

Environmental Improvement Plan

for Northern Ireland



Northern Ireland
Executive

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1. Introduction

We currently face stark environmental challenges, apparent in many parts of Northern Ireland, including most notably at Lough Neagh. We are witnessing huge biodiversity loss, warmer and wetter climates and an environment that is infinitely more polluted. It is vital that we harness the growing awareness in relation to these existential issues and implement real and lasting change for generations to come, before it is too late.



Governments around the world talk a lot about strategies and concepts like ‘joined-up thinking’. These management concepts don’t always mean much to ordinary citizens, but they are the processes which an organised democracy uses to solve problems. Humanity is facing unprecedented problems, which, in the long term could threaten our very existence, and in the shorter term, our health, wealth, security and wellbeing. So, if ever there was a time for some really joined up thinking, it’s now.

If we were able to zoom out now and look at Northern Ireland’s environmental challenges and current attempts at addressing these, from a great distance, we would see that planet Earth, including our small corner of it, is the very definition of a joined-up system. Our air, water, land, wildlife, health and wellbeing are all inter-related and interdependent and we urgently need to find an approach that addresses the myriad of problems we face. We need to find a new way to live in harmony with nature. Humankind is the most advanced species ever to walk the Earth and there is no reason why we can’t apply our ingenuity, our creativity and our capacity for collaboration to address the degradation of our natural world. If we don’t find ways, and find them quickly, to restore habitats, reverse the extinction of species, drastically reduce greenhouse gas emissions, and manage our waste products, then our lives, quite simply, won’t be worth living.

Northern Ireland’s first Environmental Improvement Plan forms the basis for this change, working alongside other policies and strategies such as the Green Growth Strategy (once adopted), the Circular Economy Strategy and the future Agriculture Policy framework, to bring about the changes we urgently need. There will of course be costs associated with many of the actions in this Plan. Adequate funding will be required through a variety of mechanisms, and it will be important to ensure that the necessary resources are in place to deliver the ambitious environmental objectives set out in the Environmental Improvement Plan.

Without a healthy environment it isn’t possible to have a healthy and thriving society, and it is through working with our natural environment that we can begin to play our full part in tackling climate change and addressing the biodiversity crisis. We need to change our attitude to make waste unacceptable, and to move rapidly away from ‘single use’ plastics and towards a truly



circular economy. Northern Ireland's size, location and existing infrastructure give us a strong foundation on which to build a future with the environment at the core of everything we do. We could become a world leader in environmental protection, climate preservation, nature restoration and green innovation, with everyone informed, engaged and playing their part. It's going to require a great deal of planning, but we need to be ambitious and we need to move fast. It's time to think big.

This Plan lays out what government thinks needs to happen to bring about this better future we all want and need. But to succeed, it needs us all to play our part and help make it happen. If you want to get involved, for yourself, your family, your children, or for whatever reason, then please read the Plan and then stay in touch with us as we develop actions for everyone to work together for a better future and a better now.

Andrew Muir MLA

Minister for Agriculture, Environment and Rural Affairs



2. Strategic Context

Northern Ireland faces a range of local environmental challenges including habitat and species loss, greenhouse gas emissions, climate change, waste management, the development of a circular economy, water quality, soil quality, air quality, waste crime, etc. In addition, the United Kingdom's withdrawal from the European Union provides new environmental opportunities and, as environmental degradation poses an increasing challenge to all parts of our globe, there is a clear impetus for the first long-term, over-arching Environmental Improvement Plan for Northern Ireland.

Northern Ireland's first Environmental Improvement Plan will form the basis for a coherent and effective set of interventions that can deliver real improvements in the quality of the environment and thereby: improve the health and well-being of all who live and work here; create opportunities to develop our economy; elevate Northern Ireland to an environmental leader; and enable us to play our part in protecting the global environment for many decades to come.

Part of the Plan identifies what we have achieved, where we are now, and what strategic initiatives are already in place and how these can be enhanced through new approaches to the issues we face going forward.

A new Programme for Government (PfG), once agreed, will provide the strategic backdrop and drivers for the huge range of activities undertaken by Northern Ireland departments. The Environmental Improvement Plan seeks to build on the valuable work that has been, and continues to be, done across a wide range of relevant policy areas.

