



# Climate and Sustainability Action Plan 2023-2027

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**Mid & East  
Antrim**  
Borough Council

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## Our Purpose

Working together to create a better future for all.

# Welcome Summary

The Climate and Sustainability Action Plan sets out how we will address climate change in Mid and East Antrim over the next five years.

Illustrating the current and projected impacts of climate change throughout the borough, the plan looks at how we propose to tackle these effects, meet our requirements within the Climate Change Act (NI) 2022 and deliver on the commitments in our Climate and Sustainability Policy.

"We will work alongside our residents and businesses to develop a positive and caring attitude towards the environment through education and empowerment."

### Our Environment

**Objectives**

- Deliver the Local Development Plan in line with Council's climate and sustainability commitments.
- Empower, educate and work in partnership with our citizens and local businesses to progress towards net-zero carbon emissions by 2050.
- Support local communities to create an environmentally resilient and sustainable borough.
- Invest to improve and develop our parks, open spaces and built heritage ensuring they meet the needs of citizens and visitors and promote the consistent use of all spaces.
- Lead by example and reduce the impact of Council services to improve and sustainably manage our environment, protecting it for future generations.

**Green Flags** (2022/2023)

**58,000** trees planted as part of MEA Trees

**All 76** MEA schools are engaged in the Eco Schools Programme

### Encouraging Active Travel

Active travel refers to making journeys by physically active means, like walking or cycling. These are usually short journeys, like walking to school, the shops, cycling to the train or bus station, or cycling to work.

Active Travel has many benefits – it's good for your health and is a clever way to get you active as part of your daily routine. It's also good for the environment, reducing congestion, air pollution and noise. It is much cheaper than using fuel, and many journeys can be quicker.

### Welcome to the H2 Gas Safe Lab, part of the Hydrogen Academy

Led by Mid and East Antrim Borough Council, with support from key project stakeholders, the Hydrogen Academy aims to enable and develop a dynamic, skilled workforce in Northern Ireland that can take full advantage of Hydrogen and Clean Technology opportunities.

**Funded by**  
Department of Enterprise, Trade and Innovation  
Department of Education  
Department of Agriculture, Rural Affairs  
Department of Infrastructure  
Department of Health

**Part Sponsored by**  
EP Kivook  
EP Ballylumford

**Supported by Project Partners**  
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University of Strathclyde  
Northern Ireland Hydrogen Centre

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# HYDROGEN ACADEMY

Supporting a greener future through skills and training.



## Our Commitment

Mid and East Antrim Borough Council will lead by example and work in partnership with local communities to develop a sustainable borough, safeguarding the future of our economy, society and environmental assets.

# Our Goals

## We are committed to achieving these targets:

- 30% reduction in council operation emissions by 2030
- Decarbonize small vehicles in our fleet by 2030
- Council operation emissions to net zero by 2040
- Supporting the borough to net zero by 2050
- Climate resilience in our buildings, public spaces and infrastructure

## Our targets will be delivered across six key themes:

### Good Governance and Community Leadership

Leading by example to develop a Council which includes sustainability and climate change in all decision making and empowers citizens to create a just transition to net zero.

### Protection of the Environment

Protecting the natural environment within our borough to enhance biodiversity, increase carbon capture and improve the health and wellbeing of our citizens.

### The Economy

Driving sustainable economic growth, supporting local communities, businesses and agriculture in transitioning to a circular economy and providing opportunities for the development of clean, green technologies in the local area.

### Transport

Reducing emissions across our fleet and supporting the development of sustainable and active travel within the organisation and throughout Mid and East Antrim.

### Resource Management

Using resources efficiently and sustainably, to reduce consumption and support a low carbon circular economy across the council and borough.

### Buildings and Energy

Improving energy efficiency and use of renewable energy across the council estate and promote low carbon solutions in the wider borough.

#MEAction  
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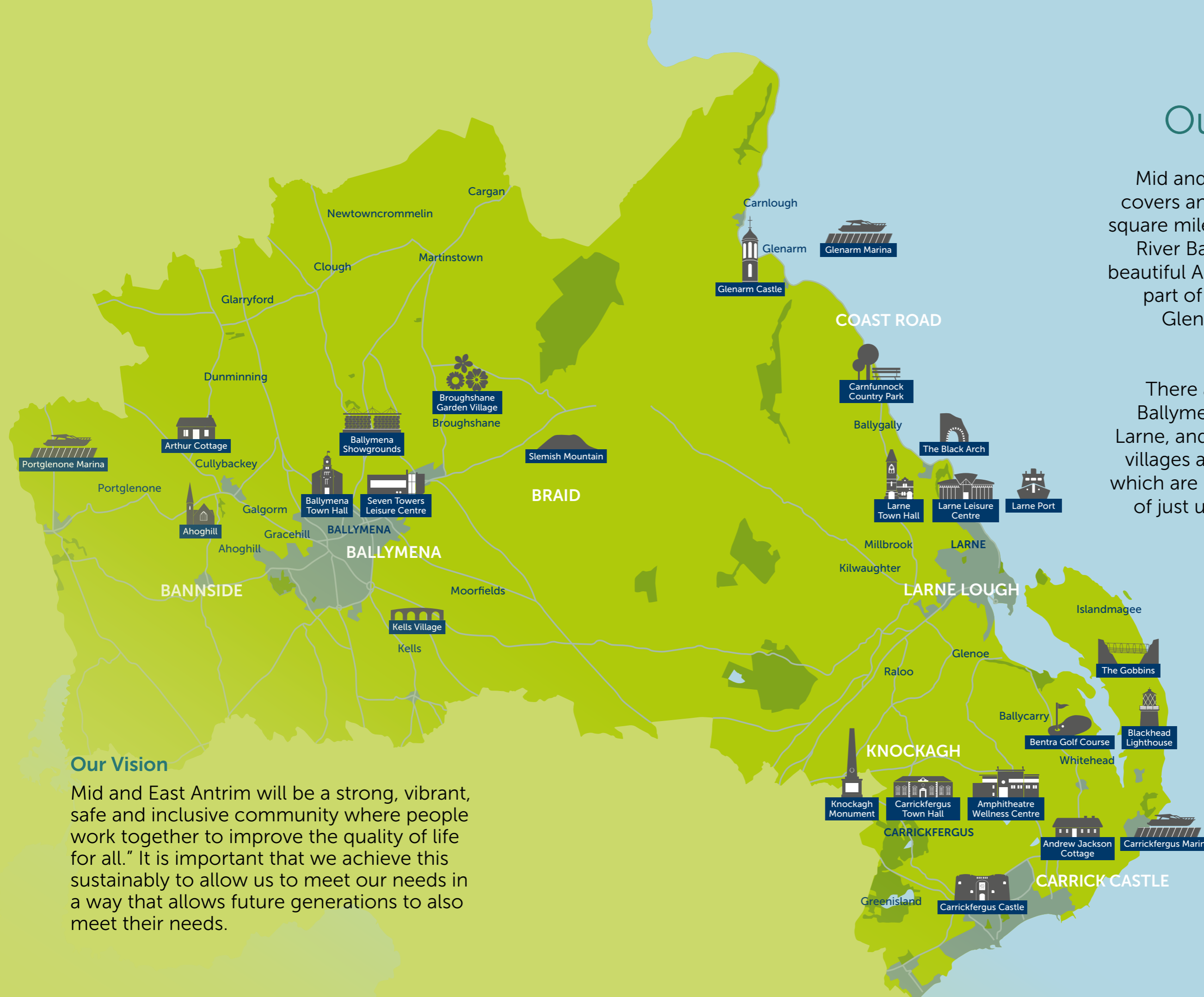
TRANSPORT



# Our Borough

Mid and East Antrim Borough covers an area of just over 400 square miles extending from the River Bann in the west, to the beautiful Antrim Coast, including part of the Antrim Coast and Glens Area of Outstanding Natural Beauty.

There are three main towns, Ballymena, Carrickfergus and Larne, and a host of welcoming villages and rural communities which are home to a population of just under 140,000 people.



## Our Vision

Mid and East Antrim will be a strong, vibrant, safe and inclusive community where people work together to improve the quality of life for all." It is important that we achieve this sustainably to allow us to meet our needs in a way that allows future generations to also meet their needs.



# What is Climate Change?

Climate change is the long-term shift in average weather patterns across the world and the increase in extreme weather events. The Intergovernmental Panel on Climate Change (IPCC) highlight in its most recent report how human activities are extremely likely to have resulted in the unprecedented warming observed since the pre-industrial era via increased emission of greenhouse gases (IPCC, 2023).

