ARDS **AND** NORTH DOWN BOROUGH COUNCIL

Climate Adaptation Plan

Ards and North Down Borough Council

Chief Executive Foreword:

Climate Change is called many things - 'the greatest threat we have faced in thousands of years', a 'manmade disaster on a global scale', an 'existential threat to the financial system', the 'greatest threat to human rights in the 21st century'.

This global threat has and will continue to have a local impact. All of us, in every aspect of our lives have a role to play in minimising our impact on the environment and on climate change.

The last few years have shown just how important our natural environment is to us. It's the air we breathe, the food we eat and the water we drink. Managed well it can greatly improve our quality of life.

By protecting nature and restoring our eco systems we can reduce our vulnerabilities and improve our resilience to the effects of climate change.

In 2019, Ards and North Down Borough Council declared a Climate Emergency and is committed to making a positive contribution in the fight against climate change. Our Corporate Plan, Towards a Sustainable Borough 2024-2028, has made transitioning to net zero one of our key priorities.

Recent years have seen an increase in the frequency of more erratic weather events. Both locally and regionally high temperature records are being broken, stronger winds are being recorded, storm events are having a greater impact on all of us and, with 115 miles of coastline, we are more exposed than most to rising sea levels.

These events are only going to become more frequent. Through our carbon reduction plans we can try and mitigate these impacts and try to prevent even higher temperatures and more challenging climatic conditions, but we also need to plan ahead and adapt to the consequences that we cannot prevent.

Through the development of this Climate Adaptation Plan we have, across all services, identified our risks and vulnerabilities and have begun to address them. Whether this is altering our mowing practices, planting appropriately, protecting our staff, 'climate proofing' our developments, business continuity planning or retrofitting our buildings, consideration of climate change has been considered and accounted for across the Council.

This is not a 'one off', we will continue to review and address our actions as scenarios change and more data becomes available.

The introduction of the Climate Change Act NI in June 2022 has reinforced the need to change. We must address both our impact on, and protection of our environment. By doing so we will be better prepared for, and resilient to, the impacts of Climate Change.

Stephen Reid
Chief Executive, Ards and North Down Borough Council

Executive Summary

Greenhouse gas emissions cause the Earth's atmosphere to hold more radiation from the sun which increases the overall temperature of the planet. This change in temperature is altering our climate and causing one of the greatest threats of our time.

Human activity has caused global warming. Global surface temperatures are now 1.1°C higher (2011-2020) than they were 1850-1900.

With continued unsustainable energy use, land use and land use change, lifestyles and patterns of consumption and production, greenhouse gas emissions will continue to rise.

In Northern Ireland, this means we will experience warmer, wetter winters and hotter, drier summers. However, cold snaps, drier winters and wet summers will occur, therefore we need to be prepared for a much greater range of extremes. We are already experiencing increased frequency and intensity of extreme weather events, and this trend is expected to continue for years to come. These changes pose considerable challenges to the everyday working and asset management of large organisations.

Climate Change is, and will continue, to affect council services and our response to increasingly extreme weather scenarios. Some action has already been taken and more will need to be taken if we are to pro-actively address the need for climate adaptation. By addressing and reflecting on recent events and assessing future climatic changes and predictions we can better plan how council services can 'adapt' to meet the ever-changing impact of our variable weather. Early preventative actions are significantly more cost effective than reactive disaster response efforts.

We recognise this by firstly 'getting our own house in order' and secondly 'leading by example'.

This Climate Adaptation Plan has been developed with the full input of all Directorates, it has been assessed alongside an NI wide Risk Assessment methodology and aligns with the Council's own Corporate Risk Assessment. This plan will not sit alone but it will be reflected in many council wide plans and strategies.

This plan will also recognise the co-benefits of green infrastructure to health and well-being for citizens, council staff and biodiversity.

'Our children will not forgive us if we leave them a world of withering heat and devastating storms where sea level rises and extreme temperatures force millions to move because their countries are no longer habitable. None of us can avoid our responsibility. Delay is not an option.'

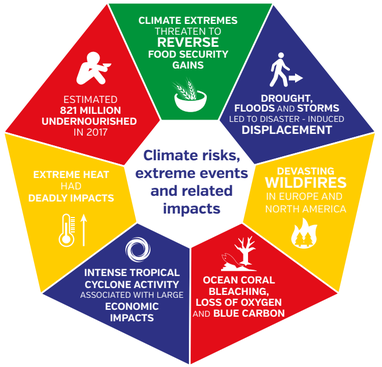
Prime Minister, Lord Deben, Chair, Climate Change Committee - Response to Climate Change Committees 2023 Progress Report

Global, UK and Northern Ireland Context

Global Context

Human activity has caused the atmosphere, and our oceans and land to warm. Evidence shows that the average temperature at the earth's surface has risen 1.1°C since the pre industrial period. A 1.0°C rise may not seem much but the impact is great.

- More frequent and intense extreme weather
- Rapid melting of glaciers and ice sheets, contributing to sea level rise
- Huge declines in arctic sea ice
- Ocean warming and marine heatwaves



These are not only environmental impacts but social and economic ones as well. Millions more will be at risk of severe hunger and extreme weather has caused trillions of dollars of economic damage in recent decades.

What has caused this?

2023 has been confirmed as the warmest on record. This has been driven by human-caused climate change and boosted by the natural El Nino weather event. Sea temperatures have also smashed previous highs.

These global records are bringing the world closer to breaching key international climate targets.

- burning fossil fuels for energy
- changes in land use and deforestation which reduces the numbers of trees available to absorb carbon dioxide
- agricultural production which releases greenhouse gasses from energy use, from the number of livestock and the amount of fertiliser applied to land
- manufacture of cement, chemicals and metals, which releases greenhouse gases into the atmosphere

We are already experiencing the effects of climate change:

- risk to water supplies
- localised flooding and flooding in coastal regions
- damage to marine ecosystems and associated failure of fisheries
- loss of biodiversity
- heat stresses affecting human health and habitability
- increased risk of wild fires
- food insecurity as growing conditions fluctuate and impact of pests increase

More information on global impact of climate change can be found here - https://wmo.int/publication-series/provisional-state-of-global-climate-2023

UK Context

The record-breaking temperatures seen in summer 2022 brought unprecedented numbers of heat-related deaths, wildfire incidents and significant infrastructure disruption. These, and impacts from other events, highlight the UK's critical exposure and vulnerability to extreme weather even today.

All 10 of the warmest years in the UK have occurred since 2003. 2022 was the UKs hottest year on record - 40.3°C was recorded.

UK Climate Risk released their most recent Climate Risk Independent Assessment [CCRA3] in June 2021 - https://www.ukclimaterisk.org/publications/technical-report-ccra3-ia/ .

It summarised the following:

- The UK is projected to experience ongoing increases in temperature until the middle of the 21st Century. This will become more frequent and more severe.
- Winter extreme rainfall is projected to be 40% more intense than earlier predictions with future winters becoming warmer and wetter overall.
- New estimates of global sea-level rise indicate an additional 5 – 1°Cm rise by 2100 compared with earlier estimates. This is due to improvements in modelling as opposed to greater warming.

Northern Ireland Context

Northern Ireland has experienced its warmest year on record, with an average temperature of 10.17°C in 2023. The previous record was 9.83°C, with records going back to 1884.

The most recent report by the Intergovernmental Panel on Climate Change [IPPC] - Adapting to Climate Change – Progress in NI – was released in April 2023 - https://www.theccc.org.uk/publication/adapting-to-climate-change-progress-in-northern-ireland/ .

It summarised the following:

- 7 of the 10 warmest years have occurred since 2000.
- experienced its warmest year on record in 2022 with its highest temperature reaching 31.3°C in Castlederg in 2021.
- 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.
- Winter 2019 was the third warmest winter since 1884.
- there has been a small observed increase in annual mean rainfall in recent decades. In Northern Ireland between the period of the mid-1970s to mid-2010s and 2010-2019 there was an increase of 6.4%, from an average of 1099mm per year to 1169mm per year.

