CLIMATE CHANGE ACTION PLAN

2024 - 2030

Antrim and Newtownabbey BOROUGH COUNCIL

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FOREWORD

As we stand at the intersection of environmental change, economic transformation and social resilience; it is with a sense of urgency and responsibility that I am pleased to present Antrim and Newtownabbey Council's Climate Change Action Plan.

Climate change is no longer a future threat; it is a present-day reality that demands our immediate attention and decisive action. Our communities, ecosystems and economies are already feeling the impacts of a changing climate, from more frequent and severe weather events to shifting patterns in agriculture, water resources and public health.

Our goals are clear. We aim to protect our communities from the effects of climate change, enhance our ability to adapt and thrive in a changing climate and lead by example in reducing our own greenhouse gas emissions. This plan outlines specific actions and strategies to achieve these goals, from building resilient infrastructure to bolstering disaster preparedness, promoting sustainable development to fostering innovative technology solutions which support us to learn and adapt from our data.

It is also a call to action for all residents of Antrim and Newtownabbey and Northern Ireland. Climate adaptation and mitigation is not solely the responsibility of government; it is a shared responsibility that extends to each and every one of us. We must work together to build a resilient, sustainable and equitable future for our children and future generations.

The road ahead is not without its challenges but, by working together, we can overcome them. We will tap into the strength of our communities, the ingenuity of our businesses and the wisdom of our experts to navigate the uncertain terrain of climate change. We will forge a path toward a more secure, prosperous and sustainable future.

I extend my sincere appreciation to all those who have contributed to this plan and I look forward to the journey ahead. Let us embark on this critical mission with unwavering determination, knowing that our efforts today will safeguard our tomorrow.

Neil Kelly
Mayor of Antrim and Newtownabbey

Richard Baker GM MSc
Chief Executive of Antrim and Newtownabbey

EXECUTIVE SUMMARY

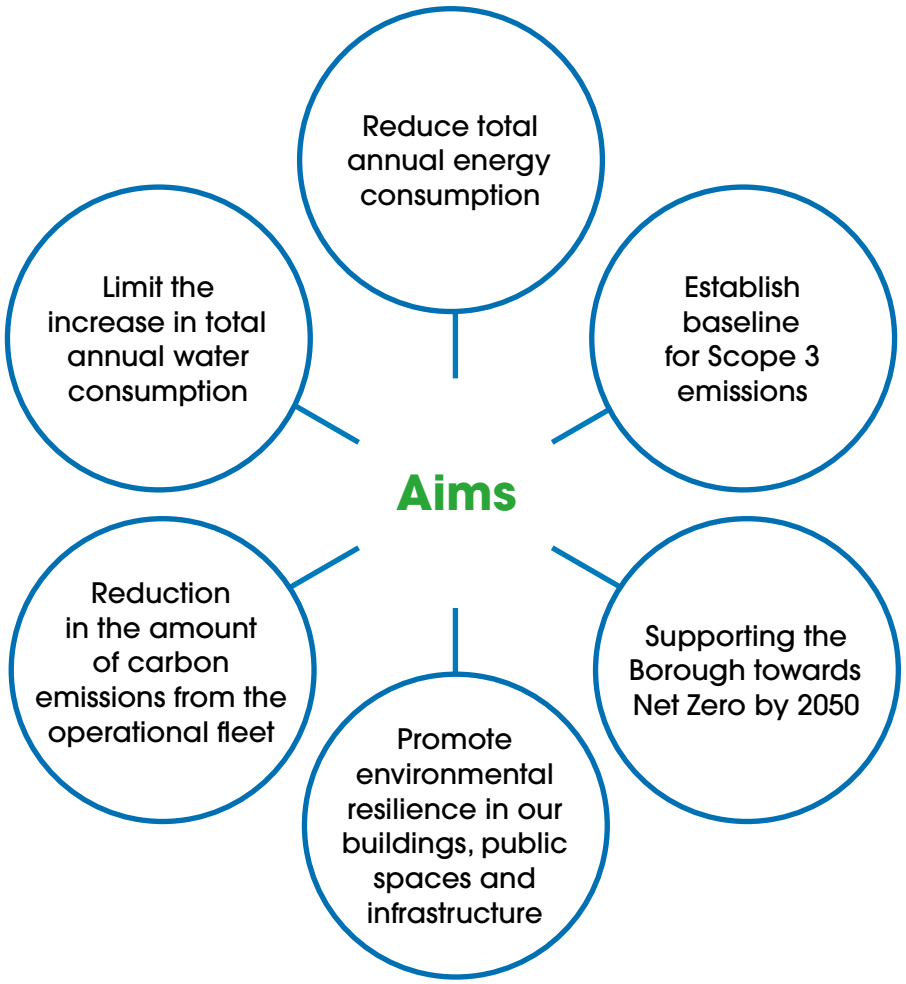
This document sets out how Antrim and Newtownabbey Borough Council will address climate change across the Borough over the next 5 years. By illustrating the current and projected impacts of Climate Change, it describes why we need to act now, how we are going to achieve the objectives set out in this document and meet the requirements within the Climate Change Act (NI) 2022.

Vision

Through ambitious innovation and proactive leadership, we will collectively address the ongoing challenges of climate change emerging as a more green, resilient and prosperous Borough.

Commitment

We will ensure that positive Climate Actions are embedded within our processes, policies and services. We will monitor the Council's environmental impacts and seek to mitigate these as much as possible. We will protect and enhance our open spaces and benchmark this work through respected accreditations.



Our aims will be delivered across the following six key areas:

Energy and Buildings

Reduce carbon emissions from buildings on our estate, improve energy efficiency and support the use of renewable energy.

Resource Management

Using resources efficiently and sustainably to reduce consumption in conjunction with the promotion of reuse, recycling and repair to support a circular economy.

Transport

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

Land Use

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

Economy

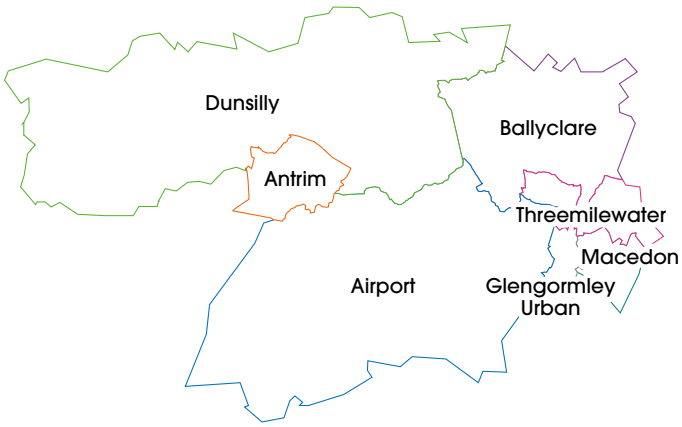
Support local businesses in the transition to net zero and create oportunites for green, sustainable growth.

Governance

Leading by example to embed climate and sustainability in all decision making and increase our ability to adapt and respond to climate change.

OUR BOROUGH

The Borough of Antrim and Newtownabbey covers 274 square miles and has a population of 146,100 people. Bounded by Lough Neagh in the west and Belfast Lough in the east, the Borough is divided into 7 District Electoral Areas (DEAs) as shown on the map.



2024

146,100 RESIDENTS

4,328 BUSINESSES

2.5M VISITORS TO OUR LEISURE CENTRES

£59M ANNUAL BUDGET

603,816 VISITORS TO OUR ARTS AND CULTURE HERITAGE SITES

90 SERVICES

651 STAFF

40 COUNCILLORS (7 DEAS)

The landscape of the Borough is varied with a diverse range of habitats, species and terrains, such as: coastal shores, scattered woodland, a variety of farmland and even our own back gardens. Community is at the heart of what we do and this is reflected through partnership working with a wide range of community groups, businesses, schools and places of worship throughout the Borough.

WHAT IS CLIMATE CHANGE?

Climate change refers to a large-scale, long-term shift in the planet's weather patterns and average temperatures. Since the mid-1800s, humans have contributed to the increased release of carbon dioxide and other greenhouse gases into the air. This causes global temperatures to rise, resulting in long-term changes to the climate.

Evidence has shown that high levels of greenhouse gases in the atmosphere are the leading cause of increasing global temperatures and it is estimated that one-quarter of human-made greenhouse gas emissions come from burning fossil fuels for electricity and heat production. Once in the atmosphere, greenhouse gases such as carbon dioxide, methane, nitrous oxide and sulphur dioxide form a 'blanket' around the planet which traps the heat from the sun and causes the earth to heat up.

In their most recent report, the IPCC states that human activity is unequivocally the cause of climate change (IPCC 2023). Human-induced climate change has caused widespread adverse impacts to nature and people, which goes beyond natural climate variability. Some development and adaptation efforts have reduced vulnerability, however the increase of weather and climate extremes has led to some irreversible impacts as natural and human systems are pushed beyond their ability to adapt.

CLIMATE CHANGE IMPACT UK

Climate change is already having visible effects on the world. Since the late 19th century, average global temperatures have increased by approximately 1°C with global warming likely to reach 1.5°C between 2023 and 2052. Globally these higher temperatures have resulted in an increase in heatwaves, drought, wildfires, floods, extreme storms and sea-level rise.

The impact of this on the UK as a whole is a greater chance of warmer, wetter winters and hotter, drier summers. All the top ten warmest years for the UK, in the series from 1884, have occurred since 2002. Additionally, it is projected that the UK will experience more frequent and severe weather conditions as well as rising sea levels. These changes will pose a risk to the natural environment, people, infrastructure and business.