## The Greenhouse Effect

The earth is surrounded by a layer of gases which retain some of the heat from the sun's rays and prevent it from radiating back into space. This is called the Greenhouse effect - a natural process without which earth would not be warm enough for life to survive. Human activity, mainly from burning of fossil fuels, releases greenhouse gases including carbon dioxide, methane, nitrous oxide and sulphur dioxide. This has resulted in an increase in this layer of gases around the earth, resulting in higher levels of heat being trapped and therefore a warmer world.

The IPCC has warned urgent action is needed to cut greenhouse gas emissions and limit warming to at least 2°C and preferably 1.5°C compared to pre-industrial values, to avoid catastrophic impacts of climate change. The most recent data from the IPCC confirms that human-induced climate change is already causing observable adverse impacts and damages to both people and nature, beyond typical variability of the climate (IPCC, 2022).



# Climate Change Impacts

Warming of the planet is now unequivocal and concentrations of carbon dioxide and other greenhouse gases are now at higher concentrations than have been recorded in the last 800,000 years (IPCC, 2023). The impact of this on our climate has been observable for decades, with the last three decades being successively warmer than any decade since 1850 (IPCC, 2023). In the UK, all of the top ten warmest years since 1884, have occurred since 2002 (Met Office, 2021).

At present carbon emissions are estimated to have led to 1.1°C rise above pre-industrial levels (IPCC, 2023). Globally these higher temperatures have resulted in an increase in heatwaves, drought, floods, extreme storm events, wildfires and sea-level rise.

## Observed Impacts in Mid and East Antrim

Already we can clearly see the impacts of climate change in our borough – these changes in typical weather conditions can effect council services, local infrastructure, native flora and fauna, result in significant costs to rectify and in the most extreme instances put human life at risk.

'Council has developed a Climate Adaptation Plan, which includes actions to improve the resilience of Council services and our communities to extreme weather events. The plan can be found here: [www.midandeantrim.gov.uk/council/policies-and-documents/climate-change-sustainability/climate-sustainability-environment-reporting/](http://www.midandeantrim.gov.uk/council/policies-and-documents/climate-change-sustainability/climate-sustainability-environment-reporting/)





# Climate Change Impacts Continued

## Extreme Heat

A warmer world has led to on average hotter summers throughout Northern Ireland, with 2022 being confirmed as the UK's hottest year on record (Met Office, 2023).

This is particularly impactful during the summer months, when we are more regularly experiencing high temperatures, resulting in increased pressure on water availability and tourism hot spots.



Wildfires have become more common, damaging habitats and wildlife. Gorse fires occurred in 2018 and 2019 in areas such as Carrickfergus and Greenisland, endangering native animal species and destroying the habitats on which they depend. Extreme heat also impacts local biodiversity with potential negative impacts on animal species due to heat stress and water scarcity.

Additionally, native tree species are more likely to be impacted by disease or heat stress during hotter summer months. These warmer conditions also cause additional risk to human health, particularly for the very young and very elderly.



## Increased Rainfall and Flooding

Across the UK winters between 2009 and 2018 have on average been 12% wetter than winters between 1961 and 1990. Summers have also been on average 13% wetter for the same time periods (Met Office, 2021). Higher levels of rainfall has put MEA at increased risk of flooding, and in cases where heavy, prolonged rainfall occurs after a long dry, period, there is a risk of flash flooding.

Our area has experienced numerous episodes of flooding in recent years including 2012, 2015, 2018 and 2021, resulting in property damage, disruption to residents' lives and damage to local parks and infrastructure.

In 2020 the Department for Infrastructure Rivers Agency estimated that flooding would put 4,700 homes in the MEA area at risk as a result of climate change (Weir, 2020) which will have both negative economic and social impacts on the borough.

## Extreme Cold: Ice and Snow

In contrast to the extreme heat, the region has also experienced extreme cold snaps in winter which can lead to issues with freezing water pipes and transport disruption from increased snow and ice.

Extremes in temperature can also have negative impacts on native flora and fauna who can be disrupted by these unusually cold conditions. In 2010 the district experienced a prolonged period of cold temperatures, coupled with high levels of ice and snow. This resulted in disruption to transport and bin collection services. Similar cold and snowy conditions in 2016 led to communities in the Glenravel area being cut off and necessitated the emergency plan protocol to be engaged when rural communities had to be supplied with provisions including bottled water and medical supplies.

## Increases in Storm Activity

Mid and East Antrim has experienced more frequent and intense storm activity in recent years, resulting in tree falls, damage to property, risk to human life and travel disruption. Storm activity is particularly disruptive in the coastal areas of our borough, where rough seas and coastal winds can lead to severe damage to marinas, coastal erosion and landslides on coastal rock faces. In 2016, there was extensive damage to Larne Promenade from the impact of the sea during storm events.

This has further economic and social impacts via disruption to transport routes and tourist attractions.





# Projected Impacts of Climate Change in Mid and East Antrim

The UK Met Office predicts future climate change will lead to warmer and wetter winters, hotter and drier summers and more frequent and intense weather extremes (Met Office, 2021). However the degree of impact will vary depending on the action taken now and in the near future.

Predictions of the impacts of future climate change vary across a range of scenarios with low to high emissions of GHGs, depending on the action we take to reduce our emissions. The different scenarios are referred to as Representative Concentration Pathways or RCPs. This plan will consider two scenarios relating to RCP2.6 (Low Emissions) and RCP8.5 (High Emissions).

These scenarios provide both an optimistic and pessimistic option for future scenarios, where average temperatures by 2100 are reaching 2°C and 4°C respectively. RCP2.6 is a scenario where GHG emissions peak in the 2020s and decline, reaching net zero in the latter half of the century. This is a Low emissions scenario.

RCP8.5 is a "business as usual" scenario where GHG emissions continue throughout the 21st century in a similar manner as they do today. This is a High emissions scenario and is the potential outcome if significant efforts to reduce our emissions are not made in the near future (Mackie and Wentworth, 2017).

