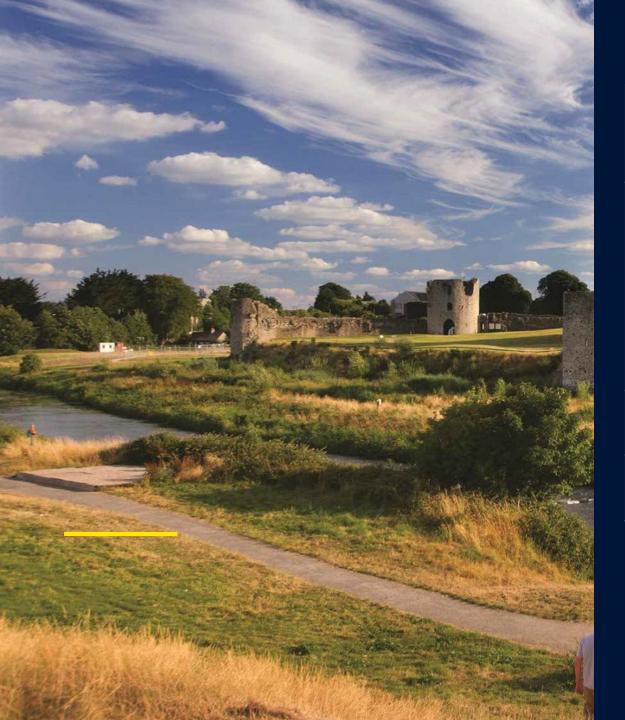
Meath's County Climate Action Plan

Non-Statutory Public Consultation July 2023

Have your say and help shape actions to facilitate and enable effective climate action at a local and community level







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Overview of Meath's County Climate Action Plan 2024 - 2029

Under the Climate Action and Low Carbon Development (Amendment) Act 2021, Meath County Council is required to prepare a local authority climate action plan for our administrative area.

Key objectives of the Plan:

- 1. 51% reduction in emissions by 2030
- 2. 50% increase in energy efficiency by 2030
- 3. Net Zero by 2050



Key Considerations of the Plan

- Alignment with National Climate Policy
- Use most recent approved climate action plan and national adaptation framework, and have regard to:
 - (a) the most recent approved national long term climate action strategy,
 - (b) the most recent approved sectoral adaptation plans, and
 - (c) any policies of the Minister or the Government on climate change.

- Statutory plan making process is 12 months 24.02.2024
- Bottom up spatially led approach with stakeholder engagement and consultation
- Actions that are specific, action-focused, time-bound and measurable reflecting a scaling up of ambitious local level climate action
- Elected Members are responsible for adopting the Climate Action Plan
- Reviewed every 5 years

Remit of Meath County Council

- Enable, facilitate and support sectors, business, communities and individuals, in the delivery of local climate actions.
- Co-ordinate efforts with all stakeholders e.g. Decarbonising Zones, communities and businesses on local climate actions.
- Co-ordinate efforts with all stakeholders to maximise effects and creating interactions.



 Deliver on climate action within MCC's remit: including our own buildings, infrastructure, systems, operations and staff.

 Build resilience to the negative impacts of climate change, within our County, through the range of services and functions provided.

 Increase awareness, communication and engage in open dialogues on climate related issues and responses.

Purpose and Scope of Meath's County Climate Action Plan

Purpose of the Plan:

- To deliver on national obligations to achieve the National Climate Objective of becoming a **Climate Resilient**, **Biodiverse rich**, **Environmentally Sustainable and Carbon Neutral Economy** by no later than the end of 2050.
- To deliver and promote evidence-based and integrated climate action by way of adaptation and mitigation measures, centred around a strong understanding of the role and remit of the local authority on climate action.
- To increase awareness, communication and engage in open dialogues on climate related issues and responses.

The scope of the Plan:

- Targeted actions for areas where Meath County Council has full accountability for climate action within our own operations.
- Actions for where Meath County Council can enable businesses, communities, and individuals in the delivery of local climate action through the functions and services they provide.
- Actions for where Meath County Council can enable and inspire local and community action bringing together stakeholders in partnership to achieve climate action related projects.
- Actions aligned to Meath County Council's 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 local government on climate action, the plan will
 not include actions whereby their implementation and achievement fall outside the role, remit, and governance of Meath County
 Council.