DAERA has been working with stakeholders and across Northern Ireland Executive departments to develop strategic outcomes to support the premise that a better environment can provide great economic, social and health benefits for individuals and for society, and outline a pathway to realising these benefits. Underpinning this ongoing work is DAERA's Science Strategy Framework, which guides and directs how DAERA utilises science in delivering services and optimises the value DAERA achieves from science, delivering positive impacts for our environment.

The Environmental Improvement Plan forms part of the wider Green Growth agenda and, for the most part, is intended to be a high-level, Executive-endorsed Plan that will sit alongside both new and existing strategies.

For a high-level Environmental Improvement Plan to be meaningful it is essential that it is ambitious in terms of its breadth and depth. The Plan aims to focus on ambitious outcomes for the big environmental issues facing us that will make a difference to the lives and well-being of current and future generations.

Enhancing our environment matters, as a healthy environment is interlinked with our health and well-being. What we do and how we do it impacts on the lives and needs of our current



and future generations. Long term planning is essential to influence and deliver the necessary protection and enhancement of our natural and cultural capital and to ensure its long term future for those generations who will inherit it from us.

Whilst this is a high level Plan setting the Executive's direction of travel for our environment over the coming decades, greater detail on actions, targets and desired future outcomes will be provided during the development and implementation of the various Strategies, Action Plans and Programmes which will sit under the umbrella of the Environmental Improvement Plan. The detail around the various Impact Assessments to be completed will therefore be contained within those resultant Strategies, Action Plans and Programmes as it would not be practicable to have them accompany this Plan.

The following sub-sections provide some further detail on the key strategic drivers underpinning the Environmental Improvement Plan.





A. Sustainability

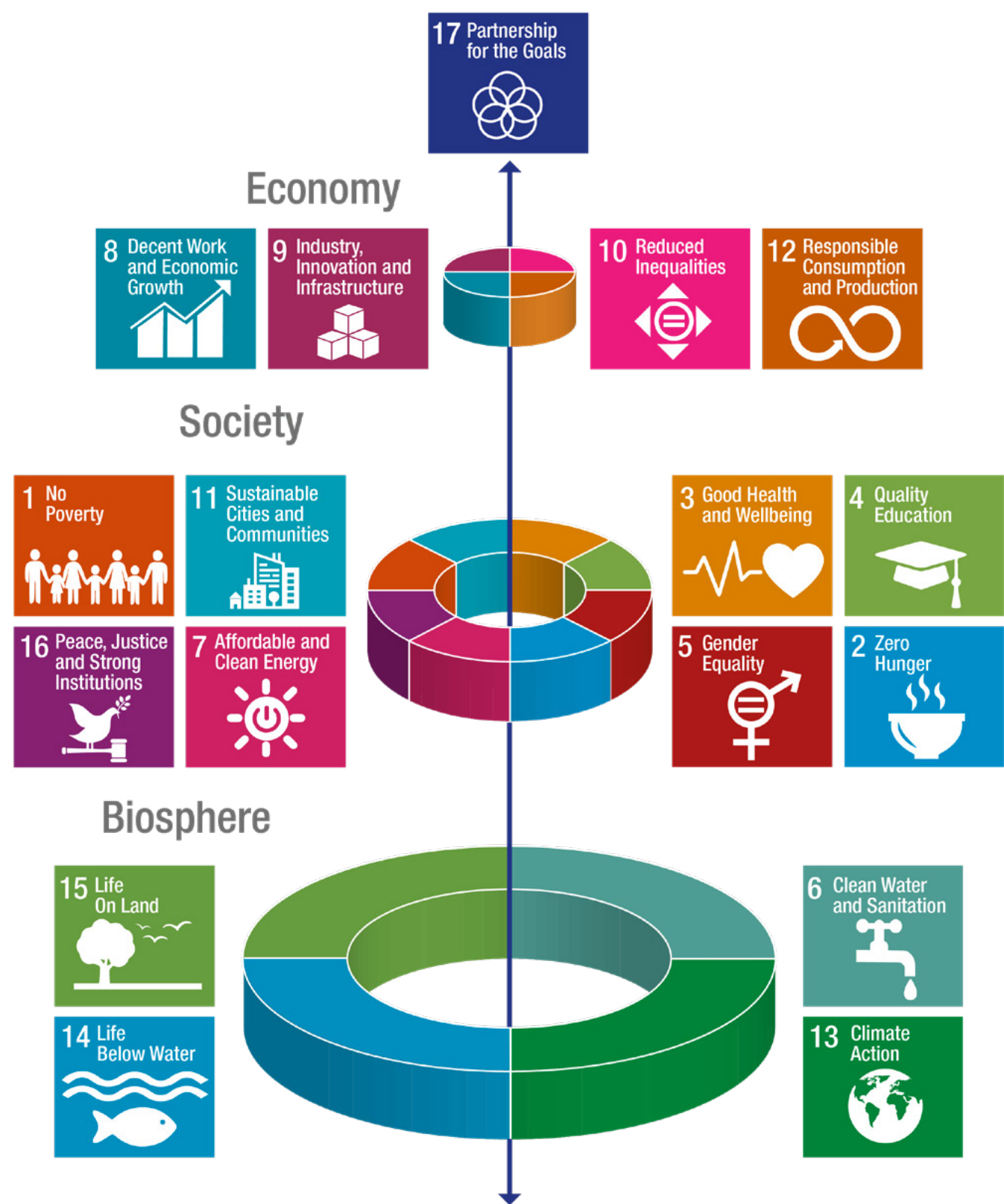
The United Nations Sustainable Development Goals (SDGs) are a call for action by all countries to promote prosperity while protecting the planet. They recognize that ending poverty must go hand-in-hand with strategies that build economic growth and address a range of social needs including education, health, social protection, and job opportunities, while tackling climate change and protecting the environment.