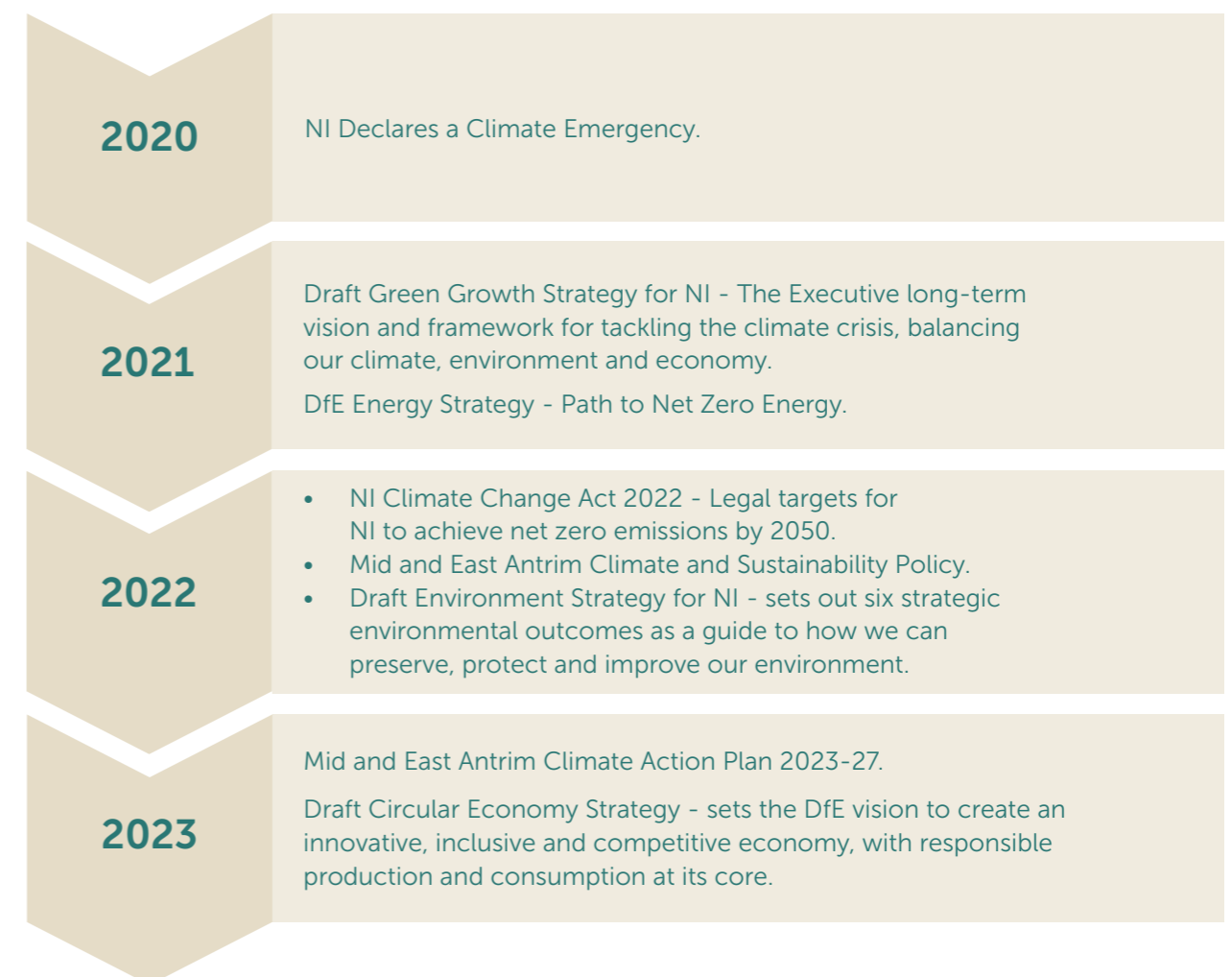
Parameter	Scenario Predictions	Examples of Likely Impacts
<b>Temperature</b>	<p>Under a low emissions scenario (RCP2.6) temperatures are expected to be up to 2.8°C warmer in summer and 2.2°C warmer in winter (DEFRA, 2020)</p> <p>By 2070 under high emission scenarios (RCP8.5) summer temperatures are estimated to be up to 4.9°C warmer and up to 3.9°C warmer in winter (DEFRA, 2020).</p> <p>Summer heat waves, similar to that of 2018, are 50% more likely to occur by 2050 (Met office 2021)</p>	<ul style="list-style-type: none"> <li>• Increased heat induced illness and mortality.</li> <li>• Increased risks from pests and disease.</li> <li>• Increased risk to flora and fauna as a result of heat stress.</li> <li>• Increased spread of invasive species.</li> <li>• Increased visitors to tourism hot spots/open spaces.</li> <li>• Impacts on infrastructure.</li> <li>• Reduced risks from cold/ice/snow in winter.</li> <li>• Reduced heating bills in winter months.</li> <li>• Impact on agri sector production.</li> </ul>
<b>Winter Precipitation</b>	<p>Under a low emissions scenario (RCP2.6) winters could be up to 17% wetter.</p> <p>Under a high emissions scenario (RCP8.5) winters could be up to 25% wetter (DEFRA, 2020).</p>	<ul style="list-style-type: none"> <li>• Increased risk to life and human safety from flooding, including mental health impacts.</li> <li>• Increased risk to property and infrastructure from flooding resulting in economic impacts.</li> <li>• Negative impacts on water quality.</li> <li>• Impact on agri sector production.</li> </ul>
<b>Summer Precipitation</b>	<p>Under a low emissions scenario (RCP2.6) summers are estimated to be up to 28% drier.</p> <p>Under a high emissions scenario (RCP8.5) summers are estimated to be up to 38% drier (DEFRA, 2020).</p>	<ul style="list-style-type: none"> <li>• Reduced water supply and increased likelihood of water conservation measures being needed.</li> <li>• Increased risk of wildfire.</li> <li>• Negative impacts on flora and fauna due to water scarcity.</li> <li>• Increased frequency and severity of surface water flooding following intense rainfall after long dry spells.</li> <li>• Impact on agri sector production.</li> </ul>
<b>Frost and Snow</b>	<p>Across the UK, under all emissions scenarios, declines in snow cover are projected, with lying snow predominantly confined to northern and mountain areas by 2100 (Met Office 2021)</p>	<ul style="list-style-type: none"> <li>• Potential reduced costs for heating/infrastructure treatment for snow/frost.</li> <li>• However, cold spells can still occur resulting in risks to human health and infrastructure and resulting in significant expenditure for treatment of transport routes.</li> </ul>
<b>Sea Level</b>	<p>By 2100 a rise of 11-52cm under a low emissions scenario (RCP2.6) and 33-94cm under a high emissions scenario (RCP8.5) is projected for the Belfast region (DEFRA, 2020).</p>	<ul style="list-style-type: none"> <li>• Increased risk of coastal flooding.</li> <li>• Increased risk of damage to coastal habitats and infrastructure.</li> <li>• Increased impacts from storm surges and high tides .</li> </ul>

The magnitude and rate of climate change impact depends greatly on mitigation and adaptation actions taken in the next decade. Rapid, effective action is needed to limit the impacts as far as possible and governments and public bodies need to act. Our Climate Action Plan sets out a framework for climate action in Mid and East Antrim, with the ultimate aim of reaching net zero across the council by 2040.



# Strategic Context and Legal Requirements

In 2019 Mid and East Antrim Borough Council passed a Notice of Motion on Climate Change. Since then, we have been working to reduce its impact on climate and nature, culminating in this Climate and Sustainability Action Plan. The plan has been guided by a number of international, national, regional and local pieces of legislation, agreements and policies:



Mid and East Antrim Climate and Sustainability Policy gives a commitment that Council will carry out its activities and functions in a manner which avoids any potentially negative environmental impact and states that the principles of sustainable development will be fully considered throughout all activities. It ensures Council's compliance with all sustainability, environmental and climate change legislation to fulfil its statutory responsibility.

# UN Sustainable Development Goals

Mid and East Antrim Climate and Sustainability Action Plan has been developed to meet our requirements within the Climate Change (NI) Act 2022 and deliver on the commitments in our Climate and Sustainability Policy. It will also ensure delivery on its commitment to achieve:

- 30% reduction in Council operation emissions by 2030
- Decarbonise small vehicles in our fleet by 2030
- Council operation emissions to Net zero by 2040
- Supporting the Borough to Net zero by 2050
- Climate resilience in our buildings, public spaces and infrastructure

[midandeastantrim.gov.uk/meaction](http://midandeastantrim.gov.uk/meaction)

Mid and East Antrim Climate and Sustainability Policy and Plan are both centred on delivering against the UN Sustainable Development Goals (SDGs), which define global sustainable development priorities and aspirations for 2030. They are centred around the 5P's: **People, Planet, Prosperity, Peace and Partnership** and call for worldwide action among governments, business and civil society to tackle poverty, inequality and put the world on a sustainable path, see Figure 1.

As a Council we recognise our major role in the development, implementation and successful delivery of the SDGs and its Community, Corporate,

Local Development and Climate Plans share many of the outcomes of these goals. Council services and activities are mapped against them bi-annually and published to demonstrate our commitment to delivering the goals. See here: [www.midandeastantrim.gov.uk/council/policies-and-documents/climate-change-sustainability/climate-sustainability-environment-reporting/](http://www.midandeastantrim.gov.uk/council/policies-and-documents/climate-change-sustainability/climate-sustainability-environment-reporting/)

In addition, sustainability screening will apply to all new projects, policies and plans to assess for sustainability impact of the proposed activity.



Figure 1: Summary of the UN SDG framework

# Implementation Structure

How will we achieve our climate targets? As part of our commitment to these goals, we have put in place a number of structures to embed climate action throughout the organisation. These groups within Council meet regularly to agree targets, implement actions and review progress on climate delivery.

## Senior Management Team

Council's Corporate Plan includes an environment pillar and climate and sustainability objectives. The Director of Operations ensures resources are in place and objectives are achieved within this pillar.

## Environment Champions

Council is accredited to ISO14001 International Environmental Management Standard which ensures Council reduces the impact of its services on the environment and improves its environmental performance year on year. We set environmental objectives and targets each year which are reviewed quarterly by an Environment Champion Team made up of representatives from across all Council services.

Council benchmarks its environmental performance a number of ways:

- External verification of the environmental management system;
- Submission to the NI Environmental Benchmarking Survey annually.
- Publish Council's Carbon Footprint Report annually, which details resource use and environmental performance across service areas. See here: [www.midandeantrim.gov.uk/council/policies-and-documents/climate-change-sustainability/climate-sustainability-environment-reporting/](http://www.midandeantrim.gov.uk/council/policies-and-documents/climate-change-sustainability/climate-sustainability-environment-reporting/)
- Annual management review of environmental objectives and targets.

## Climate and Sustainability Manager

Council employ a Climate and Sustainability Manager to drive climate change performance improvement across all Council services and ensure it is appropriately aligned to the achievement of Council's aims and objectives.



## Climate Change Working Group

Council's All Party Climate Change Working Group was formed following a Notice of Motion on Climate Change in September 2019. It meets three times a year to provide strategic direction and leadership in relation to Mid and East Antrim Borough Council's response to the Climate Change Agenda.