Vision and Mission

VISION The most effective way of reaching our goals is to work together in achieving a unified vision of the future that supports ambitious climate action. Given the wide role that Meath County Council has, it is important to have a unifying vision which reflects a desired and shared perspective of the future in a climate resilient and climate neutral society, that will unite all key stakeholders and inspire action.

Our indicative Vision for Meath is: Meath is to be a climate resilient, biodiverse rich, environmentally sustainable and climate neutral economy that supports jobs growth and healthy lifestyles.

MISSION While the Vision defines where we would like to lead County Meath, a mission statement speaks to its grounded purpose in delivering and mainstreaming effective climate action. This action-oriented mission statement helps guide representatives and stakeholders of County Meath in coordinating activities towards our defined Vision.

Our indicative Mission is that: Meath County Council through leadership and example will deliver effective and measurable climate action through our services to the people of Meath. Meath County Council will enable and inspire actions on mitigation and adaptation through partnership with communities, businesses, and other stakeholders at a local and regional level.

Strategic Objectives











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

Meath County Climate Action Plan – Evidence Base

DELIVERABLE 1: CLIMATE CHANGE RISK ASSESSMENT

- 1. Identifying the range of climate hazards that have previously affected our local authority and administrative area
- 2. Assessing the exposures and vulnerabilities of the local authority and administrative area to these hazards

DELIVERABLE 2: BASELINE EMISSIONS INVENTORY

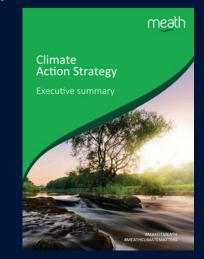
- 1. Baseline Emissions Inventory of local authority own emissions
- 2. Baseline Emissions Inventory for city/county wide emissions across a range of predefined sectors

DELIVERABLE 3: DECARBONISING ZONE

- 1. Baseline Emissions Inventory for the decarbonising zones (DZ)
- 2. There are nine decarbonisation zones selected for Meath

The purpose of this project is to meet the Government requirements to deliver a local climate action plan for all local authorities in Ireland. The content and methodology was supported through guidance from the climate action regional offices (CARO) through the Local Authority Climate Plan Guidelines.

It's important to note that Meath County Council has a starting position of strength where both adaptation and mitigation was included in the previous climate action plan completed in 2019.





Scenario narratives that were used to model Physical Climate Risks

1.5 degree temperature increase

Net Zero 2050 is an ambitious scenario that limits global warming to 1.5°C by 2100 through stringent and immediately introduced climate policies and innovation, reaching net zero CO₂ emissions around 2050. It is linked to RCP2.6, involves more transition risks early on, but manages to limit physical risks to a minimum.

2-3 degree temperature increase

Follows a path in which social, economic, and technological trends do not shift markedly from historical patterns but the world takes action to limit emission growth but fails to cut emissions in the short term and misses Paris Goals resulting in >2°C warming by 2050. It is linked to RCP4.5, involves several physical risks, and transition risks after 2030.

Policy reaction Policy reaction Policy reaction Delayed Policy reaction Delayed Transition risk

4 degree temperature increase

Assumes that only currently implemented policies are preserved. World does not cut emissions and climate change accelerates causing 2.5°C of warming by 2050 and >4°C by 2100 bringing irreversible changes. It is linked to RCP8.5, involves little to no transition risks early on, but results in irreversible and globally disrupting physical risks.



Time horizon

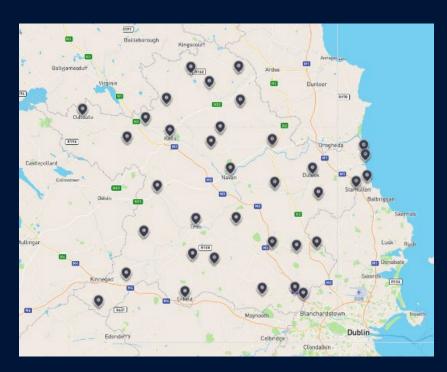
Short-term: 2030

Medium-term: 2040

Long-term: 2050

Physical Methodology – CAP Tool and Flooding Maps

There were three different models developed to support Meath County Council's climate action plan. The first and most detailed model was designed to understand the climate impacts throughout the county by modeling the climate related hazards and impacts across 36 of Meath's largest towns. This broad spread of locations also supported an overall county analysis.