The Environmental Improvement Plan aims to link each set of proposed actions and targets to improve our environment to the relevant SDGs. The 17 SDGs are detailed in Figure 1.





Figure 1: United Nations Sustainable Development Goals



Azote for Stockholm Resilience
Centre, Stockholm University.



B. Global Climate & Biodiversity Action

In committing to action under the UN SDGs, the UK is signatory to a number of international agreements on the environment, many of which underpin our local strategies, policy and legislation in Northern Ireland. A number of specific International agreements guide our local response and actions to address global concerns on climate change and sustainable use of biological diversity in our natural environment, both on land and at sea.

The Convention on Biological Diversity (CBD) and associated Aichi targets shape the current NI Biodiversity Strategy 2015-2020 and the Peatland Strategy which will support the Environmental Improvement Plan. The Kunming-Montreal Global Biodiversity Framework commitments will direct our new Nature Recovery Strategy 2032 and accompanying targets and actions for conserving, protecting and enhancing biological diversity in our natural environment ecosystems both on land and at sea. COP21 saw the signing of the 'Paris Agreement', from which the UK Net Zero commitments have followed. Subsequent COP events, such as COP26 in Glasgow, have continued to bring international Parties together to seek to accelerate global action on climate change. The final agreement of COP26, known as the 'Glasgow Climate Pact', recognised the importance of "protecting, conserving and restoring nature and ecosystems including through forests and other terrestrial and marine ecosystems acting as sinks and reservoirs of greenhouse gases.

The Environmental Improvement Plan will therefore provide a coherent response to the global challenges of climate change and biodiversity loss addressed by these commitments and the opportunity to align the actions and measures needed to address biodiversity and climate simultaneously.

C. Green Growth Strategy

A Green Growth approach requires tackling climate change holistically, considering it in the context of jobs, the economy and the environment. It means using the move from a high to a low greenhouse gas emissions economy to also improve people's quality of life through green jobs and a clean environment.

In 2021, DAERA, on behalf of the Northern Ireland Executive, led the development of a draft Green Growth Strategy. The draft Strategy was consulted on and updated to reflect the consultation outcome and is awaiting Executive approval. As drafted, the Strategy is an overarching multi-decade strategy for balancing climate, the environment and our economy. Delivering it would involve all parts of government and wider society working in collaboration from policy development to delivery, working and learning together to develop solutions that maximise the outcomes that we want to see. This would mean balancing and utilising tools such as investing in research and development, de-risking new technology, regulation, legislation, incentives, information and budgets.