Projections are warmer, wetter winters. Summers will be hotter and drier – projections are a decrease of rainfall of 11% by the middle of the century. When rainfall does come it will be more intense. Sea levels will continue to rise – estimates for Belfast are a 15cm rise by 2050.

Regional Context

Ards and North Down's geographical area is nearly 228m2 with approximately 115 miles of coastline. The area is known for its rich diversity of scenic countryside and extends from Holywood on the shores of Belfast Lough to Portaferry on the southern tip of the Ards Peninsula and Killinchy to the west of Strangford Lough.

Strangford Lough, which is of global environmental importance, forms the central geographical and landscape feature of the area. This island-studded Lough is part of the Strangford and Lecale Area of Outstanding Natural Beauty and was the first Marine Nature Reserve in Northern Ireland. It is also an Area of Special Scientific Interest and a RAMSAR site due to it being a wetland of international importance.

The largest population centres are Bangor and Newtownards followed by Comber, Holywood and Donaghadee. There is also a vibrant network of villages, each with their own plans and ideas on how they can improve the physical and social attributes of their communities.

Ards and North Down is served by 1,152km of public roads, containing 4.5% of the total Northern Ireland network. Within the borough there are 27km of dual carriage A-roads; 137km of single carriage A-roads; 58km of B-roads; 165km of C-roads; with the remaining unclassified roads totalling 766km.

Public services are dependent on a stable environment where the effects of climate change, flooding, coastal erosion, and changes in biodiversity are kept in check by mitigation and adaptation measures. Without planned resilience to these changes, delivery of services and personal wellbeing is at risk. Delivery of the Big Plan needs to consider the implications of changes to the environment and factor these into the design and delivery of future services and infrastructure.

Ards and North Down Borough Council

Non-Statutory Context

Intergovernmental Panel on Climate Change (IPPC)

The IPCC is a scientific body of the United Nations. It was created in 1988 by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP). It is the UN body for assessing the science of climate change. The IPCC provides policy makers with regular scientific assessments on climate change, its implications, and potential future risks. It also provides options for adaptation and mitigation. These reports are relevant to policy, but they are politically neutral and not prescriptive.

IPPC Assessment Reports

IPCC Assessment Reports are released on a, roughly, 7-year cycle.

The IPPC assessments are seen as the most accurate view on the science of climate change. It has 195 members of which the UK is one and all are involved in every major step.

The IPPCs reports are highly influential and informed the creation of the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol (an international treaty which extended the 1992 United Nations Framework Convention on Climate Change that commits state parties to reduce greenhouse gas emissions, based on the scientific consensus that global warming is occurring and that human-made CO_2 emissions are driving it). They were also the driving force behind the Paris Agreement to limit temperatures to well below 2°C whilst pursuing efforts to keep it below 1.5°C. The Paris Agreement was adopted in 2015.

This has been followed in 2021 by the Glasgow Pact with an agreement to further cut carbon emissions.

The latest climate science suggests that the effects of climate change on daily extreme rainfall events are only just beginning to emerge. However, the evidence of extreme maximum summer temperatures is becoming clearer, as reflected by how many of the UK's record extreme monthly temperatures have been set in the most recent decade along with a tendency for more heatwaves in recent years.

Observed sea level rise is also difficult to determine for each country. A UK-wide sea level index suggests that sea level has risen by between 1.2 and 1.6mm per year since 1901. National variations are predicted in future as outlined in the following section.

The changes in climate that we are already experiencing are projected to continue and intensify. In the second half of the century, the amount of change that occurs will depend strongly on how successful we are in reducing greenhouse gas emissions globally.

As global temperatures rise the impact locally will vary both on our ability to reduce greenhouse gas emissions (Mitigation) and on our ability to adapt to them (Adaptation).

Action cannot be delayed further. To do so will lock in more damaging impacts and threaten the delivery of other key Government objectives, such as Net Zero.

Ards and North Down Borough Council

Statutory Context

Sustainable Development Duty

Since the introduction of the Statutory Duty on Sustainable Development in 2006, as a result of the Northern Ireland (Miscellaneous Provisions) Act 2006 (Section 25), councils have a statutory duty to 'carry out their functions in a way that contributes to sustainable development'.

Climate Change Act (Northern Ireland) 2022

The Climate Change Act (Northern Ireland) 2022 ('the Act') received Royal Assent on 6th June 2022.

The Act will:

- Set targets for net zero for the years 2050, 2040 and 2030 for the reduction of greenhouse gas emissions:
    - This target excludes methane emissions which only need to be reduced to 46% against the baseline by 2050);
    - a reduction of at least 48% in GHG emissions against the baseline by 2030;
    - a GHG emissions target for 2040 (to be confirmed within 24 months of this Act coming into force) that is in line with the 2050 target.
- Contain some information on plans to meet the emissions targets for the following sectors (sectoral plans); Energy; Renewable electricity consumption – at least 80% of Northern Ireland's electricity consumption must be from renewable sources by 2030; Infrastructure; Industrial processes; Waste management – at least 70% of the waste in Northern Ireland needs to be recycled by 2030; Agriculture; Fisheries; Transport; Active travel.
- Set out a carbon budgeting framework (Carbon budget is a term used to refer to the maximum amount of carbon dioxide (CO2) emissions allowed over a period of time, to limit global warming to 1.5°C.
- Provide for reporting and statements against those targets and budgets.
- Part 3 also includes 'Just Transition' clauses – this includes the establishment of a Just Transition Commission (JTC) which will have an oversight and advisory role in relation to the 'just transition' elements of the Act. The Act requires JTC membership to be significantly representative of Northern Ireland society, but otherwise leaves the functioning, constitution and financial aspects of the JTC to secondary legislation.
- Confer power to impose climate change reporting duties on public bodies;
- Establish a Northern Ireland Climate Change Commission and appoint a Climate Change Commissioner to oversee and report on the operations of the Act. There is also a commitment to developing a climate action plan within 2 years of the Act receiving Royal Assent.

Under the Climate Change Act Northern Ireland, the Climate Change Committee (CCC) has been designated responsibility to assess progress on climate change in two ways: assessment of Northern Ireland's carbon budgets and emissions reduction targets, and assessment of progress in implementing Northern Ireland's Climate Change Adaptation Programmes. The Committee must provide progress reports for the NICCAP cycles, no later than three years into the five-year cycle.

Ards and North Down Borough Council

Commitments

The Council has a range of high-level strategies containing commitments and actions that will contribute to its long term sustainability and response to climate change.

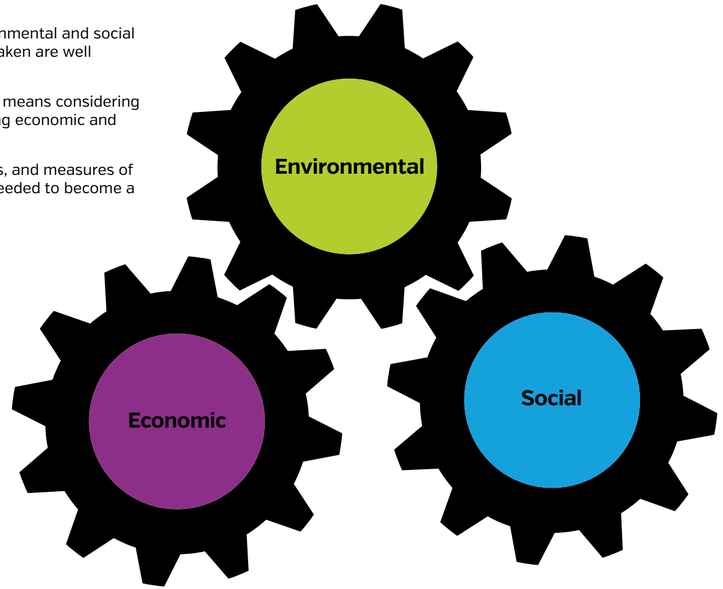
Corporate Plan

Our Vision is to be a Sustainable Borough.

