% respectively. These emissions are primarily from the burning of diesel and petrol in combustion engines and is also directly responsible for a range of air pollutants that negatively impact both human health and the environment.

The National Climate Action Plan 2023 sets out an ambitious target of 50% reduction in Transport emissions by 2030. This will require a significant change in the way we move around our County.

One of the best ways to plan for reducing emissions from travel is to use the 'Avoid, Shift, Improve' (ASI) framework, which is shorthand for

- Avoiding or reducing the need for travel,
- Shifting to public transport, walking and cycling and
- Improving the energy efficiency of vehicles we do use.

It is acknowledged that Donegal is a rural county with a dispersed population, which presents additional challenges when adopting this approach but there are significant opportunities for improvement.

Key measures identified in the National Climate Action Plan 2023 to meet our targets include:

- Improving our town, cities, and rural planning, and by adopting the Avoid-Shift-Improve approach.
- Changing the way we use our road space and increasing walking and cycling networks.
- Reducing the total distance driven across all car journeys by 20% and progressing towards 1 in 3 electric private cars.
- Using walking, cycling and public transport to account for 50% of our journeys.
- Providing 70% of people in rural Ireland with buses that cater for at least 3 trips to the nearby town daily by 2030.

There will also be wider benefits to making these changes including in the areas of health, air quality, reduced noise pollution, and improved place-making.

Donegal County Council are already very active in reducing transport emission, such as through the role out of Active Travel Projects, incorporating compact growth and sustainable transport into the planning process, collaborations with public transport and EV charging providers, transitioning and management of our own fleet, and parking and traffic policies.

We are looking for your input into our Local Authority Climate Action Plan to help us shape appropriate actions to further support emissions from transports.

- 1. Are there any transport initiatives happening in your area that work well?
- 2. Do you have any new ideas, or are there existing actions that you would like to further develop?
- 3. What would you like to do to reduce the carbon footprint of how you travel?
- 4. What are the main barriers preventing you from avoiding journeys or shifting to public transport, walking and cycling? (Weather, Lack of cycling equipment, Lack of public transport, Dangerous walking conditions, Dangerous cycling conditions, Lack of broadband, Lack of remote working hubs in your area, Distance, Ability, Require vehicle for work, Other)
- 5. What actions would assist you to avoid journeys or shift to public transport, walking and cycling?
- 6. How can Donegal County Council help you and what climate actions would you like to see in our Climate Action Plan to support emission reduction in Transport?
- 7. How can Donegal County Council help you reduce your travel emissions
- 8. What climate actions would you like to see in our Climate Action Plan to support emission reduction in transport?

# 4.4 Climate Action: Agriculture & Land Use

Agriculture emissions are greenhouse gases (GHG) released into the atmosphere during farming activities, including livestock rearing, crop production, and land use change. These emissions are primarily composed of methane (CH4) and nitrous oxide (N2O), which have significantly higher global warming potentials than carbon dioxide (CO2).

The primary source of agricultural emissions in Ireland is methane from livestock. Livestock such as cows, sheep, and pigs produce methane through enteric fermentation, a digestive process that breaks down feed in their stomachs, leading to the production of methane gas. The use of nitrogen fertilizers and manure management is another significant source of agriculture ghg emissions in Ireland.

Land Use, Land Use Change and Forestry (LULUCF) is responsible for emissions as well as carbon sinks, related to land use change and forestry. It involves the emissions and removals (carbon sinks) relating to land use, land use change and forestry, including forest land, cropland, grassland, wetlands, settlements and other land types, as well as through the harvesting of wood products. Depending on the uses of land, land can either be an emitter of greenhouse gas emissions or it can sequester or absorb greenhouse gases.

Ireland has significant and healthy biosystems, including grassland, hedgerows and forests, which can sequester or absorb carbon dioxide (CO<sub>2</sub>) and the use and management of the land has a key role in the response to climate change.

At a national level Agriculture and LULUCF (Land Use Land Use Change and Forestry) accounted for 44% of Irelands's total GHG emissions in 2019 ie 28,666 ktCO2 equivalent. Agriculture accounted for 34% ie 22,151 ktCO2e and LULUCF accounted for 10% ie 6,515 ktCO2e. What sets Ireland apart from its EU counterparts is the scale of our beef and dairy primary production industries relative to our population and land size, and the lack of heavy industry in Ireland's economic make-up.

At a local level, emissions from Agriculture in Donegal has been calculated to be 767 ktCO2e, which equates to 39% of the total greenhouse gas emissions for the County. This is reflective of the cultural importance and vital role agriculture plays in underpinning our rural economy relative to other industries.

The primary source of emissions is methane from livestock, which accounts for about 60% of the total agriculture emissions within the County with the use of nitrogen fertilizers and manure management being other significant sources. Emissions from farm vehicles and machinery accounts for 43% of the total emissions from this sector.

At a national level the LULUCF sector accounted for  $3,073 \text{ ktCO}_2$  equivalent removed and  $9,979 \text{ ktCO}_2$  equivalent emitted in 2019, equating to net emissions for LULUCF of 6,906 kt CO2e (20% of national emissions).

For Donegal the emissions from LULUCF has been calculated to be 287 ktCO2e, which equates to 15% of the total greenhouse gas emissions for the County. Cropland, Forestland and Harvested

Wood Product serve as a store of carbon and were responsible for the sequestration of 367 ktCO2e of emissions, whilst the areas Grassland, Settlements, Wetlands and Other Land were responsible for emitting 654 ktCO2e.