36 asset locations were mapped across the county using the post office at these locations as a proxy for a town centre.

The second model generated was used to understand the climate related impacts on some of Meath's critical infrastructure, including roads, rail, bridges and key water infrastructure.

There was no material difference in the findings between the overall county wide model and key infrastructure model.



The third model generated was used to understand the potential climate impacts to Meath's bogs. There were 17 locations modelled. The analysis showed that there was no material impact to climate in terms of wildfire to Meath's bogs in the short to medium term. It is important to note that this relates to climate only and not potential human interference.



Physical hazards (1.5 degree temperature increase - 2030)

Hazard	Indicator	Exposure Risk	
Changing wind patterns	Maximum strong wind surface speed	Very High	
Changing wind patterns	Maximum wind speed	Very High	
Water stress	Water stress	Very High	
Changing wind patterns	Average wind speed	High	
Changing wind patterns	Maximum wind gust speed	High	
Drought	Soil moisture anomaly	High	
Temperature variability	Air surface temperature	Medium	
Heavy precipitation	Annual maximum snow depth amount	Medium	
Changing temperature	Annual minimum temperature	Medium	
Drought	Average annual streamflow	Medium	
Precipitation variability	Cumulative precipitation	Medium	
Changing temperature	Heating degree days	Medium	
Heavy precipitation	Heavy precipitation (90th perc.)	Medium	
Precipitation variability	Intra year precipitation variation	Medium	
Temperature variability	Intra year temperature variation	Medium	
Precipitation variability	Cumulative Dry Days	Low	
Drought	Highest drought duration	Low	
Storm	Blizzard	Very Low	

The table depicts an average of exposure risk across Ireland using various sites on the CAP tool.

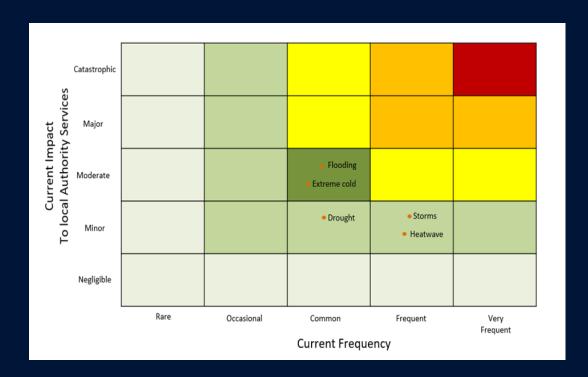
- The exposure risk varies depending on inland vs coastal sites.
- Coastal sites were exposed largely to wind and temperature variability hazards.
- Inland sites were exposed largely to factors such as soil variability and precipitation variability.

Impacts of current risks and hazards

Hazard Event	Frequency of Occurrence	Description of the Hazard Event		
Storm	Frequent - occurs once in a once to 1-2 year period	Since 2015 storms are named when they could cause 'medium' or 'high' impacts		
Flooding	Common occurs once in a 2-10 year	The threat of an area being inundated by water due typically to excessive precipitation or obstructions to the natural flow		
Extreme cold	Common occurs once in a 2-10 year	A cold wave is marked by a drop of average temperature well belo the seasonal norms of a region		
Heatwave	Frequent - occurs once in a once to 1-2 year period	A heatwave refers to a prolonged period of abnormally hot weather in Ireland, it's classified as 5 consecutive days with a maximum temperature in excess of 25°C		
Drought	Common occurs once in a 2-10 year	Climatological/Meteorological drought occurs when the amount of precipitation received in a specific area is considerably less than normal		

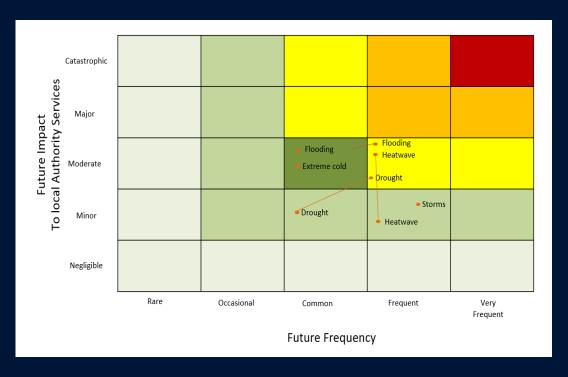
Current and Future Climate Risks in County Meath