A Sustainable Borough is one where economic, environmental and social well-being are interdependent and decisions that are taken are well balanced and equitable.

Putting sustainability at the core of our Corporate Plan means considering the implications of a changing climate alongside shifting economic and social needs.

The identification of priorities, outcomes, commitments, and measures of success are based on putting in place the conditions needed to become a sustainable Borough.



Roadmap to Sustainability

The Roadmap to Sustainability formalises the Council's commitment to becoming more sustainable, in one document. The Council, through its implementation of other key strategies and partnerships, such as The Big Plan and ongoing initiatives to improve waste management practices within the Borough, has been steadily improving its sustainability performance.

Innovation and building resilience will be key to moving forward to achieve real, long-term sustainability. This must be a 'just' transition – ensuring a climate-neutral economy happens in a fair way, leaving no-one behind.

It is within this document and its commitments that the Council has committed to the development of a Climate Adaptation Plan.

The Council's Roadmap to Sustainability can be viewed here.

Sustainability & Climate Change Policy

This Sustainability and Climate Change Policy gives a commitment that the Council will:

- endeavour to reduce its impact on the local and global environment by demonstrating clear leadership, providing high quality services, whilst preventing pollution, reducing waste and greenhouse gas emissions and saving energy and water.
- strive towards compliance with all sustainability, environmental and climate change legislation, guidance and best practice principles to fulfil its statutory responsibilities
- follow an informed approach in protecting the environment and our outstanding natural surroundings, including many internationally recognised designated sites, eg ASSIs, SPAs and SACs.
- reduce our greenhouse gas emissions and improve our resilience to current and future climate impacts.
- conserve natural resources, enhance biodiversity and further improve the quality of life and the sense of well-being for all our residents.
- do this by initially looking internally within the organisation to mitigate and adapt the Council's practices, in order to reduce our environmental footprint and promote sustainability
- working constructively with our external partners to further sustainable development by ensuring the integration and balancing of social, economic and environmental factors when plan-making and decision-taking, in order to support the long-term public interest.

Full policy can be viewed here.

Environmental Management System

Ards and North Down Borough Council is committed to environmental stewardship demonstrated through the accreditation of an ISO 14001 Environmental Management System. We work to enhance our local environment, improve the health and well-being of our local community and reduce the negative impact our activities could have on the environment.

Environmental management

We use an environmental management system to manage our environmental performance. By implementing our environmental management system, we set measurable objectives and targets to ensure continual improvement in environmental performance.

Environmental commitments

Our environmental statement sets out our commitments as an organisation:

- to reduce, reuse and recycle our waste
- to introduce measures to ensure best practice and responsible use of water, fuel and energy
- to investigate and introduce, where possible, measures to minimise the release of pollutants which cause damage to land, air and water due to our activities
- to reduce the environmental impact of goods we buy and encourage suppliers and contracted services to improve their environmental performance

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ISO 14001
ENVIRONMENTAL MANAGEMENT

Ards and North Down Borough Council

Weather Timeline

Our long coastline and low lying ground puts our Borough at particular risk to climate change including sea level rises, coastal flooding and storm events. This has resulted in a change in impact on our coastlines, has altered costline processes and accelerated change.

Until recently there has been limited and insufficient data available.

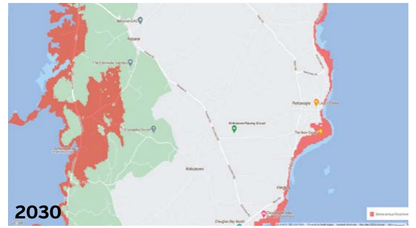
The the Northern Ireland Coastal Forum and associated working group, DAERA has been addressing this shortfall of scientifically robust data on how our coastline is changing. To disseminate their data the Northern Ireland Coastal Observatory has been created. It aims to:

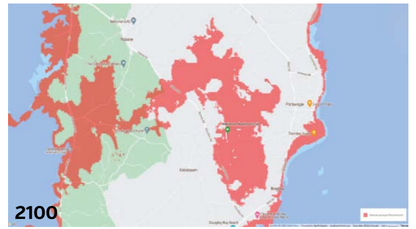
- Improve the evidence base of coastal change along the Northern Ireland coastline
- Improve the awareness of coastal change in Northern Ireland and the impacts of our changing climate
- Empower stakeholders with information to help improve the management of coastal change in Northern Ireland

The Northern Ireland Coastal Forum is a collaborative organisation which is made up of the Department for Infrastructure (DfI), the Department of Agriculture, Environment and Rural Affairs (DAERA), Chief Executives of Local Authorities with a coastal remit and the National Trust. The Forum is currently co-chaired by DAERA and DfI Permanent Secretaries and it is the agreed mechanism through which members work collaboratively in progressing coastal management issues in Northern Ireland.

Climate Central – a US non profit organisation has produced a 'Coastal Screening Tool' which maps areas exposed to sea levels rises and flooding in the years ahead for specific areas of our borough, map below as an example:

Lower Penninsula (Kircubbin across to Portavogie) by 2030, & 2100





Flood areas highlighted red denotes the water level at the shoreline that local coastal floods exceed on average once per year. Areas lower than the selected water level and with an unobstructed path to the ocean are shaded red.

The severity of these impacts are still not being fully realised. We are at the beginning of a curve towards more severe and variable weather for which we must be better prepared. We need to build our resilience to these events and support our communities in doing the same.

Recent Weather in Ards and North Down

In Ards and North Down we have seen a gradual increase in severe weather events in recent years.

These events have been captured in the following timeline:

Evidence

2014

14 August

Ex hurricane Bertha capsized 20 vessels at GP15 world championships on Strangford Lough requiring emergency response

2015

5 January

High tides strong wind, flooding, Portaferry Road closed, sandbags distributed. Holywood Esplanade closed & Strangford Ferry suspended

1 July

Heatwave – hottest day since 2006 – 36.7°C registered at Heathrow

2016

January

Storm Gertrude strong winds, power cuts, trees down

2017

21 June

Highest June temperature since 1976 – 34.5°C registered at Heathrow

17 October

Storm Ophelia – wind speeds of 71mph recorded at Orlock, power loss, Ards Peninsula severely hit, strong winds in Donaghadee, lighting pole down at Holywood Rugby Club, scaffolding de-stabilised on High Street, Bangor resulting in street closure

2018

April

'Beast from the East' Rain and strong winds

April

Easter Sunday saw record temperatures – 21°C at Helens Bay

2019

December

Record temperatures for the UK for December – 18.7°C

2020

9 February

Storm Ciara – strong winds & rain.

13 February

Storm Dennis – Flooding at Donaghadee, strong winds, high tides (see photos, Andrew White).

29 February

Storm Jorge – wind speeds of 72mph recorded at Orlock

August

Storm Ellen – strong winds & rain.

Storm Francis – severe flooding in Newcastle County Down.

31 October

Storm Aiden – strong winds, coastal gales, trees down, travel disruption, power cuts

December

Storm Bella – Strong winds

2021

February

Extreme rainfall – Kiltonga (Top photo) and Ward Park

July

Record temperature of 31.3°C recorded at Castlederg

November

Storm Arwen – winds speeds at Orlock reached 87mph, traffic disruption, events cancelled, sever damage to Aurora Leisure complex – whole site closed for a number of days. Leisure Waters closed for 8 months – costs to repair in the region of £0.5 million, loss of income

December

Storm Barra – wind speeds of 76mph recorded at Orlock, rain & snow fall, power cuts, high tides/storm events (Donaghadee) severe damage to Ballywalter Harbour – loss of access and income to local business and cost to repair £90k

The Pitch and Put green at Donaghadee commons, sumberged in water. Boulders on road, high waves

2022

February

3 storms in 1 week – Dudley, Eunice & Franklin – brough strong winds, trees down & snowfall

July

Record heatwave – UK recorded 40.3°C in Colinsby, Lincolnshire

2023

19 August

Storm Betty – wind speeds at Orlock reached 53 mph. Boat washed ashore at Ballywaticock.