The UK Government has identified six priority areas of risk as detailed below:

Risk	
Flooding and coastal change risks to communities, businesses and infatructure (Ch3, Ch4, **Ch5**, Ch6)	More Action Needed
Risks to health, wellbeing and productivity from high temperatures (**Ch5**, Ch6)	More Action Needed
Risk of shortages in the public water supply, and for agriculture, energy generation and industry (Ch3, **Ch4**, Ch5, Ch6)	More Action Needed
Risks to natural capital, including terrestrial, coastal, marine and freshwater ecosystems, soils and biodiversity (**Ch3**)	More Action Needed
Risks to domestic and international food production and trade (Ch3, Ch6, **Ch7**)	More Action Needed
New and emerging pests and diseases, and invasive non-native species, affecting people, plants and animals (Ch3, **Ch5**, Ch7)	Research Priority
NOW > FUTURE	

Risk Magnitude Low | Medium | High

Source: ASC (2016) UK CCRA 2017- Synthesis Report

CLIMATE CHANGE IMPACT NI

Northern Ireland's climate is changing in line with global patterns with average temperatures rising across all seasons, increases in annual mean rainfall, a rise in sea levels and a change in the frequency and intensity of extreme weather events.

Increased Temperatures

Across Northern Ireland, average annual land temperature in the decade 2010-2019 was 0.7°C warmer that the period from mid-1970s to mid-2010s. The 21st century has so far been warmer overall than any of the previous three centuries with Summer 2022 being the hottest year on record. Winter 2019 was the third warmest winter for Northern Ireland since 1884.

Risks associated with rising temperatures, such as more extreme heatwave events, can cause impacts on people's health and wellbeing, pressure on water resources and increased risk to flora and fauna.

Increased Rainfall

In Northern Ireland there has been an increase in annual mean rainfall of 6.4% from mid 1970s to mid 2010s.

This can lead to an increase in the likelihood of flooding of infrastructure, businesses and homes across Northern Ireland.

Four areas within the Borough have been identified as flood risk areas.

Rise in Sea Levels

Observed sea level rise is difficult to determine for each country. However, a UK-wide sea level index suggests that sea level has risen by between 1.2 and 1.6mm per year since 1901, which is a total of 16cm to date.

The coastline of the Borough is situated along Belfast Lough, which is a large intertidal sea lough located at the mouth of River Lagan. The entire stretch of the Council's coastal area is approximately 7.5km.

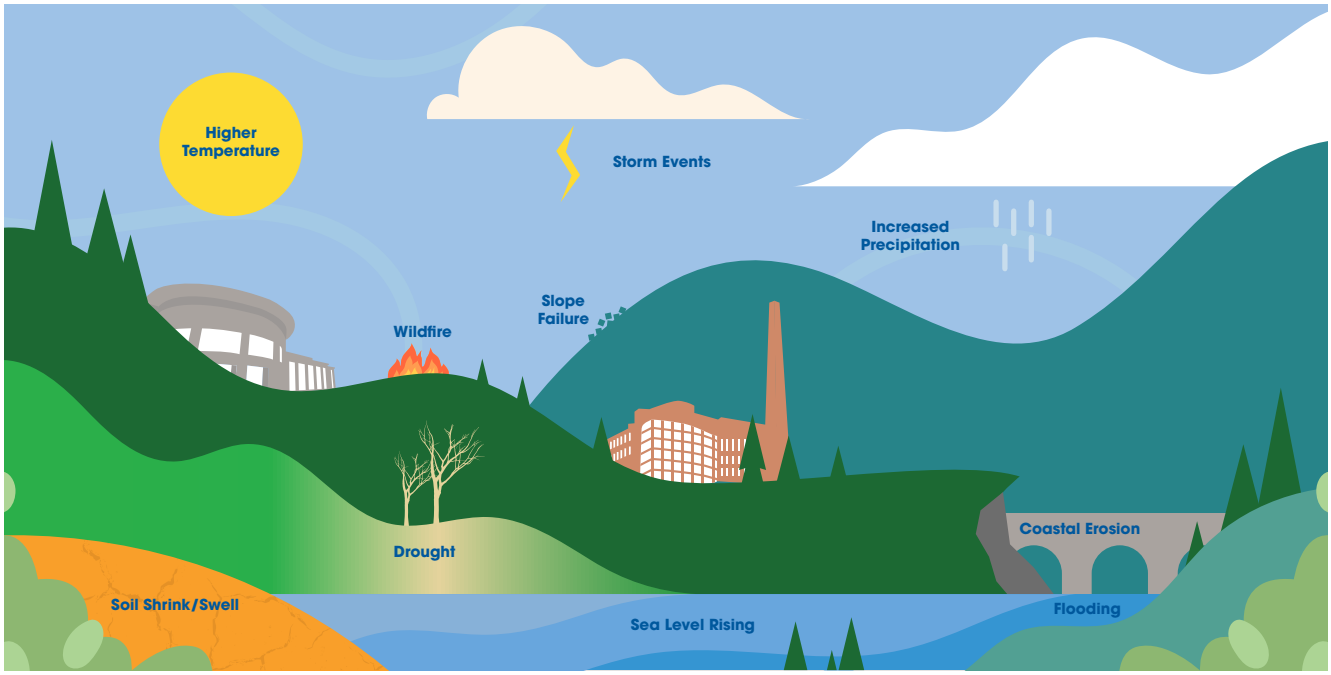
Weather Extremes

In recent years across Northern Ireland there has been an increase in the number of storms, such as the 2018 `Beast from the East' and unseasonal or prolonged cold snaps, as seen in 2010 and 2016.

This can result in falling trees, damage to property, freezing pipes, risk to human life and travel disruption.

Source:
CCRA 2017- Evidence Report Summary for Northern Ireland

CLIMATE CHANGE IMPACT IN THE BOROUGH



Flooding

- September 1999 – Whiteabbey Village
- June 2002 – Whiteabbey Village
- December 2005 – Whiteabbey Village
- August 2008 – Antrim Town
- July 2018 – Antrim Town

Extreme Heat

- June 2018 – Hosepipe ban across NI
- May 2020 – Threat of a hosepipe ban
- Heavy usage of coastal paths leads to increased erosion outside normal trends

Storms

- October 2017 – Storm Ophelia
- September 2018 – Storm Ali
- February 2018 – Anticyclone Hartmut 'Beast from the East'
- January 2024 – Storm Isha

Intense Cold

- December 2010 – coldest month on record
- March 2013 – 'Big Freeze' A8 Snow Walls 6ft high
- February 2018 - Anticyclone Hartmut 'Beast from the East'

CLIMATE CHANGE PROJECTIONS

Climate projections present a range of future scenarios based on the Representative Concentration Pathways (RCP). To model and predict future climate it is necessary to make assumptions about the economic, social and physical changes to our environment that will influence climate change. Representative Concentration Pathways (RCPs) are a method for capturing those assumptions within a set of scenarios. These scenarios are based on the levels of greenhouse gas emissions and are dependent on the action we take to reduce emissions.

RCP 2.6 demonstrates the likely impacts in a low emissions scenario and relates most closely to a 2°C rise in global temperatures by the end of the century. RCP 8.5 demonstrates the likely impacts in a high emissions scenario and relates most closely to a 4°C rise in global temperatures by the end of the century. Other RCP scenarios represent the middle ground between these two scenarios and associated impact. For the purposes of this document only RCP 2.6 and RCP 8.5 will be considered, representing the most optimistic and pessimistic future scenarios.

Parameter	Projected Scenario	Potential Impacts
Temperature	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) 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).	• Increased heat induced illness and mortality. • Increased risks from pests and disease. • Increased risk to flora and fauna as a result of heat stress. • Increased spread of invasive species. • Increased visitors to tourism hotspots/open spaces. • Impacts on infrastructure. • Reduced risks from cold/ice/snow in winter. • Reduced heating bills in winter months. • Impact on agri sector production.
Summer Precipitation	Under a low emissions scenario (RCP2.6) summers are estimated to be up to 28% drier (DEFRA, 2020). Under a high emissions scenario (RCP8.5)summers are estimated to be up to 38% drier (DEFRA, 2020).	• Reduced water supply and increased likelihood of water conservation measures being needed. • Increased risk of wildfire. • Negative impacts on flora and fauna due to water scarcity. • Increased frequency and severity of surface water flooding following intense rainfall after long dry spells. • Impact on agri sector production.

Source:
DEFRA (2020) Accounting for the effects of Climate Change: Supplementary Green Book Guidance

Parameter	Projected Scenario	Potential Impacts
Winter Precipitation	Under a low emissions scenario (RCP2.6) winters could be up to 17% wetter (DEFRA, 2020). Under a high emissions scenario (RCP8.5) winters could be up to 25% wetter (DEFRA, 2020).	• Increased risk to life and human safety from flooding, including mental health impacts. • Increased risk to property and infrastructure from flooding resulting in economic impacts. • Negative impacts on water quality. • Impact on agri sector production.
Rising Sea Levels	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).	• Increased risk of coastal flooding. • Increased risk of damage to coastal habitats and infrastructure. • Increased impacts from storm surges and high tides.
Frost and Snow	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).	• Potential reduced costs for heating/infrastructure treatment for snow/frost. • Cold spells can still occur resulting in risks to human health and infrastructure and resulting in significant expenditure for treatment of transport routes.

The magnitude and rate of climate change impact depends greatly on the mitigation and adaptation actions taken cross the globe over the next decade. Rapid and effective action is needed to limit the impacts as far as possible and it is the responsibility of all governments and public bodies to act on the information available to them.