## Climate Action Team

The climate action team meet regularly to deliver a joined up approach to:

- Carbon reduction (reducing emissions from transport, buildings and waste);
- Carbon removal (offsetting emissions through tree planting and land management);
- Biodiversity (protecting and improving habitats); and
- Climate resilience and adaptation (reducing risks from extreme weather and improving the resilience of Council services and vulnerable citizens to climate change)



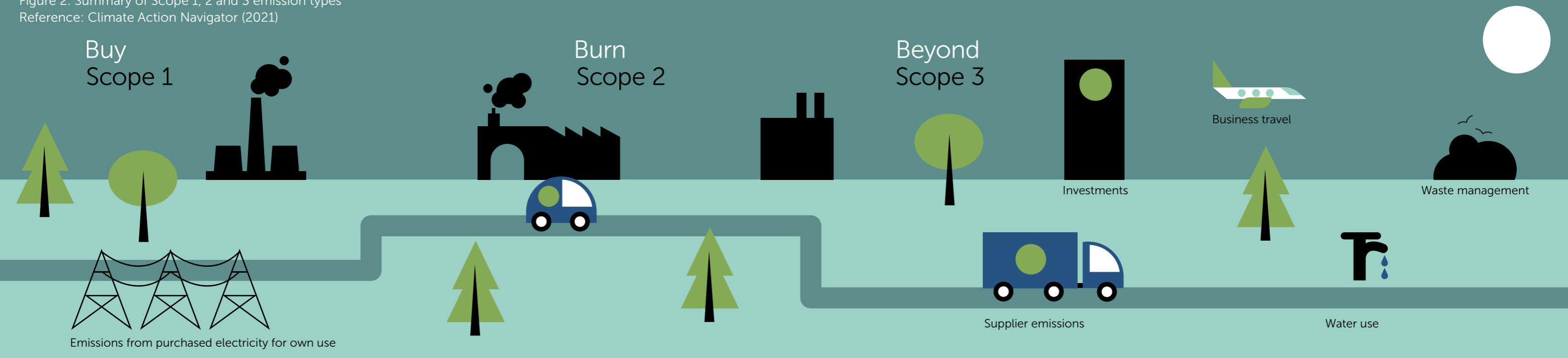
## Climate Action Pledge

We have made a public commitment to reduce our carbon emissions through taking the Business in the Community Northern Ireland 'Climate Action Pledge'.

To learn more, visit: [www.bitcni.org.uk/programmes/climate-action-pledge/](http://www.bitcni.org.uk/programmes/climate-action-pledge/)

**The work of the agile team contributes to reduced emissions through efficient building use and encouraging virtual meetings and effective journey management.**

Figure 2: Summary of Scope 1, 2 and 3 emission types  
Reference: Climate Action Navigator (2021)



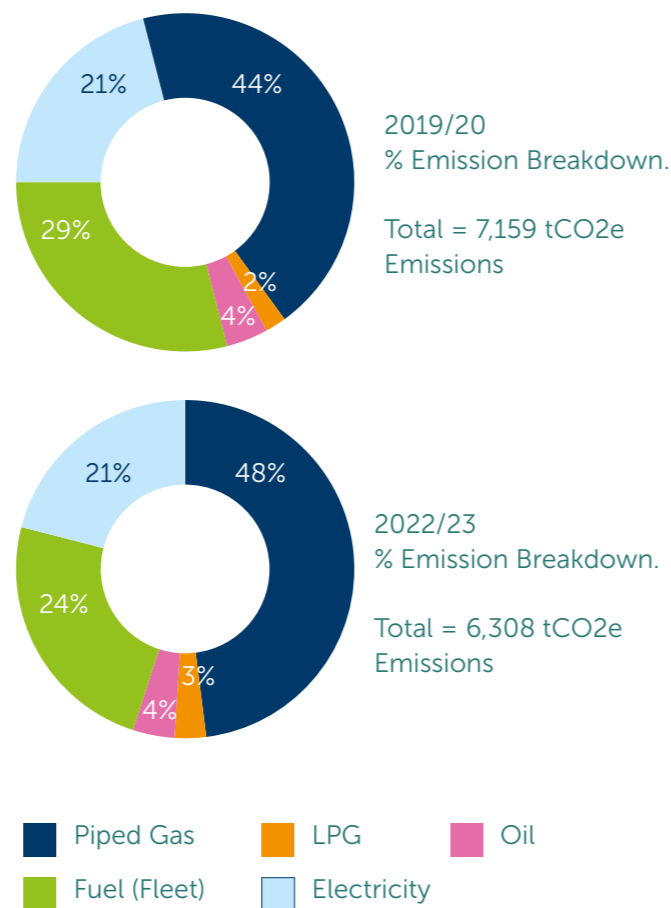
## Our Baseline Emissions

Council's baseline emissions are calculated from the fuel it burns to heat its buildings and run its fleet (scope 1) and the electricity it purchases (scope 2).

Council is also committed to measuring and reducing scope 3 emissions and has environmental objectives in place to reduce business and commuter miles and water usage. In addition Council will investigate best practice to collate emissions from its supply chain.

Council's baseline emission figure (scope 1 and 2) for 2019/20 was 7,159 tCO<sub>2</sub>e. 47% of emissions are from gas and 23% from oil, both used to heat buildings and 23% from fleet fuel. It is this figure (7,159 tCO<sub>2</sub>e) that Council needs to reduce by 30% by 2030 and reduce by 100% by 2040.

Council has already reduced its carbon footprint by 12% in 2022/23 from 2019/20 pre-covid year due to reduced use in some buildings and services, the introduction of energy efficiency measures and electricity being generated from more renewable sources.



## Nature-Based Solutions

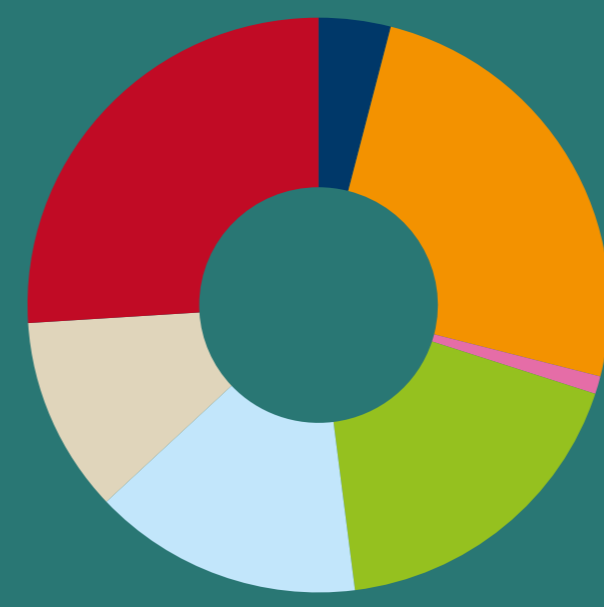
Carbon capture (or carbon sequestration) describes how carbon dioxide is removed from the atmosphere and stored as carbon. The trees, grass and hedgerows in our parks and open spaces do this naturally through photosynthesis.

The amount of carbon removed from the atmosphere in Council's green spaces will help to reduce Council's overall emissions and achieve net zero. Net zero for Council operations will be achieved when the carbon emissions that Council produce are reduced (through energy saving and renewable technologies) and the remaining emissions are removed through carbon capture.

Council currently owns 506 hectares of green space across the borough and 483 hectares of foreshore. This natural capital provides valued space for nature and our residents, but also captures in excess of 1000 tonnes of CO<sub>2</sub> per year (R Gregg et al., 2021). This is equivalent to 14% of Council's baseline emissions for 2019/20.

The woodlands, grasslands, hedgerows and healthy peatlands in our parks and open spaces can be described as nature-based solutions for climate change as they can help with climate adaptation (through reducing the impacts from flood and drought), as well as climate mitigation (through absorbing carbon dioxide from the atmosphere). In addition they support biodiversity and the health and well-being of our residents across the borough. R Gregg et al. (2021) identified the top three principles for nature to support biodiversity and climate mitigation:

- 1. Protect and restore peatlands.** Peatlands are our largest natural carbon stores and it is important to protect them to reduce emissions. Council are actively restoring Keeran Moss peatland in partnership with RSPB.
- 2. Create new native broadleaved woodlands.** Native woodland is an effective carbon sink and Council planted over 98,000 trees between 2019 and 2023 in partnership with the Woodland Trust.
- 3. Protect and restore natural coastal processes** to allow habitats, such as saltmarsh, to maintain themselves and to sequester and store carbon. Council are working in partnership with Ulster Wildlife to re-introduce native oyster beds to Glenarm marina to improve water quality and biodiversity.