Current frequency and impacts of the identified weather events in County Meath



Future frequency and impacts show there will be increases in:

- Frequency and severity of drought
- Severity of heatwaves
- Frequency of flooding

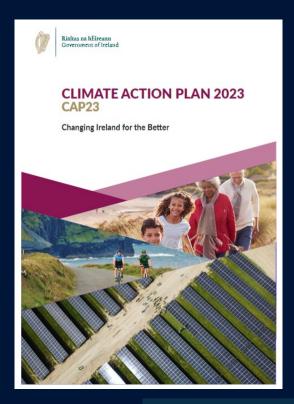


Example of characterising exposure and vulnerability to a Flooding Event

Exposure	Vulnerability			
	Туре	Description		
Business & Economy	Physical and socio economic	Loss of revenue as trade is impacted, asset loss, increased insurance costs		
Community	Physical, environmental, socio economic	Access to community resources limited, potential for job losses		
Emergency Services	Physical and socio economic	Increased demand for services		
Environment	Physical and environmental	Potential for biodiversity impact and habitat loss		
Housing	Physical and environmental	Long term damage to housing stock and asset value		
Roads & Transport	Physical and environmental	Road repair required and trade is impacted		
Tourism	Physical and socio economic	Impact to tourism numbers and income		
Water	Physical and environmental	Potential to disrupt water supply		



Baseline Emissions Inventory Methodology





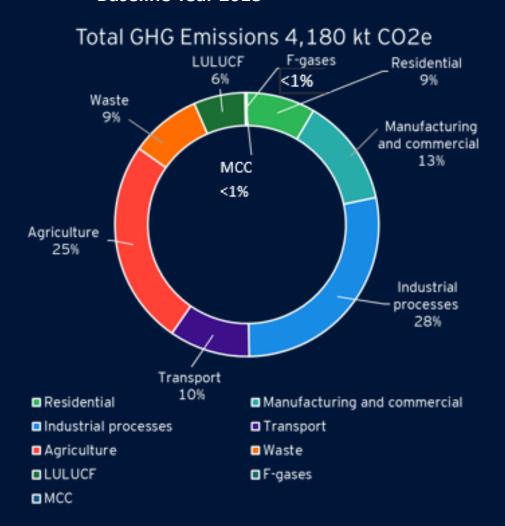
In alignment with the National Emissions Inventory and Local Authority Climate Action Plan Guidelines Annex C, the BEI covers the following sectors:

- Residential
- Manufacturing and commercial
- Industrial processes
- Transport
- Agriculture
- Waste
- Land Use, Land Use Change & Forestry (LULUCF)
- F-gases



County Emissions Inventory by Sector baseline year 2018



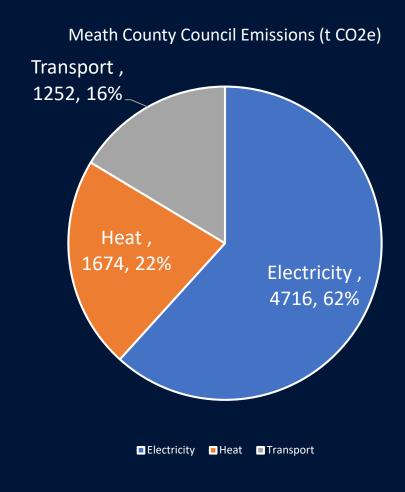


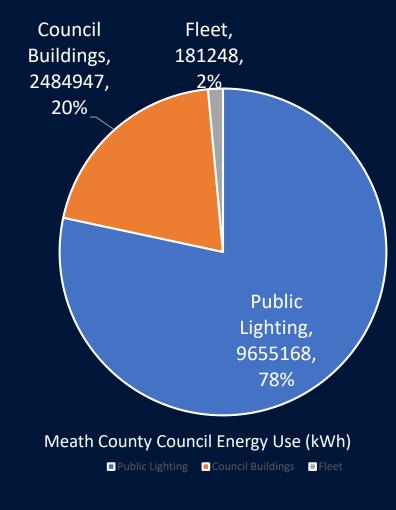
Total GHG Emissions 1,453kt CO2e 2012



Meath County Council's Emissions

Baseline Year 2018







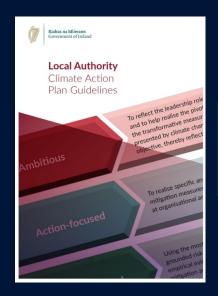
Decarbonising Zone Methodology

A Decarbonising Zone (DZ) is a spatial area identified by the local authority to act as a test bed for a range of climate mitigation, adaptation and biodiversity measures through the identification of projects (specific to the DZ emissions and climate characteristics), partners, action owners, technologies, measures and outcomes that will assist in the delivery of the National Climate Objective.