Source:
Met Office, UK Climate Projections: Headline Findings

CLIMATE ADAPTATION AND MITIGATION

Climate action requires two interlinked approaches; adaptation and mitigation.

Mitigate

Action to reduce the severity of climate change

Adapt

Preparing for the impacts of climate change

Climate adaptation aims to prepare for the impacts of climate change by first understanding how you are at risk and then making a plan to deal with such risks. Mitigation aims to reduce the severity of climate change by reducing greenhouse gas emissions.

It is vitally important that we all take immediate steps to reduce our emissions, however even if we did stop all emissions today, our previous actions have already created a certain amount of change for which we need to prepare.

CLIMATE ADAPTATION IN NORTHERN IRELAND

Climate adaptation in Northern Ireland, as in many regions around the world, involves developing strategies and taking specific actions to address the impacts of climate change and enhance resilience in various sectors. As part of the UK, Northern Ireland faces climate change-related challenges that include increased temperatures, altered precipitation patterns, sea-level rise, and more frequent and severe weather events. Here are some key areas of climate adaptation in Northern Ireland:

1. Flood Risk Management: Northern Ireland is prone to flooding and climate change is expected to exacerbate this risk. Adaptation efforts in this region focus on improving flood defences, early warning systems and land-use planning to reduce vulnerability to flooding.

2. Agriculture and Food Security: Agriculture is a vital sector in Northern Ireland. Climate adaptation in agriculture includes promoting sustainable farming practices, diversifying crops and developing strategies to address changing weather patterns and potential water shortages.

3. Infrastructure Resilience: Ensuring that critical infrastructure, including transportation networks, energy supply, and water and wastewater systems, is resilient to climate change impacts. This may involve retrofitting and improving infrastructure to withstand extreme weather events.

4. Biodiversity and Conservation: Protecting natural habitats and biodiversity is a key element of climate adaptation. This includes conserving and restoring ecosystems, as well as considering the impacts of climate change on species and habitats.

5. Public Health: Addressing health risks associated with climate change, such as heatwaves, air pollution and the spread of vector-borne diseases. Public health agencies work to develop strategies to protect vulnerable populations and improve healthcare preparedness.

6. Community Resilience: Engaging with local communities to raise awareness and develop strategies for climate adaptation. This can involve community-based projects, education and communication efforts.

7. Energy Transition: Transitioning to cleaner and more resilient energy sources to reduce greenhouse gas emissions and ensure a stable energy supply in the face of changing weather patterns.

8. Tourism and Recreation: Promoting sustainable tourism practices and adapting recreational activities to changing climate conditions, such as shifts in the timing of tourist seasons.

9. Coastal Protection: Northern Ireland's coastline is vulnerable to sea-level rise and coastal erosion. Adaptation efforts include managing coastal areas, enhancing dune systems and developing strategies to protect coastal communities.

10. Business and Economic Resilience: Helping businesses adapt to climate change by providing information, resources and incentives to reduce climate-related risks and capitalize on new opportunities, such as the green economy.

It is important to note that climate adaptation in Northern Ireland, like in other regions, requires a coordinated and integrated approach involving government agencies, local authorities, businesses, community organisations and the public. Adaptation plans in the region are typically informed by climate projections and vulnerability assessments to ensure that actions are tailored to local needs and risks. Additionally, Northern Ireland's climate adaptation efforts are influenced by UK-wide policies and international agreements on climate change.

STRATEGIC AND LEGAL CONTEXT

Antrim and Newtownabbey Borough Council have been working hard over the last number of years to reduce its impact on climate and nature, culminating in this Climate Change Action Plan. The plan has been guided by the following pieces of legislation, agreements and policies:

2006	• NI (Miscellaneous Provisions) Act 2006, Section 25 - District Councils have a statutory duty to promote the achievement of sustainable development in the exercise of their functions
2008	• UK Climate Change Act (Amended 2019) - Sets legal targets for the UK to achieve net zero emissions by 2050
2010	• NI Sustainable Development Strategy
2015	• Paris Climate Agreement - International treaty to limit global warming to well below 2 and preferably to 1.5 compared to pre-industrial levels • UN Sustainable Development Goals (2015)
2019	• Council acknowledges the scale of the climate crisis and the impact it will have on people and communities in Northern Ireland
2020	• NI Declares a Climate Emergency
2021	• Draft Green Growth Strategy for NI - The Executive's vision and framework for tackling the climate crisis • DfE Energy Strategy - Path to New Zero Energy
2022	• NI Climate Change Act 2022 - legal targets for net zero emissions by 2050 • Draft Environment Strategy for NI - 6 environmental outcomes to guide how we can preserve, protect and improve our environment
2023	• Draft Circular Economy Strategy -sets the DfE vision to create an innovative, inclusive and competitive economy with responsible productions and consumption at its core
2023	• Inclusion of planet pillar in Corporate Plan focusing on sustainability

UN SUSTAINABLE DEVELOPMENT GOALS

Antrim and Newtownabbey's Climate Adaptation and Mitigation Action Plan is centred on delivering the UN Sustainable Development goals, which define global sustainable development priorities and aspirations for 2030. The 17 Goals are centred around the 5Ps, **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 the importance of our role in the development, implementation and successful delivery of the UN Sustainable Development Goals which are embedded in Community, Corporate and Local Development Plans. Council services and activities have been mapped against the SDGs and we will aim to ensure continuous commitment to delivering these goals.

We will aim to screen all new projects, policies and plans to assess the sustainability impact and this will be used to evidence environmental as well as social benefits and how any adverse effects will be reduced.

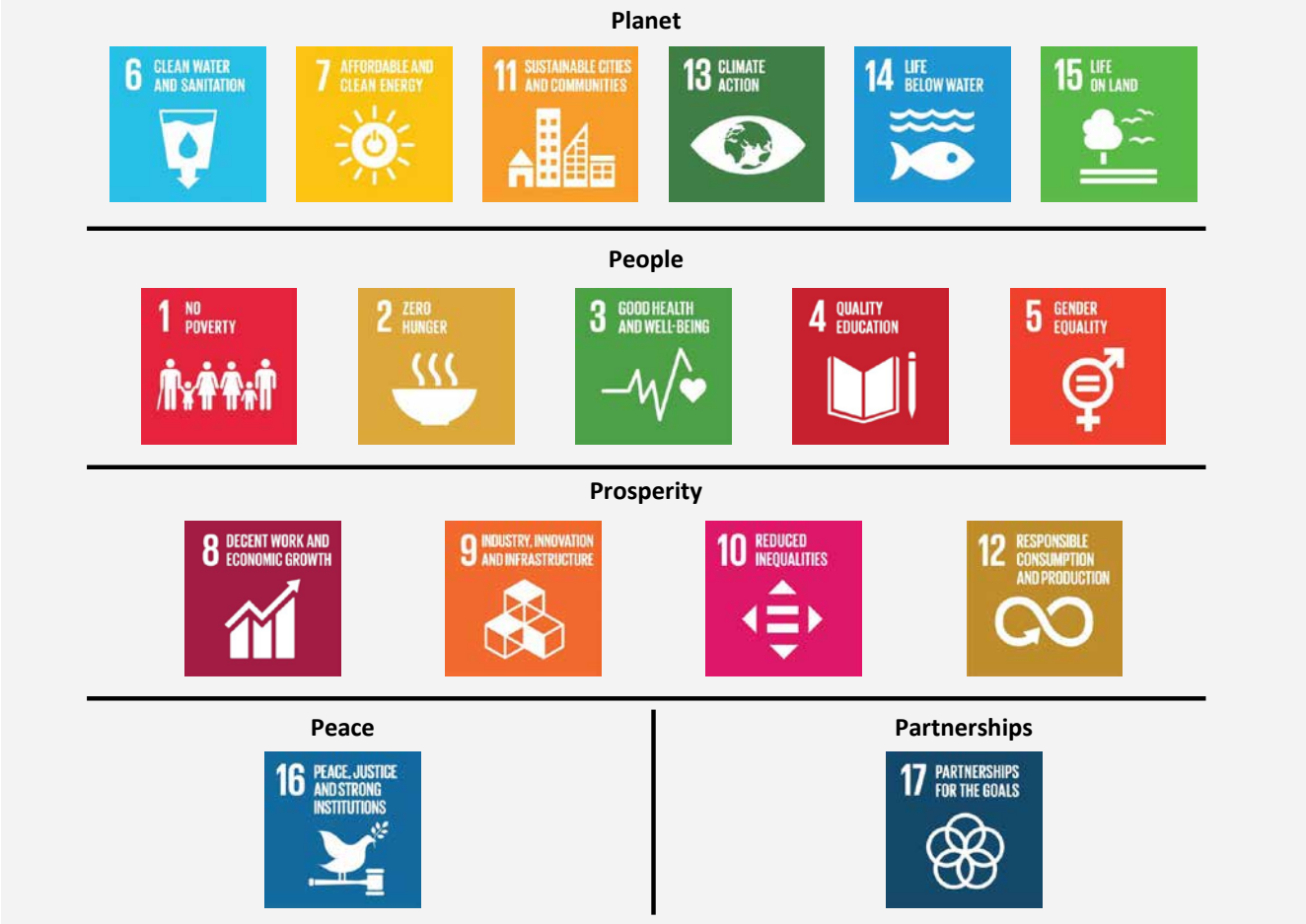
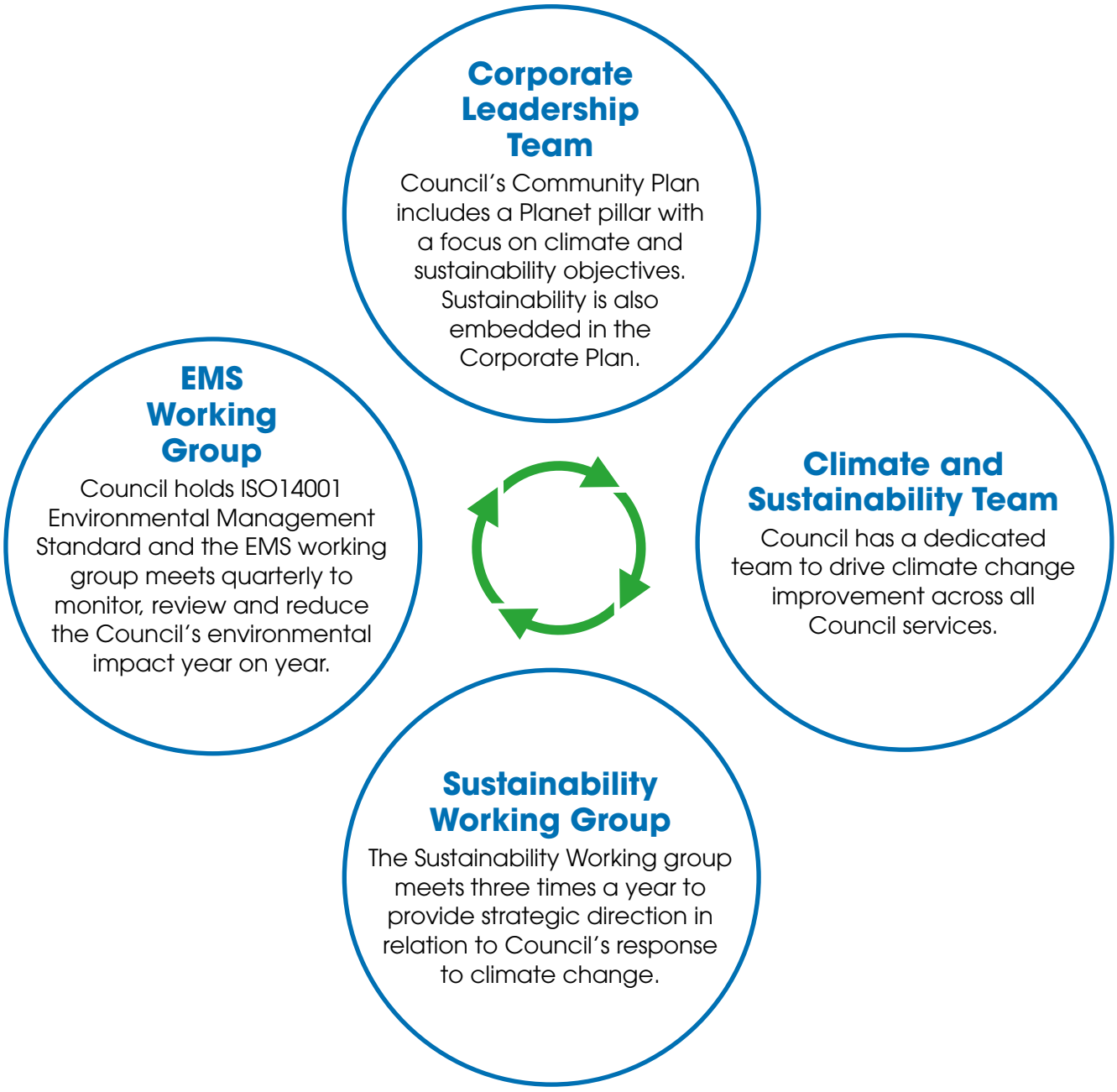