The Environmental Improvement Plan would be one of the main strategies/plans underpinning Green Growth providing a focus for conserving and enhancing our natural environment for the coming decades. In that way, the Environmental Improvement Plan would align with, and be complementary to, a Green Growth Strategy.



D. Northern Ireland Climate Action Plan 2023-27

DAERA is leading the development of Northern Ireland's first Climate Action Plan (CAP), as required by the Climate Change (Northern Ireland) Act 2022. The CAP will set out Northern Ireland's approach to meeting the carbon budget for 2023 to 2027 through a set of proposals and policies for emissions reductions. It will also establish a pathway towards the interim targets for 2030 and 2040 and the overall net zero by 2050 target.

The Climate Action Plan provides an opportunity to set out an approach to tackling climate change which will transform our society for the better by delivering improvements in housing, increased energy security through renewables, as well as active travel choices that can lead to more active lifestyles and the co-benefits for public health. Delivering employment opportunities as we transition to a green economy should be an integral part of the Climate Action Plan while improving biodiversity through nature-based solutions will be embedded in this approach.

A significant amount of work has taken place across government, particularly on the identification of policies and proposals to reduce emissions across sectors. These policies and proposals will impact across all sectors of Northern Ireland's society and economy. The CAP will also take into account the March 2023 advice report from the UK Climate Change Committee which set out a pathway for Northern Ireland to achieve net zero emissions by 2050. The public's views were sought on the CCC's advice and feedback is being used to inform the Climate Action Plan.

DAERA is committed to delivering a Climate Action Plan that is timely, evidence-based, informed by internal and external stakeholders and will deliver the emissions reductions required to achieve the carbon budget. The draft Climate Action Plan will require Executive agreement and will be published for consultation as soon as possible.

E. Environmental Governance & Co-operation

Environmental Governance

Environmental governance is about making appropriate decisions on the environmental outcomes we are seeking to achieve and the effective and efficient deployment of our limited resources to achieve those outcomes - taking a strategic approach to the environmental challenges that we face both here and on the global stage. This Plan will play a key role in this regard.

Optimal structures and processes need to be in place to enable positive environmental outcomes to be achieved. Development of internal governance arrangements to support the implementation of the Environmental Improvement Plan will form part of a wider internal review of environmental governance.

There is a realisation that Environmental Governance is a complex issue with a range of options, including the consideration of creating an independent Environmental Protection Agency. Proposals also need to be set in the context of the changed regulatory landscape created by the extension of the Office for Environmental Protection's remit to Northern Ireland in February 2022 and the potential role of a Northern Ireland Climate Commissioner.



The Environment Act 2021 (the ‘Act’) covers a wide range of environmental matters and sets the agenda for environmental governance now that the UK has left the European Union. The core provisions of the Act are the:

- establishment of the Office for Environmental Protection (OEP), a new independent environmental oversight body to assume a role previously undertaken by the European Commission; and
- preparation & publication of:
 - an Environmental Improvement Plan (EIP); and
 - a policy statement on environmental principles, to which all NI departments and UK Government Ministers making policy for Northern Ireland must have due regard.

An EIP is defined in the Act as: *“a plan for significantly improving the natural environment”*. It is not enough that it protects the environment, it must be designed to make it better and DAERA is required to set out the steps NI departments intend to take to improve the environment. The plan may also set out steps to improve people’s enjoyment of the natural environment.

The first EIP must be published within 12 months of the relevant requirements becoming law, i.e. by 25 July 2023 and DAERA must publish annual progress reports. The EIP must be reviewed (and if necessary, revised) within five years of its publication. DAERA must also obtain (and publish) appropriate data in order to monitor progress on environmental improvement.

Office of Environmental Protection

The OEP is independent of both the NI Executive and UK Government and performs a number of statutory functions:

- Monitor and report on DAERA’s environmental improvement plan;
- Monitor and report on implementation of NI environmental law;
- Advise on changes to NI environmental law, etc.;
- Handle complaints about relevant public authorities and, where necessary, investigate and take enforcement action (‘serious’ breaches only).

The OEP is tasked with holding government to account for the proper implementation of environmental law. Taking action against individuals or private businesses remains the responsibility of NIEA and other enforcement agencies.