- 4% Waste Management
- 1% Commercial
- 15% Transport
- 26% Agriculture
- 25% Industry
- 18% Domestic
- 11% LULUCF
- 0% Commercial

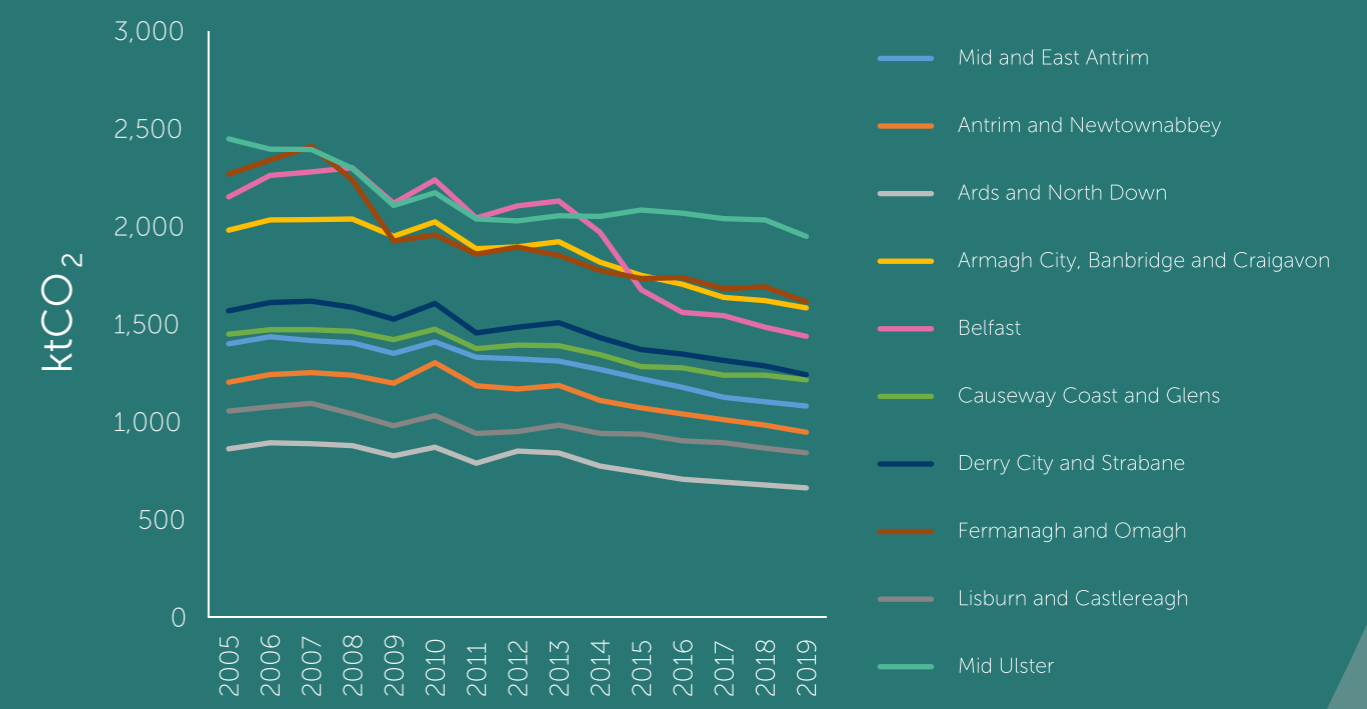
**Figure 3: 2020 GHG emissions for Mid and East Antrim**  
 Source: UK local authority and regional greenhouse gas emissions national statistics: 2005 – 2020, Department for Business, Energy and Industrial Strategy.

## Borough Baseline Emissions

The UK Department for Business, Energy and Industrial Strategy (BEIS) provides data from the UK's Greenhouse Gas Inventory and other sources such as local energy consumption statistics, to produce greenhouse gas estimates for each local authority for carbon dioxide, methane and nitrous oxide.

The most recent emissions figure for Mid and East Antrim borough is 1,634 ktCO<sub>2</sub>e. The largest source of emissions in MEA in 2020 was agriculture, totalling 429.7 ktCO<sub>2</sub>e. 402 ktCO<sub>2</sub>e were attributable to industrial emissions in the same year, making this the second largest contributor in the region.

Emissions per capita = 11.7 t CO<sub>2</sub>e  
 Emission per km<sup>2</sup> of district = 1.5 kt CO<sub>2</sub>e



**NI Local Authority Carbon Dioxide Emissions 2005 – 2019**  
 Source: UK local authority and regional carbon dioxide emissions national statistics: 2005-2019, Department for Business, Energy and Industrial Strategy. Note: these data relate only to CO<sub>2</sub> emissions as data for emissions related to other GHGs were not available for this full time period.



# What We Are Doing Well

## Good governance and community leadership

- Accredited to ISO14001 International Environmental Performance Standard across Council.
- Awarded Council of the Year at the UK iESE Public Sector Awards 2023 for transformational action in supporting hydrogen technology and green public services.
- Awarded Local Authority Individual of the Year at the UK Awards for Excellence 2022 for excellence in climate commitment and governance.
- Awarded Platinum in Business in the Community's NI Environmental Benchmarking Survey 2022 for excellence in environmental performance.



## Protecting the environment

- Restored Keeran Moss peatland in Carrickfergus, in partnership with the RSPB.
- Planted over 98,000 trees during 2019 - 2023 in partnership with the Woodland Trust, and other stakeholders.

- Installed a native oyster nursery in Glenarm Marina in partnership with Ulster Wildlife.
- Put in place four food fridges to reduce waste, support local growers, communities and retailers, saving over 700 tCO<sub>2</sub>e per year.



## Economy

- Delivered a successful Pilot Hydrogen Training Academy over 2022/23, to support skills to meet industry demand in the emerging hydrogen economy across Northern Ireland.
- Secured Innovate UK support to develop net zero delivery plans for businesses via a Fast Followers programme commencing in 2023.
- Progressing a £24m i4C Innovation and Cleantech centre under the Belfast region City Deal to support SMEs innovating around solutions for climate change impacts.
- Progressing a series of hydrogen test-bed trials in Ballymena around transport, heating and skills training in collaboration with universities and industry.

## Transportation

- Delivering a sustainable tyre programme for the Council fleet in partnership with Michelin, saving up to 20 tCO<sub>2</sub>e per year.
- Agreed a fleet strategy to invest in technology to improve fuel efficiency and investigate low emission fuels for vehicles.

- Secured funding for installation of 12 electric vehicle charge points in the borough.
- Expanding greenways to improve connectivity between our towns and villages and encourage walking and cycling.

## Resource management

- Invested in waste management infrastructure – new Sullatober Household Recycling Centre and Waste Transfer Station has reduced emissions from waste by 800 tCO<sub>2</sub>e per annum.
- Delivering local re-use programmes such as the School Uniform Scheme and Christmas Toy Container Scheme reducing emissions from textile and plastic waste.



## Buildings and energy

- Completed extensive LED lighting projects, saving approximately 1,500 tCO<sub>2</sub>e over the product lifecycle.
- Invested in six solar PV arrays, saving approximately 1,056 tCO<sub>2</sub>e over the product lifecycle.
- Implemented a water management system to reduce water waste.
- Progressing renewable technologies and a green hydrogen trial at the Ecos Centre.

# Appendix 1: Objectives and Actions

## 1. Good Governance and Community Leadership

Leading by example to develop a Council which includes sustainability and climate change in all decision making and empowers citizens to create a just transition to net zero.

Our Objectives
Climate and sustainability is embedded in Council policies, plans and decision making processes.
Lead by example to reduce emissions from Council operations to net zero by 2040.
Empower, educate and support citizens to create a just transition to net zero for the borough by 2050.
Climate adaptation is at the centre of Council's service delivery, supporting local communities and creating a sustainable and resilient borough.
Continue to work collaboratively with multi sectoral and government partners to engender community leadership on climate action.
Continue to develop stakeholder partnerships to assist with funding and resources for climate action.