Early September

Heatwaves – Castlederg reached 28°C – a September record – putting the elderly/vulnerable at risk.

October 2023

Seaweed on promenade, reaching houses on the other side.

12 November

Storm Debi Amber wind warning.

9-10 December

Storm Elin & Fergus – windy and wet weather

Ards and North Down Borough Council

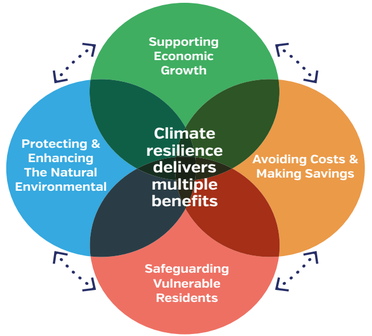
Climate Action

Climate Action

Climate change is now affecting every country on every continent. It is disrupting national economies and affecting lives, costing people, communities and countries dearly today and even more tomorrow.

Affordable, scalable solutions are now available to enable countries to leapfrog to cleaner, more resilient economies. The pace of change is quickening as more people are turning to renewable energy and a range of other measures that will reduce emissions and increase adaptation efforts.

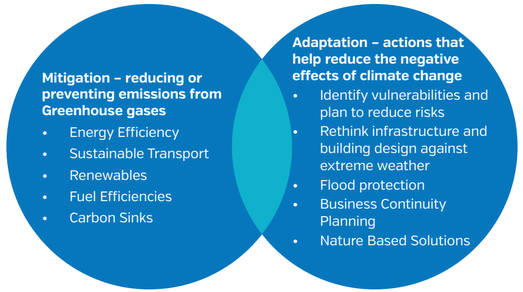
Key benefits for councils of developing climate resilience



These actions fall into one of two broad categories: climate change adaptation and climate change mitigation.

Climate change mitigation means avoiding and reducing emissions of heat-trapping greenhouse gases into the atmosphere to prevent the planet from warming to more extreme temperatures. Climate change adaptation means altering our behaviours and systems to protect our families, our economies, and the environment in which we live from the impacts of climate change. The more we reduce emissions right now, the easier it will be to adapt to the changes we can no longer avoid.

Mitigation actions will take decades to affect rising temperatures, so we must adapt now to the change that is already upon us–and will continue to affect us in the foreseeable future.



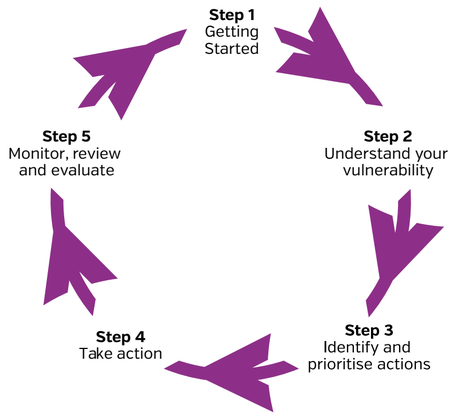
Climate Adaptation Planning

Ards and North Down Borough Council has worked in partnership with Climate NI and other councils across NI to develop their Climate Adaptation Plan using the NIAdapts Planning Toolkit.

The toolkit aims to support organisations to undertake a methodological approach to 'adaptation' with the overall aim of enabling NI to build resilience to the potential negative impacts of climate change, whilst allowing us to take advantage of any possible opportunities.

Councils have a significant role to play in preparing their regions for the impacts of climate change. This toolkit enables councils to explore the potential shocks and stresses facing their organisation and assets. It also recognises the co-benefits of green infrastructure to health and well-being for citizens, council staff and biodiversity.

The 5 steps of Planning Adaptation:



Our Approach

Several workshops were held across all service areas within the council to capture and discuss the impacts of climate change on Ards and North Down.

Representatives from across all key Service Units were brought together based on their knowledge and experience:

Waste	Assets & Property	Parks	Environmental Health	Community Halls
Leisure	Planning	Regeneration	Planning	Tourism & events
Risk	Administration	Finance	Strategic Capital Development	Economic Development
Communications	Community	Community Planning		

Through a series of workshops climate related consequences were identified based on 4 key weather-related events:

a. Flooding (High Rainfall, River, and Coastal Floods)

b. High Temperatures

c. Storms and High Winds

d. Extreme Cold

Consequences were identified on council functions, services, buildings, staff and on our businesses and communities.

Workshop discussions highlighted a variety of possible impacts:

- Increased flooding of the council estate
- Increased impact and costs to respond to extreme weather incidences across the borough
- Increase in sea levels affecting current & future assets
- Increased risk to local/vulnerable communities
- Disruption to service delivery during extreme weather events
- Storm impact on council buildings
- Tree fall/damage in local parks and green spaces
- High temperatures increasing risk to vulnerable groups
- Increased water demand to maintain green spaces

The council already has several policies, plans and strategies in place that through our normal business is working to address some of these challenges. However, Climate Adaptation Planning goes above and beyond 'Business as Usual'.

As a result, this information was consolidated into a Climate Adaptation Risk Register. From this a series of themes were identified. Details of these themes can be found in the next chapter.

Climate Adaptation Risk Register - Risk Matrix:

Impact		Likelihood				
		May occur only in exceptional circumstances	Might conceivably occur at some time	Could occur at some time	Will probably occur in most circumstances	Is expected to occur in most circumstances
		1 low	2 low-medium	3 medium	4 medium - high	5 high
No damage/injury; Financial loss< £1,000; No impact on achievement of objectives; Minimal damage to reputation	1 – low	**Very Low 1**	**Very Low 2**	**Low 3**	**Low 4**	**Medium 5**
Minor damage/injury; Financial loss £1,000 to £10,000; Minor impact on achievement of objectives; Some Localised press coverage	2 low-medium	**Very Low 2**	**Low 4**	**Medium 6**	**Medium 8**	**High 10**
Moderate damage requiring repair/ Injury requiring medical treatment; Financial loss £10,000 to £100,000; Medium impact on achievement of objectives; Significant localised press coverage	3 - medium	**Low 3**	**Medium 6**	**Medium 9**	**High 12**	**Critical 15**
Serious damage to property/ Serious injury; Financial loss £100,000 to £500,000; Failure of key service; NI Media coverage	4 – medium - high	**Low 4**	**Medium 8**	**High 12**	**Critical 16**	**Critical 20**
Property destroyed or not safe for use/Fatality or multiple injuries; Financial loss >£500,000; Failure of key objectives; National media coverage;	5 - high	**Medium 5**	**High 10**	**Critical 15**	**Critical 20**	**Critical 25**

This type of matrix shows the probability of the threat (vertical) and the result of the risk (horizontal).

Climate Adaptation Plan

Adaptation is a long-term strategic challenge; it is therefore key that we align our plan with the Councils core objectives.

As part of cross-Directorate workshops a vision of our Climate Adaptation Plan and a number of key aims were agreed.

Vision:

Ards and North Down Borough Council will embed climate action at the heart of all corporate planning and show innovative leadership in preparing for the impacts of climate change, building a resilient and sustainable community.