The OEP is required to monitor progress against the EIP and publish annual reports within 6 months of DAERA’s progress report. It may include consideration of how progress could be improved, and whether the data published by DAERA is adequate. DAERA must then respond to the OEP’s annual report, addressing any recommendations made. This will deliver a new robust and independent mechanism to monitor environmental improvement, with reports published and laid before the NI Assembly.



Environmental Principles Policy Statement

The policy statement on environmental principles will transpose into NI environmental law 5 long-standing principles embedded in the Treaty on the Functioning of the EU. In preparing the statement, DAERA must be satisfied that the statement will contribute to the improvement of environmental protection and sustainable development. Timely and comparable data to enable appropriate measurement/assessment against targets will be important.

The 5 principles that will be included in the statement are:

- the principle that environmental protection should be integrated into the making of policies;
- the principle of preventative action to avert environmental damage;
- the precautionary principle, so far as relating to the environment;
- the principle that environmental damage should as a priority be rectified at source; and
- the polluter pays principle.

Local/National/International Co-operation

The Plan seeks to adopt a holistic approach bearing in mind that environmental issues do not respect borders. We share the same air and water across these islands and have common landscapes, habitats and wildlife movement. This will require co-operation on a North/South basis as a single biogeographic unit as well as working on an East/West level with the other UK administrations to assess and report on the condition of our biodiversity, habitats and species.

As part of the implementation of the Environmental Improvement Plan we will seek, consider and share international knowledge and best practice, and embrace collaboration with international partners (including the other constituent nations of the United Kingdom and the Republic of Ireland) to deliver improved benefits for Northern Ireland's environment.

Success will be achieved through partnership working between Departments, District Councils, community and voluntary organisations, business (including the agriculture sector) and environmental NGO partners. Such partnerships have already played a crucial role in helping to protect our environment and building on these will be essential to protect and significantly improve our environment in the years ahead.

F. Agriculture, Food & Environment

Northern Ireland requires an agricultural policy that is better suited to local needs and one that will underpin long term sustainability within the industry. Changes in farming practice, technology adoption at farm level and along the supply chain will be needed to meet the emissions reductions targets set in the Climate Change Act (NI) 2022.



The Department's vision for future farm support and development is one that helps farm businesses and land managers transition to a more sustainable farming sector by seeking to implement policies and strategies that benefit our climate and environment, while supporting our economically and socially significant agriculture sector. The schemes will support farm businesses to continue to produce high quality, nutritious food whilst importantly, also reducing their environmental impact.

The Department continues to work with farmers, land managers, environmental stakeholders, veterinary associations and food processing sector organisations to develop the new Farm Support and Development Programme using co-design that is focused on delivering the four key desired outcomes of:

- Increased productivity and profitability;
- Environmental sustainability;
- Improved resilience; and
- An effective functioning supply chain.

These outcomes are synergistic and improvement in one outcome can provide a positive effect on one or more of the other outcomes.

Air quality, water quality, biodiversity, soil health and landscape are all heavily influenced by farming practices. Our environmental challenges can only be addressed if agriculture and farmers are part of the solution. We must join up our environmental ambitions with farm economic activity, where management of the environment becomes a profit centre within the farm business rather than a cost centre.

Schemes to facilitate ecosystem restoration, and to address biodiversity loss, and water and air quality (especially reducing emissions) are under development as part of this Programme. Importantly the planned Schemes and Measures provide levers to contribute to the statutory obligations under the Climate Change Act.

A sustainable agri-food industry which promotes health and well-being through locally sourced nutrition, which promotes a positive food culture and which connects people to their environment can be a driver of societal transformation. The Covid-19 pandemic has underlined this and there has been increased public interest in the environment, traceable and safe food, and connections across rural society more generally.

A world class agri-food sector is central to the health of Northern Ireland's economy and people. It not only impacts on the health, well-being and prosperity of the nearly 1.9 million people who live here, but also visitors to our country and people living in our numerous export markets.

DAERA has been leading on the development of a cross departmental Northern Ireland Food Strategy Framework which will ensure strong alignment across linked policy areas such as



agricultural, environment, economic, and social and public health policies. It is a mechanism that will enhance collaborative working around food to get better outcomes for Northern Ireland.