Solutions driven – Meath County Council will assist with identifying local solutions driven by local communities and businesses.

In alignment with the National Emissions Inventory and Local Authority Climate Action Plan Guidelines Annex D, the decarbonising zones covers the following sectors:

- Residential
- Manufacturing and commercial
- Transport

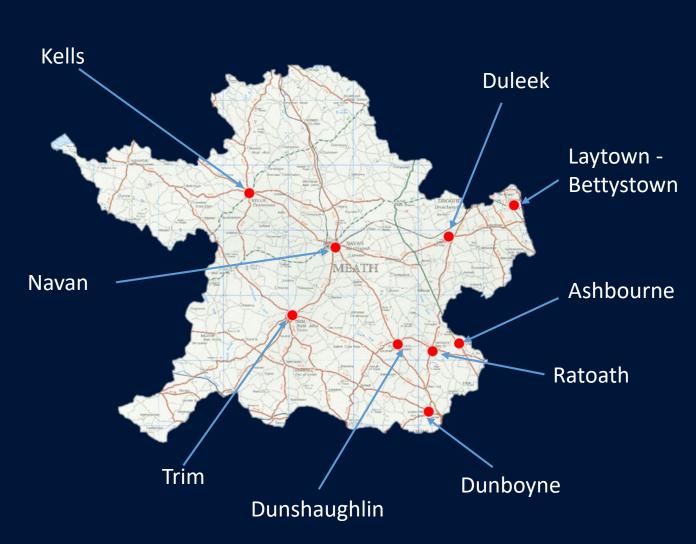




The following sectors were excluded as they were not material to the emissions in these urban locations

- Agriculture
- Waste
- Land Use, Land Use Change & Forestry (LULUCF)
- F-gases
- Industrial processes

Decarbonising Zones Location Map



How Decarbonising Zones were identified?

All 9 Meath Towns were selected where there was a population of over 5,000 people.

Opportunity for:

Share learning on a range of climate mitigation, adaptation and biodiversity measures and actions on how to address local low carbon energy, greenhouse gas emissions, and climate needs to contribute to national climate action targets.

Test beds for climate action at a local community level taking a "no one size fits all" approach.

Emissions Baseline Inventory by Decarbonising Zones

DZ Town		turing and mercial	Trans	sport	Resid	ential	DZ 1	Total
DZ Town	kt CO2e	%	kt CO2e	%	kt CO2e	%	kt CO2e	%
Navan	101	34	42	33	56	33	199	33
Ashbourne	53	18	16	12	21	12	90	15
Trim	33	11	13	10	17	10	64	11
Kells	39	13	9	7	12	7	60	10
Dunboyne	29	10	8	6	11	7	49	8
Laytown/Bettystown	3	1	17	13	23	13	43	7
Dunshaughlin	18	6	6	5	8	5	33	6
Ratoath	8	3	11	8	14	8	33	6
Duleek	12	4	6	4	8	4	25	4
Sector Total	295		128		170		595	
% of county wide total	58%		28%		48%		14%	



Lets work together to create a climate resilient, vibrant, and sustainable County that supports jobs, growth and healthy lifestyles

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



Have your Say and make a submission



Online @ Meath County Council's On Line Consultation Portal www.consult.meath.ie

Or



Email to climateactionmcc@meathcoco.ie

Or

Post to Climate Action Section, Meath County Council,
Buvinda House, Dublin Road, Navan, County Meath, C15 Y291

Stay Informed

You can keep up to date on progress of County Meath's Climate Action Plan, climate action information and initiatives via:

Climate Action Meath.ie		Tweeter - MeathClimate
Facebook – Meath County Council	(°)	Instagram - Meathcoco

Or

Email MCC Climate Action Section @ climateactionmcc@meathcoco.ie