Aims:

- Leadership – Demonstrate proactive leadership to ensure climate action is our 'business as usual' approach to planning and decision making (this must in internal, external and with our Elected Members)
- Finance - to ensure we have adequate resources to build a climate ready council/borough
- Communication
  - Understand what the impacts of climate change are on our borough and people
  - Raise awareness on climate change to empower people to take responsible action
  - Engage our communities and customers with how we are collaborating to build a climate resilient place
- Operations – Ensure our operational services and our assets (lands, buildings and staff) are prepared, robust and resilient
- Work with key partners and local communities to ensure a collaborative and effective strategic approach to climate change and adaptation

Themes for Adaptation Actions

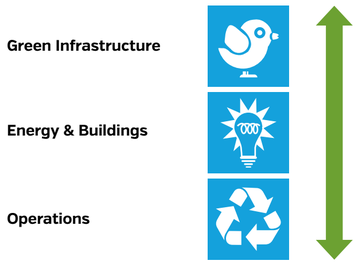
The Themes were categorised into (1) Cross-cutting and (2) Functional. These themes provide a full framework for delivery of the climate adaptation actions.

Cross Cutting Themes

Cross-cutting themes show those strategic, cross directorate topics that influence and direct how we operate as an organisation.

Functional Themes

Functional themes reflect the services and responsibilities of Council, directly, linked to climate adaptation.



All these themes are addressed in the following chapter and within the Climate Adaptation Action Plan

Cross Cutting Themes

Leadership, Governance & Planning

'Demonstrate proactive leadership to ensure climate action is our 'business as usual' approach to planning and decision making (this must in internal, external and with our Elected Members)'

Effective **leadership** inspires, motivates, and guides individuals and groups toward common goals. Governance ensures that systems and institutions operate fairly, transparently, and in the best interest of the people. Together, they play a pivotal role in fostering a flourishing society.

Local **Government** plays an important role in shaping local places and providing essential services. Northern Irelands' local councils have a range of roles and responsibilities across their geographical areas, from economic development and park management, through to emergency planning and waste services. They are being increasingly seen as key actors in climate change adaptation and in building resilience to climate change.

Reducing carbon emissions as we transition to net zero has been highlighted as one of our three priorities to help archive our vision of a Sustainable Borough. This priority is supported by an outcome to be an environmentally sustainable and resilient Council and Borough meeting our net zero obligations and adapting to climate change.

There is a direct requirement of the Climate Change Act NI that all public bodies must report on adaptation and mitigation. The frequency of this is yet to be regulated.

Sustainable Development lies at the heart of the **planning** system – a key challenge of which is mitigating and adapting to climate change.

Regional Strategic Policy (RSP)

The Regional Development Strategy (RDS) 2035, sets out a key aim to 'Take actions to reduce our carbon footprint and facilitate adaptation to climate change.' It states that:

'It is recognised that climate change is one of the most serious problems facing the world. We are all contributors to global warming and need to play our part to reduce and offset our impact on the environment. We need to reduce harmful greenhouse gas emissions to help reduce the threat of climate change and promote sustainable construction, consumption and production. We should aim to prevent waste and deal with it in line with the revised Waste Framework Directive. Everyone should contribute to reducing the Region's carbon footprint.'

Furthermore, Regional Guidance 9 of the RDS sets out that we should 'Reduce our carbon footprint and facilitate mitigation and adaptation to climate change whilst improving air quality.'

Strategic Planning Policy Statement (SPPS)

The SPPS sets out that it fulfils a central government commitment 'to identify and implement opportunities to build resilience into the built and natural environment and to develop and implement sustainable strategies to explore, address and manage significant flood risk'.

Paragraph 3.13 states that:

'The planning system should therefore help to mitigate and adapt to climate change'. More information can be found here (https://www.infrastructure-ni.gov.uk/sites/default/files/publications/infrastructure/SPPS.pdf) :

Local Development Plan (LDP)

The main purpose of the LDP is to inform the general public, statutory authorities, service providers, developers and other interested parties of the policy framework and land use proposals that will implement the strategic objectives of the RDS and the LDP objectives and guide decisions on planning applications for development in the Borough. The LDP shall set out a Spatial Growth Strategy. This gives opportunity to concentrate growth in those areas of the Borough which benefit most from high connectivity and good accessibility.

Through the LDP the Council shall identify and allocate development sites for housing, employment and mixed uses (at Local Policies Plan stage) where integration with public transport, cycling, walking and the responsible use of the private car can best be achieved. The LDP can also contribute to reducing emissions through encouraging sustainable patterns of development and the integration of land use with active travel links and sustainable transportation.

The draft Plan Strategy shall also set out the Council's approach and consult upon updated operational planning policies that supports the overall strategic approach to climate change adaptation and mitigation. including- the coast, flooding and drainage, protecting and enhancing open space, and positively facilitating the potential for generation of renewable and low carbon energy development, among others.

Emergency Planning plays a role in NI's current and future climate resilience and considers the impacts of climate change on society within the NI Civil Contingencies Framework.

Emergency Planning groups continue to embed consideration of climate hazards into all multi agency plans. Some of the potential climate impacts relevant to emergency planning, in a multi-agency environment in Northern Ireland are:

- Disruption and damage to current public infrastructure (buildings, roads, including those used for emergency shelters etc.), local council services and utilities from extreme weather and gradual climatic changes.
- Increase of costs and pressure on resources in preparing, responding, and recovering from emergencies
- Increasing frequency and magnitude of weather events and gradual climatic changes, increasing risk to public health, consistent with climate change (flood risks, heat waves, storms etc.) which can impact local communities and businesses:
- Wider disruption to production of goods, supply chains and distribution networks i.e. food shortages and price inflation.

Consideration of climate change impacts within emergency plans is integral to the resilience of local council regions and NI. It enables Ards and North Down Borough Council to better anticipate climate risks, appropriately respond and effectively recover.

It is imperative that Ards and North Down Borough Council consider the impacts of climate change, and plan and implement suitable preventive measures to ensure that health, safety, and welfare standards are maintained throughout the council. This includes appropriate mitigation for staff working in extreme weather conditions, heat both indoors and outdoors, exposure to sun for longer periods, impact on those with respiratory conditions and reduced productivity due to more extreme conditions.

Finance & Procurement

'To ensure we have adequate resources to build a climate ready council & borough'.

Every council requires money **to finance** the resources it needs to provide local public services. The Local Government Finance Act (NI) 2011 (Sec 1) states that "A council shall make arrangements for the proper administration of its financial affairs".

The 3rd UK Climate Change Risk Assessment (CCRA3) highlighted the high economic costs of climate change but also the high economic, societal, benefits of adaptation – highlighting this type of investment can be effective and efficient.

Finances will be affected by climate change through the cost of damage to assets and property, disruption, costs of responses/repairs/retrofitting and loss of income through closures. It may also find itself vulnerable with insurers.

However, a finance gap remains between amount needed for adaptation versus what is being spent.

Integrating climate change into standard business processes is essential.

The draft Corporate Plan 2024-2028 has increased economic growth as one of its 3 priority areas. However, it recognises that this must be a sustainable economy, reducing poverty, increased living standards, increased employment opportunities and better economic security overall. It must also be a thriving economy, encouraging investment by businesses in the borough. This will all, in turn, improve our investment in a low carbon economy and other social and environmental commitments.

Given its central position in public spending, **procurement** can be a lever to implement a whole-of-economy approach to climate change, by aligning purchasing decisions with sustainability and climate goals, engaging with suppliers to drive positive change, and promoting innovation and transparency throughout the supply chain.

With the correct approach, Ards and North Down Borough Council can ensure efficient and effective procurement which also embeds climate resilience in the local region.

Communication & Training

'Communication can help build trust. Building trust can inspire citizens to become more engaged and more involved in their communities.'

The aims of strong **communications** and training are to:

- Understand what the impacts of climate change are on our borough and people
- Raise awareness on climate change to empower people to take responsible action
- Engage our communities and customers with how we are collaborating to build a climate resilient place

Ards and North Down Borough Council must build trust and confidence, and while doing so, strengthen relationships with citizens, stakeholders, and staff. This requires strong strategic communications.

Communication has been a key theme through the development of this Climate Adaptation Plan. The process of developing a shared understanding of climate change and its potential impacts on our borough has strengthened discussions across council. Teams recognise their responsibilities to climate change and climate adaptation and are beginning to build this into Service Planning. Cross service working groups open conversations for a shared, partnership approach.