Figure 1: Summary of the UN SDG framework

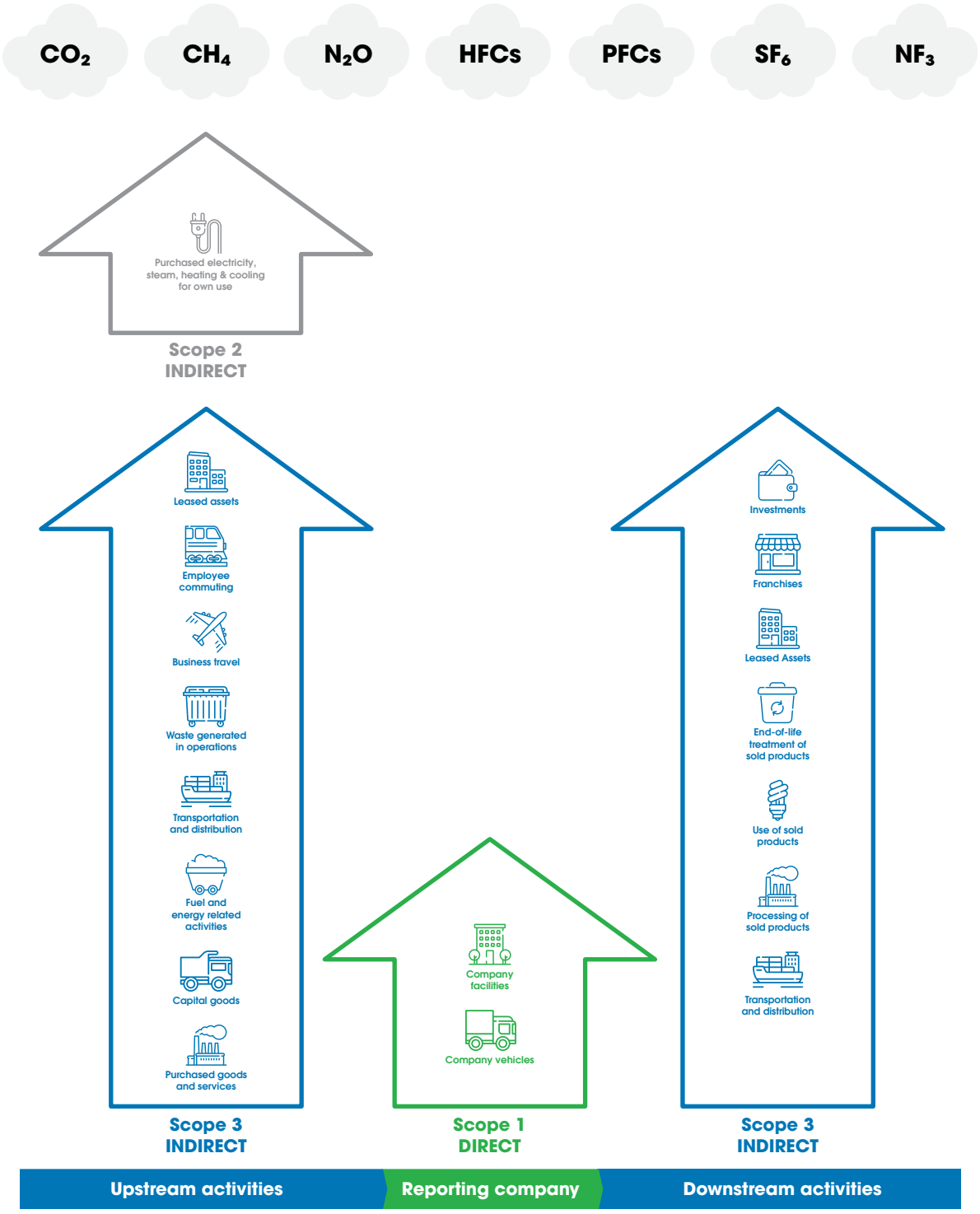
IMPLEMENTATION

As part of Council's commitment to these goals, a number of structures have been implemented to ensure that climate action is embedded throughout the organisation. These cross-departmental groups within Council meet regularly to agree targets, implement actions and review progress on climate delivery.