The National Climate Action Plan 2023 sets out an ambitious target of 25% reduction in Agriculture GHG emissions by 2030. Sectoral targets for LULUCF GHG emission reduction are yet to be confirmed and will coincide with the completion of a Land-use Review.

The agriculture sector is undergoing a significant transformation to deliver the reduction in GHG emissions and key measures identified in the National Climate Action Plan 2023 to meet our targets include:

- Changing how we fertilise our land and reducing the use of chemical Nitrogen
- Improving the efficiency of our animals, including the earlier finishing of beef cattle, reducing age of first calving for suckler beef cows, improved animal feeding, and a focus on low methane traits in breeding programmes.
- Expanding our organic sector
- Providing land use diversification options for livestock farmers
- Increasing our annual afforestation rates and promote forest management initiatives in both public and private forests
- Improved management of grasslands on mineral soils for carbon sequestration
- Rehabilitation of our peatlands

Donegal is a rural county where our farmers are recognised for their excellent food production and their economic and social importance in our communities. Climate change is already impacting farming practices and reducing GHG emissions will be challenging but achievable. Many farmers across the county have already commenced the journey of reducing emissions from farming and land use activities and are engaging positively with new guidance on farmer practices and environmental programmes.

While Donegal County Council does not have a direct influence over agriculture we are already engaged with farmers and landowners through other environmental programmes and community and business supports.

We are looking for your input into how we can further support the transformation of farming and land use in the county and to help us shape appropriate actions in our Local Authority Climate Action Plan.

- 1. How can Donegal County Council support local farmers to continue to produce world-class, safe and nutritious food while building resilience to the impacts of climate change and reducing their emissions?
- 2. How can Donegal County Council support LULUCF objectives and actions?

# 4.5 Climate Action: Adaptation

Climate adaptation involves taking action to prepare for and adjust to the current and future impacts of climate change. Understanding the risks posed by climate is an essential first step for Donegal County Council to develop effective and efficient adaptation actions in response to current and projected climate change. Climate change risk assessments identify the likelihood of future climate hazards and their potential impacts. This is fundamental for informing the prioritisation of climate action and investment in climate action.

Understanding the risks posed by climate is an essential first step for Donegal County Council to develop effective and efficient adaptation actions in response to current and projected climate change. As part of the Building the Evidence Phase baseline Climate Risk Assessment was carried out to assess the current and future climate risks for the Donegal County Council The Climate Risk Assessment Report can be viewed <a href="here">here</a>.

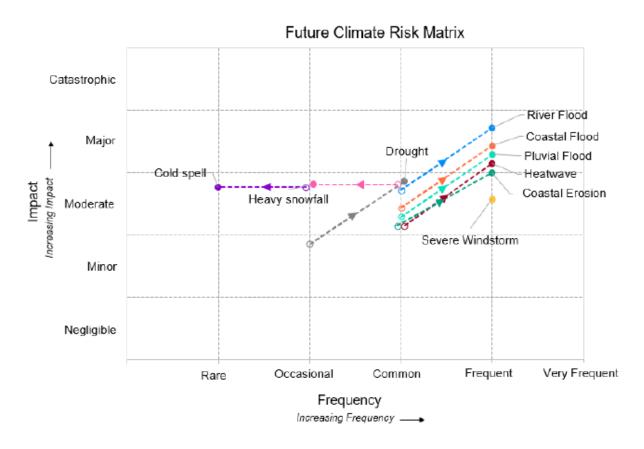


Figure 4.1: Climate risk matrix showing the future change in risk with the hollow marker showing the current risk and the solid marker the future risk. The dotted line shows the change between the current and future risk.

 Recent experiences of cold spells and heavy snowfall events in 2018 and 2022, demonstrated the wide range of impacts for Donegal County Council these included, amongst others, disruption to public transport networks and road closures. Projected

- increases in average temperature and decreases in the frequency of snowfall indicate a decrease in the frequency of cold spells, heavy snowfall, and their associated impacts.
- Recent experiences of river and pluvial flooding events in 2020 and 2021 demonstrated the
  wide range of impacts for Donegal County Council these impacts included damage to
  residential properties, closure of businesses, disruption to public services and closure of
  transport networks. Projected increases in the frequency of extreme precipitation events
  will result in increased surface water and riverine flood risk for Donegal County Council
- Donegal experiences coastal erosion and coastal flooding events on a common basis, with recent events in 2021 and 2022 resulting in disruption of transport networks and damage to coastal habitats. Projected sea level rise will increase the frequency of coastal inundation and erosion events and associated impacts.
- Heatwaves and droughts have contributed to the imposition of restrictions on water supply, damage to road surfaces and have placed an increased demand on recreational areas.

Donegal County Council are already very active in adapting and building resilience to the impacts of climate change, such as through flood defence schemes (in conjunction with the OPW), planning, risk assessment, and maintenance and strengthening of infrastructure.

To increase resilience, Donegal County Council will need to proactively plan for and work with our communities and government agencies to adapt to the current and future climate change risks identified.

We are looking for your input to help us shape appropriate adaptation actions in our Local Authority Climate Action Plan.

- 1. What are the priority climate related risks for Donegal?
- 2. How can Donegal County Council support your community adapt or build resilience to the impacts of climate change.
- 3. How can Donegal County Council support the use of Nature Based Solutions in adapting to the impacts of climate change?
- 4. What would you like Donegal County Council to do when it comes to adapting to future climate change?