As a council we will lead by example and support our ratepayers in doing the same. Raising awareness across council and with local communities is vital to the delivery of climate adaptation. This includes raising awareness and understanding climate change impact and adaptation requirements within local communities and industry sectors.

We will ensure staff and members are appropriately briefed and **trained** to understand their role. Through our internal training team and use of external/3rd sector partners to deliver on specific knowledge we can build that knowledge basis, giving staff and members the confidence to deliver on climate change decision making.

Partnerships

'Having strong partnerships whilst tackling climate change can promote positive, solution driven approaches. By working more closely together communities, local and central government, businesses and 3rd sector organisations can deliver a greener future, whilst creating opportunity.'

Ards and North Down Borough Council have committed to the UN Sustainable Development Goals – 17 global actions for Sustainable Development. These range from improved health and education to reducing inequalities to climate action. Goal 17 is about revitalizing the global **partnership** for sustainable development. The 2030 Agenda is universal and calls for action by all countries – developed and developing – to ensure no one is left behind. It requires partnerships between governments, the private sector, and civil society. More detail is available within the Councils Roadmap to Sustainability.

The Council is committed to improving social inclusion and reducing inequalities (Sustainable Development Goals 3, 5 & 11) this will only increase community preparedness for the unavoidable consequences of a changing climate.

We will continue to develop strong cross sector partnerships to increase capacity, improve our knowledge base, develop new skills, utilise additional funding, develop solutions and drive innovation.

Data Gathering & Monitoring

'What gets measured, gets managed.'

We collect **data** daily. It is collected in a variety of ways from surveys, energy records, budget sheets, bin weights, maps etc. It can be recorded for financial decision making, service improvement, meeting legislative requirements, project impact measuring etc.

The Climate Change Act Northern Ireland has set a clear target of net zero carbon by 2050. To understand and plan how we will achieve this we must understand where we are now!

By collating relevant data, we can determine our current baseline. With a net zero target by 2050 we have a clear and definitive end goal. How we get there will be guided by interim targets and action plans.

We will improve how we collect data and record information in relation to climate change and retain this in a centralised way, allowing access for all. We need to understand what the impacts are at a local level and what the response could and should be.

Only by achieving this can we respond to climate change with meaningful adaptation planning.

Functional Themes

Green Infrastructure

'Nature Based Solutions have a vitally important role to play in addressing both the causes and consequences of climate change'.

The key features of **green infrastructure** are that it is a network of integrated spaces and features, not just individual elements; and that it is 'multi-functional' – it provides multiple benefits simultaneously.

These can be to:

• support people's mental and physical health	• reduce water run-off during flash flooding
• encourage active travel	• carbon storage
• cool urban areas during heat waves	• provide sustainable drainage

Within our remit of development, we should be striving to include Nature Based Solutions within our design and specifications. Nature Based Solutions are defined by the EU as 'solutions that are inspired and supported by nature, which are cost effective, simultaneously providing environmental, social and economic benefits whilst building resilience'. This means using natures own resource, soil, water, and vegetation, in place of 'grey' infrastructure.

Nature Based interventions can deliver carbon reductions at a fraction of the cost of engineered solutions and when delivered effectively can enhance the stocks of natural assets and the ecosystem services they provide (UK Natural Capital Committee. April 2020).

'Nature Based Solutions with safeguards are estimated to provide 7% of climate change mitigation until 2030 needed to meet the goal of keeping climate warming below 2°C, with likely co-benefits for biodiversity' (IPBES Global Assessment Report).

Ards and North Down Borough Council has and will continue to develop several projects under the umbrella of Green Infrastructure – Tree & Woodland Strategy, Local Biodiversity Action Plan, Growing Strategy, Greenways, Nature Networks etc. More information can be found on our Council website here.

Energy & Buildings

We must ensure we protect councils' assets, property and infrastructure.

The Council will ensure that its assets and **buildings** are resilient to the effects of climate change. Buildings vary from small community centres to offices to large Leisure Facilities of varying age, build type and location. They will need to be healthy and comfortable places to visit and work all year round – cool in summer, warm in winter whilst resilient to the effects of other climate hazards such as flooding. Buildings should:

- not overheat during heatwaves
- be prepared for flooding
- be designed for climate resilience

Council assets and buildings also extend to our heritage sites and museum collections.

The museum collection is held in the B+ listed building in Bangor Castle. The increased frequency of storms, and subsequent high winds and flooding, extremes in temperature and shifts in huimidity have increased the risk to the museum collection. The heightened risk of flooding, damage to the building and leaking have increased costs as more repairs and more frequent monitoring are required yearly to ensure the building remains fit for purpose. Additional staff resources and equipment are being deployed to help prevent damage and to maintain a safe and stable environment for the collection. Collection salvage and rescue plans are in place to ensure staff respond quickly to emergency situations caused by extreme weather events.

Within the wider borough of Ards and North Down there are 759 recorded Sites and Monuments, including 122 Scheduled Monuments and 14 State Care Monuments. There are 671 listed buildings, including 18 listed Grade A, 17 Historic Parks, Gardens and Demesnes and 3 Conservation Areas (Holywood, Portaferry and Donaghadee). These sites and monuments represent all historic eras.

Climate change is one of the most significant challenges for the management of these historic sites and artefacts. The growing intensity and frequency of climate hazards require increasing resources to both investigate and respond to these risks. Some effects, such as rising sea levels and increased intensity of rainfall in storms are clear to see. Others are less visible but cause changes in climate that can have huge effects to the longevity and preservation of the historic environment.

Transformation of **energy** systems to meet net zero creates opportunity to improve the resilience of these systems.

Risks to energy mostly come from higher temperatures in summer and increased intensity of heatwaves which contribute to energy generation and transmission losses, faults from overheating components and increase in demand to meet cooling requirements. Increased rainfall and intensity of rainfall could impact energy loss with inundation of flood water. Snow and ice are also important causes of weather-related power disruption.

Access to reliable energy provision is essential to continued service provision. As digitalisation of our operations continues this reliance will increase.

Operations

'Ensure council services not only continue but that they are adaptable to face the challenges of a changing climate.'

As part of maintaining NI's built infrastructure, Ards and North Down Borough Council deliver waste and cleansing services to keep spaces free from waste and refuse collected on a regular basis. Our dependency and interaction with the built environment, makes waste and street cleansing one of the most visible services the council delivers.

Climate change is likely to create short and longer-term implications for effective delivery of refuse collection and street cleansing. These may include disruption to schedules. H&S issues, capacity shortage, additional costs, increased waste decomposition in extreme heat etc.

Undertaking adaptation planning and action offers councils the opportunity to save on costs, maintain the quality of the service, and manage the efficient use of resources. Some examples could include strong communications to manage expectations or action plans to mitigate impacts.

Changes in climate will continue to raise numerous issues for the parks maintenance and management services. Without Ards and North Down Borough Council undertaking appropriate planning and adaptation action, these impacts are likely to exert considerable pressures on resources. Some impacts could include more weeding & mowing, increase spread of pests and disease, damage to green spaces and increased costs.

Adaptation planning can offer opportunities to alter maintenance schedules to meet demands, incorporate watering programs and tree management into plans, use climate resilient planting and integrate blue-green infrastructure planning.

Ards and North Down Borough Council

Adaptation Plan

Adaptation Action Plan

To summarise the data gathered during workshops and follow up meetings an Adaptation Action Plan has been developed.

This Action Plan will address priority risks and allocate them under a relevant theme with a lead department to take this action forward. This will include any internal partners and external stakeholders required for successful delivery.