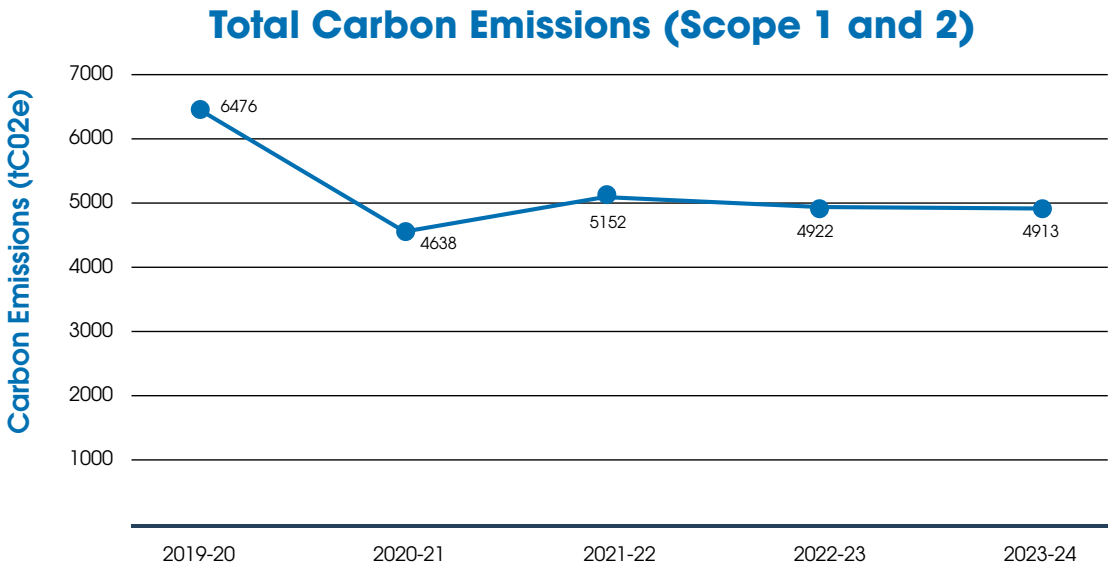


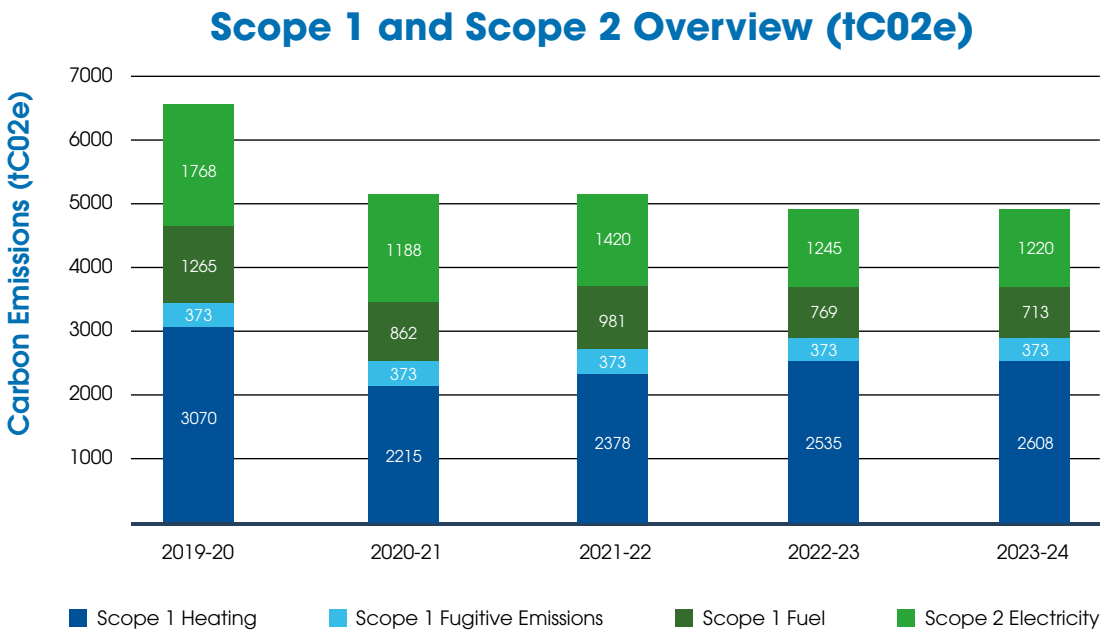
OUR CARBON EMISSIONS

Council's baseline emissions have been 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 will investigate best practice to collate emissions from its supply chain.



The graph below shows Council's total carbon emissions for Scope 1 and 2 from 2019/2020 through to 2023/2024.





The graph above provides a more detailed breakdown of the carbon emissions for Scope 1 and 2 from 2019/2020 through to 2023/2024.

Overall, Council has reduced its Scope 1 and 2 emissions by 24% from 2019/2020 to 2023/2024 and is committed to work towards achieving net zero emissions by 2050, in line with the Climate Change (NI) Act 2022.

These reductions have been achieved through the implementation of the property energy action plan, the creation of a capital fund to facilitate energy efficiency improvements across buildings and through the de-carbonisation of the fleet.

Council is committed to ensuring that future strategies, plans and policies will continue to support more sustainable practices, continue to reduce carbon emissions and adapt to a changing climate.

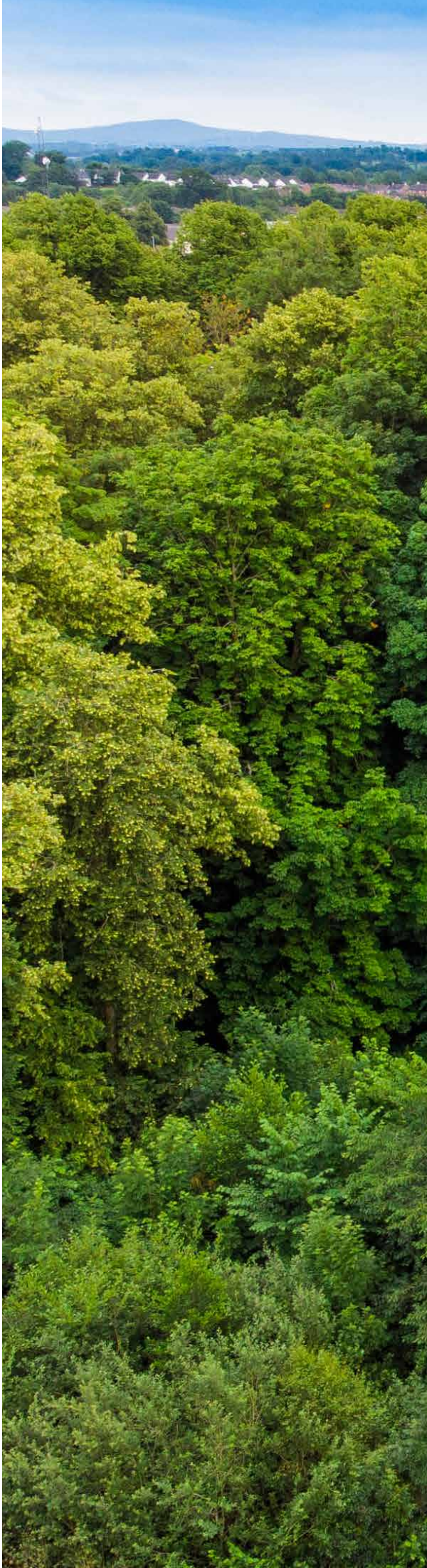
NATURE BASED SOLUTIONS

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.

The woodlands, grasslands and hedgerows 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.

At the end of January 2024 Council, along with other organisations, had planted 213,565 trees as part of the 'One Million Tree' project and it is estimated that these trees will absorb 1922.1 tonnes of CO_2 per annum for the first 20 years. This will offset the CO_2 emissions of approximately 2,869 residents in the Borough, per annum.



ACTIONS

Collaboration across a broad range of Council services and departments has ensured a cohesive approach in establishing the strategies and actions required to mitigate and adapt to climate change.

Energy and Buildings

Our goal is to reduce carbon emissions from buildings on our estate by improving energy efficiency and increasing the use of renewable energy. We also aim to promote low carbon solutions in the wider borough.

	Objectives	Links to Risk Register
EB1	Improve the energy efficiency of Council buildings and maximise the use of renewable energy sources to help deliver carbon reduction targets.	F1, S1, H1, C3
EB2	Embed good practice energy management approaches into facility and building management decisions with a focus on reducing carbon emissions.	F1, S1, H1, C3
EB3	Embed sustainable criteria into the design and delivery of all new Council buildings and refurbishments.	F1, S1
EB4	Implement adaptation measures in Council buildings at risk from extreme weather.	F1, S1, H1, C2, C3
EB5	Work with multi sectoral and government partners to promote low carbon solutions across the borough.	F2, F3, S4, C3
EB6	Deliver the Local Development Plan in line with Council's climate and sustainability commitments.	F2, F3, F4

Action	Performance Indicator	Lead Department	Objective	Type of Measure
Reduce heating consumption in line with industry standards for type/ age of the building.	Review of heating consumption across all buildings. No. of measures introduced to reduce heating consumption. % decrease in carbon emissions from heating across Council as a whole.	Estates	EB1/EB2	Mitigation

Action	Performance Indicator	Lead Department	Objective	Type of Measure
Reduce electricity consumption in line with industry standards for type/ age of the building.	Review of electricity consumption across all buildings. No. of measures introduced to reduce electricity consumption. % decrease in carbon emissions from electricity across Council as a whole.	Estates	EB1/EB2	Mitigation
Identify buildings with poor DEC ratings and propose recommendations for efficiency.	No. of buildings identified as having poor DEC ratings. Reduction in overall carbon emissions.	Estates	EB1/EB2	Mitigation
Assessment of all Council sites to assess for potential alternative energy generation sources.	Outcome report for assessments. No. of changes to energy sources at each assessed site.	Estates	EB2	Mitigation
Deliver an energy efficiency in work education programme to Council staff.	No. of staff taking part in online module.	Organisational Development	EB2	Mitigation
Ensure sustainable principles are integrated into all major construction and refurbishment projects at the design phase and the project specification.	Evidence of sustainable principles included in designs.	Capital Development	EB3	Mitigation

Action	Performance Indicator	Lead Department	Objective	Type of Measure
New council buildings to be designed to incorporate climate resilience and flood proofing measures in risk locations.	Proposals for new buildings will be screened using a sustainability tool. New council buildings will achieve a sustainability accreditation. No. of new buildings with green roofs/ green walls. External shading to be considered to manage heat risk. No. of SuDS to be installed on any new Council developments.	Capital Development	EB3	Adaptation
LED light fittings installed across all Council sites, where economically viable.	No. of buildings with LED lights installed. % decrease in energy use.	Estates	EB4	Mitigation
Explore greening of existing buildings to promote overheating resilience of buildings.	No. of buildings incorporating greening.	Parks Capital Development	EB4	Adaptation
Explore movable shading to promote passive cooling in identified sites.	No. of buildings with movable shading installed.	Parks Capital Development	EB4	Adaptation
Explore retrofit of SuDS in sites identified at risk from flooding.	No. of sites identified at risk of flood. No. of SuDs installed.	Capital Development Estates	EB4	Adaptation

Action	Performance Indicator	Lead Department	Objective	Type of Measure
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. No. of people engaged with.	Environmental Health	EB5	Mitigation
Reduce dependence on fossil fuels and encourage renewable sources of energy supply.	No. and location of new or repowered wind turbines.	Estates	EB5/EB6	Mitigation
Any capital development proposals within an area identified at risk of flooding will be accompanied by a robust Flood Risk Assessment	No. of capital development proposals permitted in identified Flood Risk Areas.	Planning	EB6	Adaptation
Increased use of sustainable drainage systems (SuDs) as the preferred method of treating surface water for all new capital development proposals.	No. of new planning application submissions which include SuDS.	Planning Building Control Capital Development	EB6	Adaptation

Resource Management

Our goal is to use resources efficiently and sustainably, to reduce consumption across the Council and support the Borough to a low carbon, circular economy where all waste is reduced, recycled or repaired.