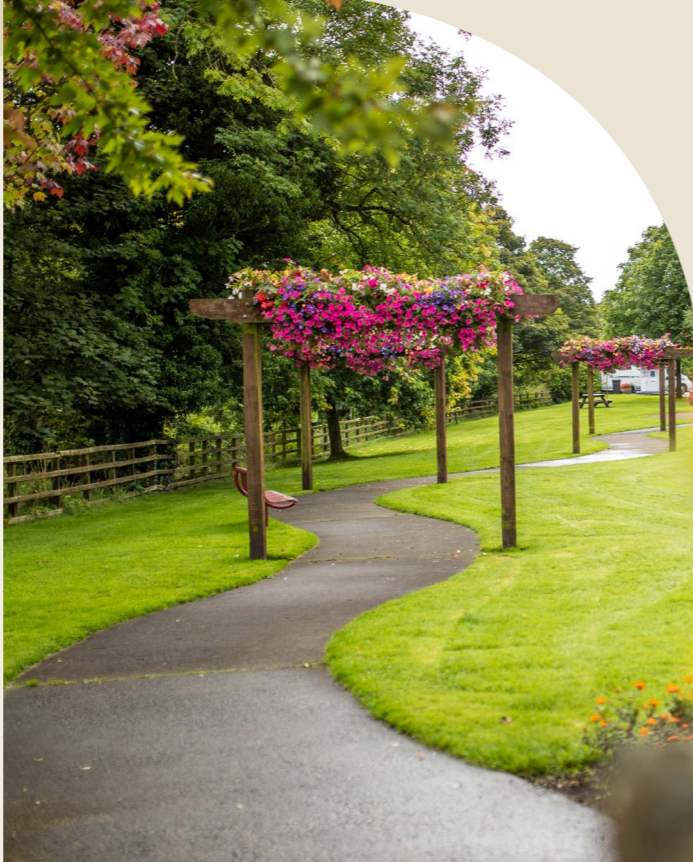


Actions	Indicators	Responsible Team
Ensure that sustainable development and climate change are used as a guiding principle in council plans, policies and strategies.	100% of new or reviewed policies screened for sustainability.	Policy
Ensure that climate change risks are appropriately addressed within our risk management and business continuity process.	Climate change risks are included in the risk register. Every services area's Business Continuity Plan includes climate change threats.	Climate & Sustainability Community Planning
Engage and influence the pension scheme provider on fossil fuel divestment.	Report from pension scheme on % fossil fuel divestment.	Climate & Sustainability

Actions	Indicators	Responsible Team
Include environmental and social value weightings in procurement policy.	Employ a social value officer. Evidence of environmental and social value weightings in awards.	Procurement
Investigate best practice to collate emissions from Council's supply chain.	Evidence of engagement with supply chain.	Procurement
Implement actions within Council's Adaptation Plan to reduce the impacts of extreme weather and improve health and well being.	No. of initiatives to enhance and promote the benefits of green open spaces and the landscape quality. No of Community Resilience Groups / initiatives	Corporate & Community Resilience
Work with multi-agency partners to increase capacity to respond to severe weather events and to increase community resilience.	No. of multi-agency response interventions delivered as a result of severe weather.	Corporate & Community Resilience
Support communities to build local resilience through the creation of community-led resilience hubs including the ability to respond to climate change risks.	Complete the RCRG Resilience Pilot with selected communities. Contribute learning to Regional Resilience Toolkit. Implementation of the RCRG Regional Resilience Toolkit across the Borough and linking with multi-agency partners.	Corporate & Community Resilience
Implement a collaborative approach to delivering the climate change agenda to local communities.	No. of communications and PR to raise awareness of climate and sustainability agenda. Monitor the effectiveness of climate change engagement through digital platforms.	Communications
Improve promotion, marketing, and communication of sustainability-themed procurement activities, policies and processes as appropriate.	No. of sustainability and climate themed events.	Events
Develop cross departmental collaborations and partnerships to assist with sources of funding for climate action.	No. of cross-departmental collaborations and partnerships.	Climate & Sustainability

## 2. Protecting the Environment

Protecting the natural environment within our borough to enhance biodiversity, increase carbon capture and improve the health and wellbeing of our citizens.

Our Objectives	
Reduce GHG emissions and improve carbon capture across the Council estate, services and wider borough	
Reduce GHG emissions from land use through planning (or delivery of the Local Development Plan).	
Utilise nature based solutions to aid in Climate Change adaptation and improve health and wellbeing.	
Protect and enhance biodiversity in our parks and open spaces.	
Optimise environmental management practices to reduce the impact of Council services on air, land and water.	
Continue to develop stakeholder partnerships to assist with funding and resources for climate action.	

Actions	Indicators	Responsible Team
Ensure the planning system protects the natural environment, biodiversity and ecosystems (LDP Natural Heritage policies).	Number of planning applications approved in International, National or Local Sites.	Planning
Preserve carbon storage in peatland by applying a presumption against commercial peat extraction (Policy MIN7).	Number of planning applications approved for commercial peat extraction (target 0).	Planning
Invest in nature-based solutions that work for towns making the council estate and public realm more climate change ready through enhancing green spaces, urban greening, and adaptable planting regimes.	Continued decrease in the use of peat compost from parks and open spaces.	Parks and Open Spaces
	% reduction use in pesticides.	Parks Development
	Increased hectares of publicly accessible land managed sustainably.	Parks Development
	No. of community projects supported.	Parks Development

Actions	Indicators	Responsible Team
Protect and restore, where possible, peatlands and degraded soils on the Council estate or in partnership across the Borough.	No. of hectares of peatland restored. Carbon emissions reduction from peatland and restored soils.	Parks Development
Develop a Tree and Woodland Management Strategy to include tree planting, tree health maintenance and woodland management to increase tree cover across the borough to enhance biodiversity, increase carbon store and support ecosystem services.	No. of trees planted on Council land. No. of trees planted on public & private land through MEABC support.	Parks Development
Work in partnership with Ulster Wildlife to re-introduce native oyster beds to Glenarm and Carrickfergus marinas.	No. of oyster beds introduced. No. of educational programmes.	Harbours & Marinas Parks Development
Become a Sustainable Food Place.	Achieve bronze level in Sustainable Food Places. Achieve gold in medium term. No. of community fridges across the Borough. No. of support opportunities for community growing.	Parks Development
In house growing of plants (nursery) to allow sustainable planting.	All plants grown in house.	Parks & Open Spaces
Develop opportunities for promoting and encouraging sustainable water management.	No. of water diversion/holding proposals (green roofs, permeable paving, soakaways, tree planting, ponds and wetlands) considered at design stage of new projects. No. of reduction of water schedules and water intensives planting schemes across parks and green spaces. Investigate alternative sustainable water supply opportunities.	Capital Regeneration Parks & Open Spaces Parks & Open Spaces
Introduce natural solutions for oil spills in Harbours and Marinas .	No. of oil spills cleared with polysorb (target 0).	Harbours & Marinas

### 3. Economy

Driving sustainable economic growth, supporting local communities, businesses and agriculture in transitioning to a circular economy and providing opportunities for the development of clean, green technologies in the local area.

Our Objectives	
Drive inclusive and sustainable economic growth through investing in our people, our places and its business.	
Promote the low carbon circular economy through good environmental, social and economic governance.	
Support communities, farmers and local businesses to live more sustainably, reduce carbon emissions and adapt to a changing climate.	
Drive innovation in clean green technology in the borough through partnerships.	
Develop the skills needed to embrace opportunities for a prosperous and more sustainable future.	

Actions	Indicators	Responsible Team
Support the business community to adopt energy efficiency practices and progress towards net-zero carbon emissions by 2050.	No. of business mentoring/ information/education sessions delivered.	Economic Development
Work in partnership with academia and employers to help shape future Cleantech skills interventions.	Development of course materials in partnership with academia, partners and employers.	Economic Development
BRCD – To establish an i4C physical hub, supporting future innovation activity in the Borough and clean technology needs across NI. Targeting BREEAM 'Excellent' rating which will embed sustainability at all stages of the proposal.	Establishment of the i4C Innovation and CleanTech Centre. Achieving BREEAM 'Excellent' rating.	Belfast Region City Deal
Using the Belfast Regional City Deal to drive low carbon growth and transformational change	Secure funding for i4c innovation and cleantech centre.  No. of hydrogen trial test-bed projects established.	Economic Development


Actions	Indicators	Responsible Team
Develop a localised Sustainable Tourism Strategy based on Tourism NI's new strategy.	Delivery of new strategy.	Tourism
Complete an audit of local businesses to assess sustainability credentials and share best practice.	No. of businesses engaged.	Tourism
Develop a new outreach and support programme to engage with local businesses to promote sustainability.	No. of businesses engaged in the programme.	Tourism
Increase awareness of free to use sustainability tool kits.	No. of communications about the sustainable toolkit.	Tourism
BRCD – Expansion at The Gobbins proposal targeting BREEAM Infrastructure 'Excellent' rating on the building development. Measures to improve sustainability will be included in design and delivery.	Achieving BREEAM 'Excellent' rating on the building development.	Belfast Region City Deal
BRCD – Carrickfergus Regeneration Project to regenerate, reposition and rebrand the town of Carrickfergus. Measures to improve sustainability will be included in design and delivery.	No. of increased GVA and jobs for Northern Ireland.  No. of regeneration actions for Carrickfergus town centre.  No. of wellbeing benefits for residents.	Belfast Region City Deal
Explore low carbon initiatives for town centre business/property owners to introduce low carbon practices.	Deliver successful introductions of low carbon initiatives.	Economic Development
Ensure town centres regeneration contributes to climate action by reducing emissions, investing in low carbon transport and creating more greenspaces.	No. of public realm improvements / regeneration projects delivered in partnership with Council, DFC and DFI.	Capital Regeneration
Work in partnership with academia and employers to promote career opportunities in the Cleantech sector through a series of school engagement activities.	No. of school engagement events to promote the Cleantech/environment/ science sector to schools.	Economic Development