Leadership, Governance & Planning							
Priority	**Demonstrate proactive leadership to ensure climate action is our 'business as usual' approach to planning and decision making (this must in internal, external and with our Elected Members)**						
Objectives	**Action**	**Lead Department / Team**	**Partners**	**Timeframe (years)**			
			(Internal & External)	1- 2	2- 3	3-5	5 +
Ensure local Emergency Planning Response includes extreme weather .	Keep out of hours provision under review to meet future needs. Current information does not reflect a need now for formal on call but this will remain under review.	Administration/HR	Assets & Property, Community Halls, Environment	✓	✓	✓	✓
	Identify staff with transferable skills to be utilised in an emergency and work with HR to recruit volunteers.	Administration/HR	All council departments	✓			
	Continue to review of local weather records to ensure Emergency Planning response to extreme weather is appropriate	Administration - (Risk)	RCRG/all council depratments/ Regional Flood Group	✓	✓	✓	✓
Review of staff well-being during extreme weather - ongoing	Assess conditions for safe working practices (eg driving, litter picking, grave digging etc) and review PPE required - H&S handbook updated	Administration (H&S)	Parks & Cemeteries, Waste & Cleansing, Assets & Property	✓			
	Continue to review and were necessary integrate climate change considerations into flexible working policies & staff travel during extreme weather.	HR	all service units	✓	✓		

Leadership, Governance & Planning (continued)							
Priority	**Demonstrate proactive leadership to ensure climate action is our 'business as usual' approach to planning and decision making (this must in internal, external and with our Elected Members)**						
Objectives	**Action**	**Lead Department / Team**	**Partners**	**Timeframe (years)**			
			(Internal & External)	1- 2	2- 3	3-5	5 +
Take a precautionary approach to development of the Local Development Plan	Introduce a policy on use of SUDs which includes promotion of and awareness of their use and benefits	Planning	Assets & Property/ Sustainability/Parks & Cemeteries/relevent statutory bodies	✓			
	Consideration of coastal erosion during planning policy development and applications	Planning	Assets & Property/ Sustainability/relevent statutory bodies	✓	✓		
	Work with DfI and other statutory bodies to develop and approach to developing plans and policies towards development and climate change including building within tidal zones, inclusion of SUDs & green infrastructure and inclusion of new technoligies for flood prevention, supporting the Loiving with Water capaign.	Planning	all service units/relevant statutory bodies	✓	✓		
Climate risk assess all Capital & Regen Projects	Develop Climate adaptation checklist / screening for all Council development and projects	Administration (Sustainability)	all service units	✓			
	Build ongoing operation and management into budgets by including life cycle costings in all projects, eg landscaping, planting, energy management	All council departments	all service units	✓	✓	✓	✓
	Develop a sustainability checklist for Capital & Regen projects	Strategic Capital Projects	all service units	✓			
	Build extreme weather alterations into contractors specifications	Strategic Capital Projects/Regeneration/ Asset & Property	Contractors	✓	✓	✓	✓

Finance & Procurement							
Priority	**To ensure we have adequate resources to build a climate resilient council and borough**						
Objectives	**Action**	**Lead Department / Team**	**Partners**	**Timeframe (years)**			
			(Internal & External)	1- 2	2- 3	3-5	5 +
Review of Insurance to include extreme weather damage	Review of historical weather related claims and incidents and review practices and insurance.	Administration (Risk)	Assets & Property	✓	✓		
Review of financial capacity to deal with climate change	Review past costs to repair due to extreme weather and calculate any increase frequency of maintenance due to changing weather and costs/ loses from closures.	Finance	all service units	✓			
	Record, monitor and review costs to council of emergency response through appropriate coding of hours, equipment needed, clear up costs etc. Build in to future budget planning and business cases	Finance	all service units	✓	✓	✓	✓
	Ensure future budget planning includes any savings made and additional expenditure to climate proof assets	Finance	all service units	✓	✓	✓	✓
Keep under review of weather related contracts, eg PPE, maintenance, salting	Calculate the estimated increased in budget required to provide funding/ grants to impacted communities	Environmental Health	DfC	✓	✓	✓	✓
	Review of contracts such as PPE & response contracts, eg salting, maintenance to ensure climate change and extreme weather events are considered and contracts are fit for purpose to ensure all staff and equipped for extreme weather.	Procurement	Parks & Cemeteries/ Waste & Cleansing/other frontline service units	✓	✓		

Finance & Procurement (continued)							
Priority	**To ensure we have adequate resources to build a climate resilient council and borough**						
Objectives	**Action**	**Lead Department / Team**	**Partners**	**Timeframe (years)**			
			(Internal & External)	1- 2	2- 3	3-5	5 +
Continue to identify and apply for funding/grant opportunities to support understanding of climate change and potential solutions	Funding to remain as a standing item on the Climate Working Group	Administration - (Sustainability)	all service units	✓	✓	✓	✓
	Investigate opportunities for technological solutions to support adaptation	Administration - (Sustainability)	all service units	✓	✓	✓	✓

Communication & Training							
Priority	**Understand what the impacts of climate change are on our borough and people** **Raise awareness on climate change to empower people to take responsible action** **Engage our communities and customers with how we are collaborating to build a climate resilient place**						
Objectives	**Action**	**Lead Department / Team**	**Partners**	**Timeframe (years)**			
			(Internal & External)	1- 2	2- 3	3-5	5 +
Increase training to internal staff and Elected Members	OD to build climate change training into online and face to face training for staff and elected members	OD	all service units	✓			
Develop Sustainability & Climate Change Communications Campaign	Develop internal & external campaign to align with current messages & projects to support staff and the general public in being more sustainable and climate aware	Corporate Communications	Sustainability/external partners eg KNIB	✓			

Partnerships							
Priority	**Work with key partners and local communities to ensure a collaborative and effective strategic approach to climate change**						
Objectives	**Action**	**Lead Department / Team**	**Partners**	**Timeframe (years)**			
			(Internal & External)	1- 2	2- 3	3-5	5 +
Continue to work in partnership with internal & external agencies to address the impacts of climate change	'Map' the network of statutory and community bodies who have supported council used in the past to aid extreme weather responses and define roles and responsibilities going forward. IS comments Multi agency partnerships all listed with plans.	Administration - (Sustainability)	Community Planning/ Keep Northern Ireland Beautiful	✓	✓		
	Develop a Community Resilience Plan including building knowledge and understanding of climate change and opportunities for community to respond with their own ideas.	Administration - (Sustainability)	Community Planning/ Keep Northern Ireland Beautiful	✓	✓		
	Continue to work with key stakeholders on vulnerable individuals/communities to add any support as and when required.	Administration - (Risk)	SEHSCT/NIWater	✓	✓	✓	✓

Data Gathering & Monitoring							
Priority							
Objectives	**Action**	**Lead Department / Team**	**Partners**	**Timeframe (years)**			
			(Internal & External)	1- 2	2- 3	3-5	5 +
Develop an evidence base for climate change risks within the borough.	Continue to use flood information available through Rivers Agency and information through flood incident line. Continue to review flooding hotspots each quarter by the EPG Flooding & Extreme Weather group with opportunities for remidial action being consider.	Administration - (Risk]	HOST/CLT/EPG Flooding & Extreme Weather Group	✓	✓	✓	✓
	Map areas identified as vulnerable to climate change including those at risk of flooding and/or storm surges, coastal erosion, heat maps to identify areas for cooling and areas exposed to high winds, ensure preventative and adaptive measures are put in place to ensure continuation of services.	Administration - (Sustainability]	Risk/GIS	✓	✓	✓	✓
	Develop a structured way to capture and map local knowledge and understanding of areas vulnerable to the effects of climate change within ANDBC	Administration - (Sustainability]	Risk/GIS	✓	✓	✓	✓