	Objectives	Links to Risk Register
RM1	Improve resource efficiency and material re-use as part of a low carbon, circular economy.	F1, S1, H1, C3
RM2	Support and promote the waste hierarchy of reduce, reuse and recycle to meet our waste, recycling and climate targets.	F1, S1, H1, C3
RM3	Reduce water consumption and encourage sustainable surface water management.	F1, F5, F6
RM4	Educate our workforce on climate change and promote resource efficiency in the workplace.	F3, H2, C1, C2, S4
RM5	Engage communities in climate education and environmental initiatives to create a greener, resilient and sustainable borough.	F3, H2, C1

Action	Performance Indicator	Lead Department	Objective	Type of Measure
Reduce consumption of single use plastics (SUP) within Council and across the Borough.	% reduction of SUP. No. of education events on SUP. Review of policies to ensure SUP are removed, where relevant.	Waste & Sustainability Procurement	RM1	Mitigation
Reduce consumption of paper within Council.	% reduction in paper ordered. No. of paperless actions recorded as part of EMS.	All Departments Waste & Sustainability	RM1	Mitigation

Action	Performance Indicator	Lead Department	Objective	Type of Measure
Initiate and promote schemes which focus on material re-use and repair across the Borough.	No. of initiatives ongoing. No. of communications campaigns to promote re-use and repair. % increase on total annual tonnage of waste diverted from landfill from the initiatives.	Waste & Sustainability Community Planning Communications	RM1	Mitigation
Expand sustainable planting initiatives across the Borough.	% of areas that use sustainable planting.	Parks	RM1	Mitigation
Engage with schools and community groups to increase knowledge and support the waste hierarchy and circular economy.	No. of events run by council to promote reduce, re-use, recycling and circular economy. No. of communications campaigns to increase re-use.	Waste & Sustainability Communications	RM 2	Mitigation
Harmonise household waste and recycling collection models across the Borough to make recycling easier for our residents.	% increase in recycling of municipal waste.	Waste & Sustainability	RM2	Mitigation
Meet the 55% recycling rate target of municipal waste by 2025 within the Waste (Circular Economy) (Amendment) Regulations (NI) 2020.	% increase in recycling of municipal waste.	Waste & Sustainability	RM2	Mitigation

Action	Performance Indicator	Lead Department	Objective	Type of Measure
Meet 60% recycling target of municipal waste by 2030 within the Waste (Circular Economy) (Amendment) Regulations (NI) 2020.	% increase in recycling of municipal waste.	Waste & Sustainability	RM2	Mitigation
Reduce water consumption across all Council sites.	% decrease in litres used across Council as a whole.	Estates	RM3	Mitigation
Provide Carbon Literacy training to all Council staff.	%/No. of staff who complete training.	Waste & Sustainability Organisational Development	RM4	Mitigation
Provide EMS/ Sustainability training to all Council staff.	%/No. of staff who complete training.	Waste & sustainability Organisational Development	RM4	Mitigation
Support communities to access funding for environmentally sustainable projects or action on climate change.	No. funding applications submitted for interventions / number successful.	Community Planning	RM5	Mitigation/ Adaptation

Transport

Our goal is to reduce carbon emissions from our own fleet by phasing out the use of petrol and diesel vehicles or equipment, switching to low emissions fuels and increasing the number of electric vehicles. We will also facilitate a shift to zero carbon forms of travel across the Borough in order to improve air quality and meet our climate goals.

	Objectives	Links to Risk Register
T1	Reduce carbon emissions across the Council fleet.	F1, S1, H1, C3
T2	Reduce carbon emissions across the Grey fleet.	F1, S1, H1, C3
T3	Promote sustainable and active travel across the Borough.	F1, S1, H1, C3
T4	Improve air quality across the Borough.	F1, S1, H1, C3

Action	Performance Indicator	Lead Department	Objective	Type of Measure
Switch light commercial vehicles (LCV) to electric vehicles as per planned rollout.	% reductions in carbon emissions from Council fleet.	Fleet	T1	Mitigation
Switch heavy goods vehicles (HGV) to HVO fuel as per planned rollout.	% reductions in carbon emissions from Council fleet.	Fleet	T1	Mitigation
Review route optimisation for service delivery to reduce carbon emissions.	% reduction in carbon emissions from fuel used.	Waste Operations	T1	Mitigation
Improve the EV Chargepoint infrastructure across Council estate.	No. of EV charging points installed	Estates	T1	Mitigation
Driver training for all relevant staff to encourage greater fuel efficiency during the operation of Council vehicles.	% reductions in carbon emissions from Council fleet.	Fleet	T1	Mitigation

Action	Performance Indicator	Lead Department	Objective	Type of Measure
Explore potential eco-friendly, sustainable tyre options to reduce waste and improve fuel consumption.	% reduction in carbon emissions from responsible tyre management.	Fleet	T1	Mitigation
Reduce grey fleet travel through encouraging virtual meetings and effective journey management.	Reduced mileage/ travel claims. % reductions in carbon emissions from staff business miles. Promote cycle to work scheme for staff.	Waste & Sustainability All departments	T2	Mitigation
Work in partnership with DfI to explore funding opportunities to extend current greenways.	No. of km of new greenway.	Parks Planning	T3	Mitigation
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. Enhance greenways and towpaths.	Parks	T3	Mitigation
Promote active travel in the Borough, encouraging cycling, walking and running as an alternative to travel by car.	No. of promotional campaigns.	Parks Communications Community Planning	T3	Mitigation
Air quality – monitor and review air quality in accordance with the NI Air Quality Strategy.	%reduction in air pollutants. % reduction in enforcement action.	Environmental Health	T4	Mitigation
Annual testing of vehicle emissions of Council vehicles.	% of vehicles in Council's fleet that meet vehicle exhaust emission standards.	Environmental Health	T4	Mitigation

Land Use

Our goal is to protect and restore nature to enhance biodiversity, increase carbon capture and improve the health and wellbeing of our residents.

	Objectives	Links to Risk Register
L1	Reduce GHG emissions and improve carbon capture across the Council estate, services and the wider Borough.	F1, F5, F6, S3, H4
L2	Reduce GHG emissions from land use and embed adaptation strategies through planning.	F1, F5, F6, S3, H4
L3	Protect and enhance biodiversity in our parks and open spaces.	F1, F5, F6, S3, H4
L4	Utilise nature based solutions to aid in Climate Change adaptation and improve health and wellbeing.	F3, H3, S3
L5	Optimise environmental management practices to reduce the impact of Council services on air, land and water.	F1, F5, H2, H4

Action	Performance Indicator	Lead Department	Objective	Type of Measure
Ensure the Council estate is more climate ready through enhancing green spaces, urban greening and adaptable planting regimes.	% increase in quantity of peat-free compost used across Council estate. % reduction use in pesticide. % increase of sustainable planting across Council estate.	Parks Economic Development	L1	Adaptation/ Mitigation
Progress the "Plant a Million" Trees programme.	No. and type of native trees planted.	Parks	L1	Adaptation/ Mitigation
To ensure the Local Development Plan encourages the provision of public open spaces in new developments.	No. of major residential development proposals of 25 or more, or on sites of 1 hectare or more, that provide public open space provision.	Planning	L2	Adaptation/ Mitigation

Action	Performance Indicator	Lead Department	Objective	Type of Measure
Any residential development proposals within an area identified at risk of flooding will be accompanied by a robust Flood Risk Assessment.	No. of development proposals permitted in identified Flood risk Areas.	Planning	L2	Adaptation
To ensure the Local Development Plan promotes sustainable means for surface water drainage, including Sustainable Drainage Systems (SuDS) and sewerage infrastructure.	Where it is considered a feasible solution, the no. of development proposals permitted that incorporate SuDS.	Planning	L2	Adaptation
To ensure the Local Development Plan protects and enhances the diversity of our Borough's natural heritage (habitats, species, landscapes and earth science features.	Annual Monitoring Report of the Council's Local Development Plan.	Planning	L2	Adaptation/ Mitigation
Maximise the wildlife value of species rich grasslands and meadows on Council owned property.	% increase in wildflower meadows. % of meadow managed grasslands	Parks	L3	Adaptation
Exploration of planting in open spaces owned or managed by the Council that is drought resistant and requires less watering and where possible utilise recycled water gathered on sites (rainwater harvesting).	Establish baseline on allotment water butts. Ensure all new troughs, hanging baskets and planters have water reservoirs.	Parks	L3	Adaptation

Action	Performance Indicator	Lead Department	Objective	Type of Measure
Maximise the habitat potential of Council-owned spaces.	Establish baseline figures of key sites.	Parks	L3/L4	Adaptation/ Mitigation
Provide opportunities for outdoor activities and access to nature, and promote the health benefits of this.	No. of events and activities provided.	Parks Communications Wellbeing	L4	Adaptation
Ensure our environmental management system remains relevant, effective and aligned with ISO14001:2015 standards.	Continued re-certification	Waste & Sustainability	L5	Mitigation

Economy

Our goal is to support local businesses in the transition to net zero and create a vibrant, inclusive, sustainable and prosperous economy.