Actions	Indicators	Responsible Team
BRCD – Expansion at The Gobbins proposal targeting BREEAM Infrastructure 'Excellent' rating on the building development. Measures to improve sustainability will be included in design and delivery.	Achieving BREEAM 'Excellent' rating on the building development.	Belfast Region City Deal
BRCD – Carrickfergus Regeneration Project to regenerate, reposition and rebrand the town of Carrickfergus. Measures to improve sustainability will be included in design and delivery.	No. of increased GVA and jobs for Northern Ireland.  No. of regeneration of Carrickfergus town centre. No. of wellbeing benefits for residents.	Belfast Region City Deal
Examine lighting approaches in design of public & civic space which contributes to a low carbon environment.	Lighting strategy complete across Town Centres.	Economic Development/ Climate & Sustainability
Examine town centre incentives for business/property owners to introduce low carbon practices.	No. of successful introductions of low carbon incentives and uptake.	Economic Development/ Climate & Sustainability
Ensure town centres regeneration contributes to climate action by reducing emissions, investing in low carbon transport and creating more greenspaces.	No. of public realm improvements / regeneration projects delivered in partnership with Council, DFC and DFI.	Economic Development/ Regeneration
Provide businesses with opportunities to learn new skills and develop a knowledge and education of opportunities within the Cleantech sector.	No. of training courses/ practical training delivered.  No. of businesses participating in clean-tech initiatives.	Economic Development
Work in partnership with academia and employers to promote career opportunities in the Cleantech sector through a series of schools engagement activities.	No. of programmes delivered.  No. of events to encourage entrepreneurship and employability.  % attendees found event helpful in accessing careers support.	Economic Development



## 4. Transport

Reducing emissions across our fleet and supporting the development of sustainable and active travel within the organisation and throughout Mid and East Antrim.

Our Objectives	
Reduce carbon emissions across Council fleet.	
Increase sustainable and active travel and reduce trips by vehicle to improve air quality.	
Encourage agile working and digital innovation to reduce business and commuting miles.	
Promote sustainable practices in servicing and maintenance of infrastructure.	

Actions	Indicators	Responsible Team
Decarbonise small fleet (<7.5 T) by 2030.	Completion of pilot scheme, trialling leasing options.  % reduction in carbon emissions from Council fleet annually.	Waste
Trialling new technology to decarbonise the fleet.	No. of completed trials.  No. of new technology rolled out.  % reduction in carbon emissions from Council fleet annually.	Waste
Implement route optimisation software across waste collection services.	% reduction in carbon emissions from Council fleet annually.  No. of drivers trained in Eco Driving.	Waste
Implement circular economy principles in tyre management.	% reduction in carbon emissions from responsible tyre management.  % reduction in new tyre purchase.	Waste
Further realise the efficiencies and sustainable benefits of agile working, encouraging virtual meetings and effective journey management.	% reduction in business miles annually.  % reduction in commuting miles annually.	Climate & Sustainability

Actions	Indicators	Responsible Team
Work in partnership with DfI to encourage walking and cycling through investment in additional infrastructure and creation of linkage opportunities.	No. of km of new greenway.	Parks Development
Update the Cycle Routes Masterplan and include walking routes to promote walking and cycling and promoting this across the borough.	No. of km of new greenway.	Parks Development
Identify funding opportunities and grants available for outdoor activities and active travel to improve health and wellbeing of residents within the borough.	No. of active travel initiatives.  Improved quality in children's play areas.  Lengthening of greenways and towpaths.	Parks Development
Work with Translink, Sustrans and other key stakeholders to provide education and participation initiatives to encourage active, public and shared modes of transport.	No. of educational initiatives to encourage cycling.	Parks Development
Support the roll out of the EV infrastructure in the Council estate and across the borough.	No. of new EV charge points.	Energy
Air quality – monitor and review air quality in accordance with the NI Air Quality Strategy.	Compliance through an updated Air Quality Action Plan.	Environmental Health
Use the planning system to prevent new developments locking residents into car dependency.	Evidence of established practice.	Planning
Ensure the needs of pedestrians and cyclists are taken into account in development.	Evidence of established practice.	Planning
Ensure proposals for car parks provide secure, direct and safe access and movement for pedestrians and cyclists (Policy TR7)	Evidence of established practice.	Planning

## 5. Resource Management

Using resources efficiently and sustainably, to reduce consumption and support a low carbon circular economy across the council and borough.


Our Objectives	
Improve resource efficiency and material re-use as part of a low carbon circular economy.	
Support the waste hierarchy of reduce, reuse and recycle to help meet our waste, recycling and climate targets.	
Upskill our workforce on climate change and encourage a culture of resource efficiency in the workplace.	
Engage communities in climate education and environmental initiatives to create a resilient and sustainable borough.	
Reduce water consumption and encourage sustainable surface water management.	

Actions	Indicators	Responsible Team
Engage with schools and community groups to increase knowledge and support the waste hierarchy and circular economy to meet our waste and climate targets.	<p>No. of events run by council to promote reduce, re-use, recycling and circular economy.</p> <p>No. of communications campaigns to increase re-use.</p>	Climate & Sustainability
Ensure the sustainable management of waste including the promotion of the waste hierarchy and the circular economy	<p>% increase of recycling rate of municipal waste.</p> <p>No. of communications campaigns to increase re-use.</p>	<p>Waste</p> <p>Climate &amp; Sustainability</p>
Reduce consumption of single-use plastic (SUP) within Council and events.	% reduction in single-use plastic.	Events
Encourage the hospitality industry by encouraging compostable packaging, reducing single-use plastic.	No. of initiatives to promote awareness and provide information on alternatives to single-use plastics.	Tourism

Actions	Indicators	Responsible Team
Standardise household waste and recycling collection models and commit to making recycling easier for our community.	% increase of recycling rate of municipal waste.	Waste
Meet the 55% recycling rate target of municipal waste by 2025 within the Waste (Circular Economy) (Amendment) Regulations (NI) 2020.	% increase in the recycling rate of municipal waste.	Waste
Meet 60% recycling target of municipal waste by 2030 within the Waste (Circular Economy) (Amendment) Regulations (NI) 2020	% increase in the recycling rate of municipal waste.	Waste
Improve promotion, marketing and communication of sustainability-themed events.	<p>No. of sustainability and climate themed events.</p> <p>Evidence of sustainability criteria used in events.</p>	<p>Climate &amp; Sustainability</p> <p>Events</p>
Encourage communities to engage in climate education and participate in sustainable initiatives.	<p>No. of climate education programmes promoted.</p> <p>No. of sustainable initiatives delivered.</p>	Climate & Sustainability
Support communities to access funding for climate action projects to sustainably manage their environment e.g. environment grant.	No. of funded climate action projects delivered.	Community Development
Cleanliness - continue to deliver and shape effective enforcement and education on Clean Neighbourhood matters through collaborative practices.	<p>No. of complaints received in relation to litter, fly tipping and dog foul each year.</p> <p>No. of litter talks given in schools and community groups each year.</p>	<p>Environment Health</p> <p>Waste</p>
Upskill our workforce on climate change and encourage an agile corporate culture of resource efficiency in the workplace.	No. of employees who have received Carbon Literacy Training.	Climate & Sustainability

## 6: Buildings and Energy

Improving energy efficiency and use of renewable energy across the council estate and promote low carbon solutions in the wider borough.

Our Objectives	
Improve the energy efficiency of Council buildings and maximise the use of renewable energy sources to help deliver carbon reduction targets.	
Continue to work with multi sectoral and government partners to promote low carbon solutions across the borough.	
Embed good practice energy management approaches into facility and building management decisions, targeting a reduction in carbon emissions.	
Embed sustainable criteria into the design and delivery of all new Council buildings and refurbishments.	
Implement adaptation measures in Council buildings at risk from extreme weather.	
Deliver the Local Development Plan in line with Council's climate and sustainability commitments.	