Data Gathering & Monitoring (continued)							
Priority							
Objectives	**Action**	**Lead Department / Team**	**Partners**	**Timeframe (years)**			
			(Internal & External)	1- 2	2- 3	3-5	5 +
Improve understanding of potential adaptation costs and benefits.	Develop a blue/green infrastructure plan that will establish areas best suited for climate change adaptation through flood eleviation and sustainable drainage	Administration - (Sustainability]	Parks & Cemeteries/ Planning/Capital/ Regeneration	✓	✓		
	Increase knowledge and understand from good practice examples, working in partnership with others to develop ideas.	Administration - (Sustainability]	all service units	✓	✓	✓	✓
Continue to keep a record of extreme weather events and the councils response to them and impact on the community	Maintain a record of the type and scale of event and cost of response and repairs	Administration - (Sustainability]	Risk/Assets & Property	✓	✓	✓	✓
Continue to record Environmental Health emergency response information	Keep headline records of areas requesting emergency support and amount of payment requested. This will reinforce mapping of vulnerable areas - domestic and commercial - and resourcing.	Environmental Health	Sustainability/GIS/ Finance	✓	✓	✓	✓

Operations							
Priority							
Objectives	**Action**	**Lead Department / Team**	**Partners**	**Timeframe (years)**			
			(Internal & External)	1- 2	2- 3	3-5	5 +
Strengthen the resilience of the Council by mainstreaming adaptation considerations into operations and service delivery	Continue to review tourism and events planning in terms of extreme weather being included in risk assessments	Tourism	Risk/Assets & Property/ Sustainability	✓	✓	✓	✓
	Review halls, leisure spaces - internal and external to include risk assessment for extreme weather, prioritisation of sites and protocol for cancelations - extreme weather included in risk assessment	Leisure & Amenities	Risk/Assets & Property/ Parks & Cemeteries/ Sustainability	✓			
	Review maintenance schedules to include more preventative measures, eg clearing drains more often particularly at times of leaf fall, sandbag provision in advance, raising boilers at risk of flood waters	Assets & Property	Sustainability/DfI/Waste	✓			
	Review response to bathing water quality during flood events - consider a prediction model to include communications to raise awareness of the risk of reduced bathing water quality following periods of heavy rainfall.	Environmental Health	Communications	✓			
	Continue to ask DAERA for bathing water testing data all year round in order to build a clear picture of quality across the boroughs beaches for which ANDBC operators them.	Environmental Health	DAERA				

Operations (continued)							
Priority							
Objectives	**Action**	**Lead Department / Team**	**Partners**	**Timeframe (years)**			
			(Internal & External)	1- 2	2- 3	3-5	5 +
Strengthen the resilience of the Council by mainstreaming adaptation considerations into operations and service delivery (continued)	Review response to monitoring, identifying and communicating locations of blue green algae blooms.	Environmental Health	DAERA				
	Review existing and future cemetery planning to ensure extreme weather is included	Parks & Cemeteries	Capital Projects, Planning/GIS/ Sustainability	✓			
	Develop severe weather protocol for waste management, property, parks, cemeteries & fleet supported by a clear communications method to inform public of any changes/ alterations	Waste & Cleansing Services	Assets & Property, Parks & Cemeteries/ Communications	✓			
Review operational response to increased visitors, including litter, waste and antisocial behaviour	Continue to dentify areas at risk of increase in litter, fire risk, anti-social behaviour and ensure response procedure to this is fit for purpose, including communications.	NET	Waste & Cleansing/ Environmental Health/ NIFRS/PSNI	✓			
	Review resources required to respond to commercial health and hygene issues as a response to extreme weather	Environmental Health		✓			
Human Resources	Review of staff working conditions and PPE for extreme weather - breaks, hydration, sunscream, shading, AC	Administration (H&S)	all Service Units	✓			
	Review of working patterns and shifts or redirection of staff to more urgent weather related duties	Human Resources	all Service Units	✓			

Energy & Buildings							
Priority							
Objectives	**Action**	**Lead Department / Team**	**Partners**	**Timeframe (years)**			
			(Internal & External)	1- 2	2- 3	3-5	5 +
Risk assess all council buildings and sites against the effects of climate change and develop an action plan and budget to manage this	Undertake climate risk assessment of all buildings and sites based on data available including older sites with exposed stonework, sites with shared/contracted spaces	Assets & Property	all Service Units	✓	✓		
	Ensure operational equipment is utilised correctly and operating efficiently, eg heating/cooling.	Assets & Property		✓			
	Prioritise opportunities for natural heating & cooling to avoid high energy costs	Assets & Property	Capital Projects/ Regeneration	✓	✓	✓	✓
Develop a Fleet Management Strategy	Review of operation procedures in times of extreme weather	Assets & Property		✓			
		Assets & Property		✓			
Develop a Sustainable Buildings Criteria	Develop a baseline criteria for future builds and refurbishments include lifecycle costings as part of a wider Sustainable Capital Projects policy.	Capital Projects	Finance/Procurement/ Leisure & Amenities	✓			
	Ensure Council capital development and regeneration projects are designed and built to respond and adapt to climate change	Strategic Capital Projects/Regeneration	Finance/Procurement/ Leisure & Amenities	✓	✓	✓	✓

Green Space & Biodiversity							
Priority							
Objectives	**Action**	**Lead Department / Team**	**Partners**	**Timeframe (years)**			
			(Internal & External)	1- 2	2- 3	3-5	5 +
Develop Green Infrastructure Plan	Integrate climate adaptation into management and maintenance plans for key public parks & spaces.	Parks & Cemeteries	Sustainability/Climate NI/NIEL	✓	✓	✓	✓
	Identify opportunities during capital and regeneration projects to design in Green Infrastructure	Capital Projects/ Regeneration	Parks & Cemeteries/ Sustainability/Climate NI/NIEL	✓	✓	✓	✓
	Identify sites that could manage flood risk with natural flood water storage and work in partnership with external organisations to use these as flood alleviation	Sustainability	Planning/Parks & Cemeteries/Climate NI/ NIEL	✓	✓	✓	✓
	Explore the use of SUDS on public sector owned infrastructure to include where possible soft SUDS options such as include swales, ponds, wetlands, green roofs, infiltration trenches for capital development projects.	Sustainability	Assets & Property/Parks & Cemeteries/Capital Projects/Regeneration/ Planning	✓	✓	✓	✓
	Continue no mowing areas, develop in other areas	Parks & Cemeteries		✓	✓	✓	✓
	Utilise climate friendly and local planting	Parks & Cemeteries	Sustainability	✓	✓	✓	✓
LBAP	Develop any climate adaptation actions from LBAP	Parks & Cemeteries	Sustainability	✓	✓	✓	✓
	Continue Nature Recovery Networks project	Parks & Cemeteries	Sustainability	✓	✓	✓	✓
LDP	Develop and consult on supportive Planning Policy in Draft Plan Strategy	Planning	Sustainability	✓			

Implementation and Monitoring

This Climate Adaptation Plan is the beginning of a new process to deliver a range of actions to adapt Ards and North Down Borough Council to the impacts of Climate Change.

This plan will continue to evolve to ensure the borough remains prepared to adapt.

The Action Plan will remain as a live document. There will be annual reviews at the Climate Action and Sustainability Champions Working Group to discuss progress and issues raised.

This will also remain part of the Roadmap to Sustainability and will be reported to Council as per agreed schedule.

Meeting the reporting requirements of the Climate Change Act NI will be determined by Department of Agriculture and Rural development (DAERA). They will define both format and frequency of reporting. At time of writing this plan the reporting element of the legislation is going through a consultation phase.

Monitoring of the Adaptation Plan and Actions will vary depending on the type of objectives. Indicators will be agreed as individual actions are implemented. Examples of indicators:

- Financial
- Staff hours
- Training hours
- Community engagement sessions
- Grants/emergency support claims
- Water/air quality data

This list is not exhaustive.

Some of these indicators will form part of our mandatory reporting requirements, within the Climate Change Act NI.

For more information on the Ards and North Down's Climate Adaptation Summary Report, please visit the website are contact the department:

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Ards and
North Down
Borough Council