	Objectives	Links to Risk Register
E1	Drive inclusive and sustainable economic growth through investing in our people, our places and its business.	F3, S4, C1
E2	Support communities and local businesses to live more sustainably, reduce carbon emissions and adapt to a changing climate.	F3, S4, C1

Action	Performance Indicator	Lead Department	Objective	Type of Measure
Build low carbon and sustainability criteria into all relevant grant programmes.	No. of grants provided to encourage low carbon and sustainable elements.	Economic Development	E1	Mitigation
Ensure town centre regeneration contributes to climate action by reducing emissions, investing in low carbon transport and creating more greenspaces using sustainable materials where possible.	No. of public realm improvements / regeneration projects delivered in partnership with Council, DFC and DFI. No. of funding opportunities secured towards these activities.	Economic Development	E1	Mitigation/ Adaptation
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	E1	Adaptation/ Mitigation
Implement Tourism NI's new Sustainable Tourism strategy.	Delivery of new strategy.	TNI Arts & Culture	E1	Adaptation/ Mitigation

Action	Performance Indicator	Lead Department	Objective	Type of Measure
Explore opportunities to make events more sustainable.	Use of Sustainability Screening Tool for key annual events. Increase in sustainable measures at events.	Waste & Sustainability Arts & Culture	E1	Adaptation/ Mitigation
Work with sustainable food places partnerships to develop initiatives which enable more local food growing and community owned food partnerships by 2029.	Re-launch of 'Muddy Boots' initiative. % increase of community fridges across the Borough Developing links between Fareshare and community fridges.	Environmental Health Community Development Waste & Sustainability	E2	Adaptation
Encourage people within the Borough to shop locally to limit emissions caused by transport.	No. of campaigns promoting this. No./ % of interactions with Communications including clicks, shares, likes and comments per post.	Waste & Sustainability Economic Development Communications	E2	Mitigation

Governance

Our goal is to embed climate and sustainability into all our decision making processes and increase our capacity to respond to the climate crisis.

	Objectives	Links to Risk Register
G1	Climate and sustainability is embedded in Council plans, policies and decision making processes.	F1, S1, S2, H1, C2, C3
G2	Lead by example to reduce emissions from Council operations to net zero by 2050.	F1, S1, S2, H1, C2, C3
G3	Climate adaptation is at the centre of Council's service delivery, supporting local communities and creating a sustainable and resilient Borough.	F1, S1, S2, H1, C2, C3
G4	Continue to work collaboratively with multi sectoral and government partners to promote community leadership on climate action.	F2, S2, C1
G5	Continue to develop stakeholder partnerships to assist with funding and resources for climate action.	F2, S2, C1

Action	Performance Indicator	Lead Department	Objective	Type of Measure
Ensure that sustainable development and climate change are used as a guiding principle in council plans, policies and strategies.	Planet pillar included in Corporate Development Plan and Community Plan from 2024 onwards. 100% of new or reviewed policies screened for sustainability. Sustainability criteria to be considered within business cases/economic appraisals.	Information Governance Organisational Development	G1	Adaptation/ Mitigation
Include environmental and social value weightings in procurement policy.	Evidence of environmental and social value weightings in awards.	Procurement	G2	Mitigation

Action	Performance Indicator	Lead Department	Objective	Type of Measure
Investigate best practice to measure emissions from Council's supply chain.	Collaboration with Sustainable NI/ Climate NI. Meetings with other Councils.	Procurement All relevant departments – as applicable	G2	Mitigation
Ensure that climate change risks are appropriately addressed within our risk management process.	Climate change risks are included in the risk register.	Waste & Sustainability	G3	Adaptation
Provide prompt assessment of impacts from weather events and provide information on potential protection measures to the residents	No. of alerts posted informing residents of weather warnings. No. of articles in Borough Life. No. of promotional messages issued. No./% of interactions with Communications including clicks, shares, likes and comments per post/ issue.	Health & Safety Waste & Sustainability Parks Communications	G3	Adaptation
From 2025, Council will create a climate impact 'tagging' system to create a baseline of financial impacts on council business operations from severe weather events.	Participation in pilot scheme for a couple of major weather events per year. Making use of NILGA guidance as part of climate finance guide.	Emergency Planning Finance Parks Met Office	G3	Adaptation
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.	Waste & Sustainability Communications	G3/G4	Adaptation/ Mitigation

Action	Performance Indicator	Lead Department	Objective	Type of Measure
Work with multi-agency partners to increase capacity to respond to severe weather events and to increase community resilience.	No. of engagements with multi-agency partners working together during severe weather events.	Health & Safety Community Development Waste & Sustainability Parks Environmental Health Communications	G3/G4	Adaptation
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.	Community Planning Environmental Health	G4	Adaptation/ Mitigation
Implement environmental and climate education activities, promotional campaigns and environmental improvement initiatives in the community.	Climate action included in Community Plan within the new planet pillar. No. of people, schools and community groups involved in 'environmental activities'.	Waste & Sustainability Community Planning	G4	Mitigation
Develop cross departmental collaborations and partnerships to assist with sources of funding for climate action.	No. of cross-departmental collaborations and partnerships	Waste & Sustainability	G5	Adaptation/ Mitigation

MONITORING AND EVALUATION

Adaptation and mitigation are an ongoing process which requires systematic monitoring and evaluation. Progress will be reviewed annually with a report produced by the Waste and Sustainability Department. As the Council's first Climate Adaptation and Action Plan, we understand the importance of ongoing review and having flexibility built in to update the plan in accordance with new research, risks and changing local conditions.

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

GLOSSARY

Carbon Removal: is the process by which a carbon sink, such as forestry, reduces the amount of greenhouse gases in the atmosphere.

CO_2e - CO_2 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.

Fugitive Emissions: Fugitive emissions from refrigeration and air conditioning units result from leaks and other irregular releases of gases or vapors from such appliances and other pieces of equipment.

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

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.

Nature Based Solutions: Methods of mitigating climate change using natural ecosystems e.g. carbon sequestration via restoration of peatlands or degraded habitats.

Natural Capital: refers to the stock of natural resources, which includes geology, soils, air, water and all living organisms.

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.

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

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APPENDIX 1

Risks and Opportunities

In preparing for climate change and the adaptive measures to be taken, Antrim and Newtownabbey Borough Council faces the challenges of responding to a range of uncertain risks. Consideration is given to that although some services may not currently be impacted by climate change, they may be likelihood to projected changes and may experience impacts in the future

It is broadly recognised that:

Climate change is creating new risks and exacerbating existing ones. Ecosystems will shift, food production will be placed under increasing pressure and some types of extreme weather events will increase in frequency and severity.

In developing an understanding of the levels of exposure to climate hazards, all departments and the Sustainability Working Group looked at the climate impacts that are of current significance, climate projections and the consequences for the delivery of services by Antrim and Newtownabbey Borough Council. The assessment also took account of non-climatic, societal factors e.g. our vulnerable population, which may result in a higher level of sensitivity to climate hazards such as heatwaves.

Opportunities

Projected changes in climate may also result in additional benefits and opportunities for Antrim and Newtownabbey. Adaptation measures can reduce costs of disruption to business operations and help to realise new business opportunities arising from the impact of climate change and improve the health and wellbeing of residents across the Borough.

Climate Risk & Opportunities Register

The Climate Risk Register identifies Risk, developed from the baseline and future vulnerability assessments, with associated timeframes and projections of future changes

As part of the Adaptation planning Antrim and Newtownabbey Borough Council completed a comprehensive risk register and our findings are presented as follows:

ANTRIM AND NEWTOWNABBEY CLIMATE RISK REGISTER

Projected Change: Wetter Winters and, despite an overall trend towards drier summers, a greater risk of localised, intense summer flooding when it does rain heavily												
Risk Statement (Impact and Consequence) and Risk Code (F-Flooding/H-Intense Heat/S-Storms/C-Intense Cold)	**Relevant Internal Departments**	**Inherant Risk**			**Current Policies, Procedures and Management Controls (e.g. include resource, legislation)**	**Residual Risk**			**Short (<5yr) Medium (5-10yr) or Long (>10yr) Term Risk?**	**Projected change in risk level (to 2050)**	**Urgency Score (in next 5 years)**	**External relevant organisations**	**Links to UK CCRA**
		Likelihood	**Impact**	**Risk Score**		**Likelihood**	**Impact**	**Risk Score**					
(F1) Increased frequency and intensity of precipitation leading to increased flood risk to Council Assets and Operations resulting in financial losses, disruption to service, increased insurance costs e.g. Cultural Heritage Risk	Finance Environmental Health Waste Parks Insurance	3	3	Medium	Council Emergency Plan Adverse Weather Procedure	3	2	Medium	Long	Increase	Further Investigation	Nothern Ireland Water (NIW), Department for Infrastructure Roads & Rivers), Rivers Agency, TourismNI, DfC, Culture NorthernIreland.org, Heritage, DfE	I2. Infrastructure Services
(F2) Frequency of flood events disrupting infrastructure networks (water, energy, transport, ICT, Utilities)	Environmental Health Communications & PR Waste Parks Emergency Planning	3	3	Medium	Council Emergency Plan Multi Agency Plan Multi Agency Approach to Emergency Planning	3	2	Medium	Long	Increase	Sustain Current Action	Northern Ireland Water (NIW), Department for Infrastructure Roads & Rivers), Rivers Agency, Translink, PSNI, BT, PHA	I1. Infrastructure networks (water, energy, transport, ICT)
(F3) Frequency of flood events disrupting communities and businesses requiring Council response and support e.g. forestry productivity, agriculture	Environmental Health Economic Development Communications & PR Waste Parks Emergency Planning	3	4	High	Dfi Roads/Rivers Hot Spots and Priority Areas for Review, Severe Weather and Severe Flooding Working Group	3	3	Medium	Long	Increase	Further Investigation	Nothern Ireland Water (NIW), Department for Infrastructure Roads & Rivers), Rivers Agency, Northern Ireland Housing Executive (NIHE), Invest NI, Department for Communities (DfC), DAERA	H3. People, communities and buildings B1. Flooding of business sites