Actions	Indicators	Responsible Team
Improve the energy efficiency of Council buildings to help deliver carbon reduction targets and reduce costs.	Reduction in Carbon Emissions.	Energy & Facilities
Maximise the use of renewable energy sources to help deliver carbon reduction targets and reduce costs.	Reduction in Carbon Emissions.	Energy & Facilities
Embed good practice energy management approaches into facility and building management decisions.	Reduction in Carbon Emissions.	Energy & Facilities
Ringfence an 'invest to save' budget to ensure sufficient investment in energy efficiency / renewable technologies which in turn reduces financial and carbon costs.	No. of projects within the 'invest to save' portfolio.	Energy & Facilities

Actions	Indicators	Responsible Team
Reduce water consumption.	Water usage per square metre of council estate.  No. of measures to reduce water consumption.  Desktop review of water consumption across the estate.	Energy & Facilities
Deliver an energy efficiency education programme to Council staff.	No. of staff attending online energy efficiency module.	Energy & Facilities
Asset efficiency – identify Council buildings with poor thermal performance and/ or occupancy and propose recommendations for efficiency.	No. of buildings identified having poor thermal performance.  Reduction in Carbon Emissions.	Energy & Facilities
Ensure sustainable principles are integrated into all major construction and refurbishment projects (over £3m) at the design phase, incorporating it into both the business case and project specification.	Evidence of sustainable principles included in design phase.  Evidence of whole life carbon assessments to costing and evaluating build and retrofit options.	Capital Works
New build, extensions or refurbishment projects in excess of £1,000,000 and 1,000m <sup>2</sup> will be subject to a formal assessment and will be expected to achieve Passive House Plus certification, where appropriate. All other new build, extensions or refurbishment projects will adopt key sustainable practices and wider sustainability requirements.	No. of projects achieving Passive House Plus certification.  No. of projects adopting sustainable practices.	Capital Works
Construction Stage: Manage construction waste in line with the waste hierarchy of reduce, re-use and recycle through sustainable design.	% Reused and recycled construction waste.  Use of locally sourced and recovered materials.	Capital Works
Require the design of buildings to incorporate climate resilience and flood proofing measures in at risk locations.	Reduction in development within flood risk locations.  Increase in use of sustainable drainage.	Capital Works



Actions	Indicators	Responsible Team
Design Stage: incorporation of increased greening e.g. through installation of green walls/roofs etc, use of SuDS, where possible.	No. of designs incorporating green walls/ roofs, use of SuDS.	Capital Works
Deliver a flagship project which maximises sustainable design principles and use of sustainable construction materials.	Delivery of Carnfunnock Country Park refurbishment.	Capital Works
Administer and enforce relevant building regulations as they relate to fitness of materials and conservation of fuel and power.	No. of inspections of commencement of works in relation to new/replacement boilers/heating systems to all building types.  No. of inspections of commencement of works in relation to upgraded loft insulation/cavity wall insulation to all building types.	Building Control
Actively participate within Northern Ireland Building Control, Building Standards and the Building and the Regulations Advisory Committee to lobby for proportionate minimum acceptable standards in respect of energy efficiency, sustainability of building materials and implementation of energy from renewable sources in new, altered or extended building projects.	Attendance record for Council Building Control Staff.  Log improvements to Building Regulations implemented over time as they relate to energy efficiency, sustainability of building materials and implementation of energy from renewable sources where building work is carried out under Building Regulations.	Building Control
Utilise the knowledge and experience of Building Control staff as a consultee in capital projects and facilities maintenance proposals as they relate to Councils building portfolio to reduce energy use.	Numbers of consultation requests made by Council stakeholders e.g. Assets, Capital works, Facilities Maintenance.	Building Control
Ensure development proposals have taken account of the efficient use of energy, water and other resources, and where feasible and practicable integrate micro-generation and passive solar design. (Policy GP1e v.).	Include in draft plan strategy and upon adoption in late 2023 will become establish practice.	Planning

Actions	Indicators	Responsible Team
Reduce dependence on fossil fuels and encourage a renewable energy mix (Policy RE1)	Include in draft plan strategy and upon adoption in late 2023 monitor the megawatts of renewable energy development approved by Planning Department in reporting year (by renewable energy type).	Planning
Encourage sustainable drainage systems to be included in all development proposals, where feasible and practicable. (Policy GP1e v.).	Include in draft plan strategy and upon adoption in late 2023 will become established practice.	Planning
Ensure development proposals within areas of surface water flood risk include sustainable drainage systems (SuDS) as the preferred means of drainage (Policy FRD4).	% Planning permissions granted within areas of surface water flood risk which include SuDS measures..	Planning
Ensure proposals for surface level car parks include sustainable drainage (SuDS) (Policy TR7).	% Planning permissions granted for surface level car parks which include SuDS measures.	Planning
Identify opportunities for 'soft SuDS' solutions to be included as Key Site Requirements in housing and economic zonings in the LPP.	On adoption of the Local Policies Plan monitor % planning permissions granted on zonings in line with the Key Site Requirement to include soft SuDS measures.	Planning
Ensure no development on a site at risk from flooding or where it would cause or exacerbate flooding elsewhere (Policy GP1d v.).	Include in draft plan strategy and upon adoption in late 2023 will become established practice.	Planning
Consider development proposals on floodplains only by exception (Policy FRD1).	No. of Planning permissions granted on floodplains against policy (target 0).	Planning
Require development proposals >1ha or >25 units to provide public open space as an integral part of the development (at least 10% of site area) (Policy OSL4).	The number of planning permissions granted that meet the public open space requirements of Policy OSL4.	Planning
Raise awareness of energy efficiency measures and other support to tackle fuel poverty in the borough	No. of initiatives to promote energy efficiency and address fuel poverty	Environmental Health



# Monitoring & Reporting

## Step 1: Initiative

Identify climate change impacts and risks. Develop Climate and Sustainability Strategy,



## Step 2: Research

Establish baseline data.  
Complete workshop.  
Engage with heads of service and key officers.



## Step 3: Plan

Agree a vision, key themes, objectives and indicators.  
Develop a Climate Action Plan.



## Step 4: Implement

Develop a monitoring and reporting system.  
Integrate the plan into council operations.



## Step 5: Monitor and Review

Report on performance annually.  
Review the plan every two years.

Source: International Council for Local Environmental Initiatives (ICLEI) Five Milestone Approach for Climate Action Planning



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senior management and engagement with heads of service and key officers in the workshop to agree a vision, themes, objectives and time bound actions across all our service areas.

## Glossary

**BEIS:** Department for Business, Energy and Industrial Strategy

**Blue carbon:** Carbon captured by the world's ocean and coastal ecosystems.

**BREEAM:** Building Research Establishment Environmental Assessment Method. This is an internationally recognised, science-based suite of validation and certification systems for a sustainable built environment.

**BRCD:** Belfast Region City Deal Carbon

**Sequestration:** The process of capturing and storing carbon dioxide from the earth's atmosphere

**Circular economy:** keeping resources in use for as long as possible, extracting the maximum value from them whilst in use, then recovering and regenerating products and materials at the end of life.

**CO<sub>2</sub>e - CO<sub>2</sub> equivalent:** This is a metric measuring all greenhouse gases, including carbon dioxide, methane, and nitrous oxide, allowing them to be expressed as a single number for simplicity.

**IPCC:** Intergovernmental Panel on Climate Change. An intergovernmental body of the United Nations established in 1988 to advance scientific knowledge about climate change caused by human activities.

**Greenhouse gases:** Gases including carbon dioxide, methane, nitrous oxide and fluorinated gases which contribute to the greenhouse effect and enhanced global warming.

**ktCO<sub>2</sub>:** Kilotonnes of Carbon Dioxide  
**Nature Based Solutions –** Methods of mitigating climate change using natural ecosystems e.g. carbon sequestration via restoration of peatlands or degraded habitats.

**Net Zero:** Reducing greenhouse gas emissions to as close to zero as possible, with any residual emissions being offset by sequestration methods such as via forests and oceans.

**Scope 1 Emissions:** Direct emissions resulting from onsite burning of oil, gas and fuel within your fleet.

**Scope 2 Emissions:** Direct emissions resulting from purchase of electricity.

**Scope 3 Emissions:** Indirect emissions associated with all other activities up and down stream including water use, waste, business and commuter miles, investments, transportation and distribution and leased assets.

**SuDS:** Sustainable Drainage Systems. Drainage solutions that provide an alternative to the direct channelling of surface water through pipes and sewers to watercourses. SuDS mimic natural drainage regimes, aiming to reduce surface water flooding, improving water quality and enhancing biodiversity in the environment (BGS, 2023).

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