Projected Change: Wetter Winters and, despite an overall trend towards drier summers, a greater risk of localised, intense summer flooding when it does rain heavily													
Risk Statement (Impact and Consequence) and Risk Code (F-Flooding/H-Intense Heat/S-Storms/C-Intense Cold)	**Relevant Internal Departments**	**Inherant Risk**			**Current Policies, Procedures and Management Controls (e.g. include resource, legislation)**	**Residual Risk**			**Short (<5yr) Medium (5-10yr) or Long (>10yr) Term Risk?**	**Projected change in risk level (to 2050)**	**Urgency Score (in next 5 years)**	**External relevant organisations**	**Links to UK CCRA**
		Likelihood	**Impact**	**Risk Score**		**Likelihood**	**Impact**	**Risk Score**					
(F4) Increased precipitation and frequency of flood events affecting physical structures - e.g. bridges, pipelines, subterranean and surface infrastructure from subsidence, flooding and coastal erosion	Property & Building Services Planning Capital Development Health and Safety Human Resources	3	4	High	Adverse Weather Procedure, Inspections, Gabions, Planting Plan kept under review	3	3	Medium	Long	Increase	More Action Needed	Department for Infrastructure (Roads & Rivers), Translink, PSNI, Phoenix, Firmus, NI Water, Rivers Agency, Emergency Services	I4. Bridges and pipeline I7. Subterranean and surface infrastructure
(F5) Increased precipitation and frequency of flood events affecting landscapes and natural assets, marine habitats, biodiversity and increased spread of invasive species	Parks Waste	3	4	High	Adverse Weather Procedure, Local Biodiversity Action Plan	3	3	Medium	Long	Increase	Further Investigation	Nothern Ireland Water (NIW), Department for Infrastructure Roads & Rivers), Rivers Agency, DAERA, NIEA, RSPB, BiodiversityNI	N1. Terrestrial species and habitats - Changing climatic conditions N17. Coastal species and habitats - Coastal flooding, erosion and climate factors
(F6) Increased precipitation and sea level rise leading to flood risk	Emergency Planning Capital Development Planning Parks	3	4	High	Adverse Weather Procedure, ANBC Draft plan Strategy	3	3	Medium	Long	Increase	More Action Needed	Nothern Ireland Water (NIW), Department for Infrastructure Roads & Rivers), Rivers Agency, Northern Ireland Coastguard	I3. Infrastructure Services N17. Coastal species and habitats

Projected Change: Wetter Winters and, despite an overall trend towards drier summers, a greater risk of localised, intense summer flooding when it does rain heavily												
Risk Statement (Impact and Consequence) and Risk Code (F-Flooding/H-Intense Heat/S-Storms/C-Intense Cold)	**Relevant Internal Departments**	**Inherant Risk**			**Current Policies, Procedures and Management Controls (e.g. include resource, legislation)**	**Residual Risk**			**Short (<5yr) Medium (5-10yr) or Long (>10yr) Term Risk?**	**Projected change in risk level (to 2050)**	**Urgency Score (in next 5 years)**	**External relevant organisations**	**Links to UK CCRA**
		Likelihood	**Impact**	**Risk Score**		**Likelihood**	**Impact**	**Risk Score**					
(H1) Increasing frequency of high temperatures leading to uncomfortable working conditions for staff resulting in increased cooling costs, lower productivity, PPE, shift changes, job rotation	Property & Building Services Capital Development Health and Safety Human Resources	2	2	Low	Departmental Health & Safety Risk Assessments	2	1	Very Low	Medium	Increase	Sustain Current Action	HSE(NI), Unions	B5. Reduced employee productivity in businesses H1. Health and wellbeing
(H2) Increased heat causing risks to health and wellbeing, vector borne diseases, poor water quality, food safety, and changes in air quality	Environmental Health Communications & PR Parks Emergency Planning	2	2	Low	Food Safety Advice and Inspections	2	1	Very Low	Medium	Increase	Sustain Current Action	Met Office NI Water DFI Roads and Rivers	H8. Health - Vector-borne disease H7. Health and wellbeing -changes in indoor and outdoor air quality
(H3) Increased warm weather leading to increase in visitors to public parks and outdoor amenities impacting parks and leisure facilities and increased traffic congestion	Parks Arts & Culture Waste Leisure	4	2	Medium	Media Warnings	4	1	Low	Medium	Increase	Sustain Current Action	Biodiversity NI	I8. Public water supplies ID9. UK public health
(H4) Changes to growing season requiring extended grass cutting period, increased variation in planting	Parks Arts & Culture	3	3	Medium	Local Biodiversity Action Plan Meadow Management Policy	3	2	Medium	Medium	Increase	Sustain Current Action	Biodiveristy NI	N3. Terrestrial species and habitats N18. Landscape character

Projected Change: Wetter Winters and, despite an overall trend towards drier summers, a greater risk of localised, intense summer flooding when it does rain heavily													
Risk Statement (Impact and Consequence) and Risk Code (F-Flooding/H-Intense Heat/S-Storms/C-Intense Cold)	**Relevant Internal Departments**	**Inherant Risk**			**Current Policies, Procedures and Management Controls (e.g. include resource, legislation)**	**Residual Risk**			**Short (<5yr) Medium (5-10yr) or Long (>10yr) Term Risk?**	**Projected change in risk level (to 2050)**	**Urgency Score (in next 5 years)**	**External relevant organisations**	**Links to UK CCRA**
		Likelihood	**Impact**	**Risk Score**		**Likelihood**	**Impact**	**Risk Score**					
(S1) - Increased frequency and intensity of storms resulting in damage to council assets leading to financial loses, increased insurance costs	Parks Waste Insurance Finance Property & Building Services Arts & Culture	3	3	Medium	Adverse Weather Procedure	3	3	Medium	Medium	Increase	Sustain Current Action	Met Office	B4. Business access to finance, investment and insurance H5. Building fabric
(S2) - Increased frequency and intensity of storms resulting in disruption to utility provision as well as Council service delivery	Waste Leisure Community Development Parks Events Arts & Culture Property & Building Services	3	3	Medium	Adverse Weather Procedure, RCRG	3	3	Medium	Medium	Increase	Sustain Current Action	Met Office Power NI Airticity	I10. Energy I13. Digital
(S3) - Stronger and more frequent winds may damage vegetation and trees which may become unsafe and require ongoing maintenance	Health and Safety Planning Parks Leisure Arts & Culture Property & Building Services	2	5	High	Tree Procedure Media Warnings	2	3	Medium	Medium	Increase	Sustain Current Action	Met Office	N1. Terrestrial species and habitats - Changing climatic conditions
(S4) - Stronger and more frequent winds may disrupt communities and businesses, requiring Council response and support	Environmental Health Economic Development Communications & PR Waste Parks Emergency Planning	3	4	High	Adverse Weather Procedure RCRG	3	3	Medium	Long	Increase	Further Investigation	Northern Ireland Housing Executive (NIHE), Invest NI, Department for Communities (DfC), Met Office, Power NI, Airtricity	I12. Transport I13.Digital B6. Disruption to business supply chains and distribution networks

Projected Change: Wetter Winters and, despite an overall trend towards drier summers, a greater risk of localised, intense summer flooding when it does rain heavily												
Risk Statement (Impact and Consequence) and Risk Code (F-Flooding/H-Intense Heat/S-Storms/C-Intense Cold)	**Relevant Internal Departments**	**Inherant Risk**			**Current Policies, Procedures and Management Controls (e.g. include resource, legislation)**	**Residual Risk**			**Short (<5yr) Medium (5-10yr) or Long (>10yr) Term Risk?**	**Projected change in risk level (to 2050)**	**Urgency Score (in next 5 years)**	**External relevant organisations**	**Links to UK CCRA**
		Likelihood	**Impact**	**Risk Score**		**Likelihood**	**Impact**	**Risk Score**					
(C1) Intense cold disrupting transport, energy, water and communication infrastructure and local communities requiring Council response and support	Comms Environmental Health Community Development	3	3	Medium	Winter Operations Plan Contract Management for Waste Collection	3	2	Medium	Short	Decrease	Sustain Current Action	Met Office Translink Power NI	I1. Infrastructure networks (water, energy, transport, ICT)
(C2) Cold snaps resulting in disruption to service delivery	Parks Community Development Waste Leisure Events	3	3	Medium	Winter Operations Plan	3	2	Medium	Short	Decrease	Sustain Current Action	Met Office	I12. Transport I13.Digital
(C3) Cold snaps resulting in damage to Council property and assets leading to financial losses, increased insurance costs and additional resource	Environmental Health Property Services Insurance Corporate Health & Safety	3	3	Medium	Departmental Business Continuity plans, Memorandum of Understanding	3	2	Medium	Short	Decrease	Sustain Current Action	Met Office	B4. Business access to finance, investmenet and insurance H5. Building fabric

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