The draft Food Strategy Framework recognises the interconnectedness between food, health, the economy and the environment and has been developed collaboratively with officials from across Northern Ireland Departments and other stakeholders. It proposes a new strategic food systems approach for Northern Ireland, and sets out a long-term vision, high level principles and areas for strategic focus. DAERA led a public consultation in 2021 to seek stakeholders' endorsement of the proposals - responses indicated a strong endorsement by stakeholders for the NI Food Strategy Framework approach.

The primary role of DAERA's Knowledge Advisory Service is the holistic development of farm and food businesses, where environmental and economic performance are inextricably linked, through the development and delivery of Knowledge and Technology Transfer, industry training, benchmarking and technical support to the industry. This ensures that the environmental sustainability, resilience and productivity of our land based and food processing industries are the primary focus, allowing better integration of environmental advice to support the agri-food sector.

The objective will be an industry that is environmentally responsible, efficient, adaptable, responsive and resilient in times of crisis and uses knowledge and evidence as primary tools to deliver sustained success. Northern Ireland can become an exemplar as to how, with a small environmental footprint and the highest standards of animal health & welfare, to both protect health and feed large numbers of people sustainably, efficiently and profitably.

G. Marine Environment

Northern Ireland's marine area is over 6,800 km² and represents approximately one third of our natural environment. The coast, and the seas around it, include highly productive and biologically diverse ecosystems. The seas provide the oxygen we breathe, store carbon dioxide we produce and are an important part of the water cycle and climate system. Our marine environment supports fishing, aquaculture, tourism and other marine industries that make up the '*blue economy*'.

The Marine and Coastal Access Act 2009 and the Marine Act (Northern Ireland) 2013 provide mechanisms for managing the marine environment, including Marine Licensing, Marine Planning and Marine Protected Areas (MPAs). The Fisheries Act 2020 provides a framework for the management of fishing and aquaculture activities.

Northern Ireland works with the other UK administrations to develop and implement the UK Marine Strategy to achieve good environmental status (GES) in our seas. Achieving GES is about protecting the marine environment, preventing its deterioration and restoring it where practical, while allowing sustainable use of marine resources. GES is underpinned by an ecologically coherent network of marine protected areas.



H. Built & Historic Environment

The built environment is a major component of our environment. How we maintain, reuse and enhance our built environment - whether in our large towns and cities, or in the countryside - will be a vital element in the success of the Environmental Improvement Plan. The Department for Communities (DfC) has a significant role in this area, with its responsibilities including housing, urban regeneration and the historic environment. The Department works closely with DAERA, the Department for Infrastructure, the Department for the Economy, the NIHE, district councils and others in fulfilling its remit.

Urban areas are centres of innovation and growth, and engines of economic development; but they are also major contributors to climate change, generating significant greenhouse gas emissions. Many cities have developed in low-lying areas and are vulnerable to the impacts of climate change - Belfast is a prime example of such a city. Blue / green infrastructure can not only assist the greening of our urban environment but also facilitate better water management and support safer, cleaner, sustainable spaces that allow interconnectivity, provide recreation spaces, and help communities to thrive economically and socially. As our urban areas evolve, the need for different types of buildings changes, and there is therefore a need to examine incentives to repurposing existing buildings to avoid dereliction and blight, but also to reuse embodied energy and increase energy efficiency.

Access to good quality, affordable and sustainable homes that are appropriate to people's needs provides enhanced societal benefits including health and wellbeing. Use and reuse of housing, including appropriate construction, renovation, retrofit and repurposing, also play a vital role in emissions reduction while seeking to ensure a fair and just transition to carbon neutrality. The Housing Supply Strategy seeks to put people at the centre of housing supply, delivering on objective need underpinned by principles of fairness and equality. It will focus on meeting housing challenges, including tackling whole-life carbon emissions from both new homes and existing homes, increasing the provision of the right homes in the right locations, and the creation of thriving, attractive and sustainable communities where people want to live. Work on a revised Fuel Poverty Strategy is underway and will align with other Executive Strategies, including the Energy Strategy, and the overarching direction they set for our environment, climate change and energy efficiency.

Our historic environment and cultural heritage are major draws for visitors - from near and far - and a critical element of who we are and how we feel about ourselves. Our heritage is our authentic voice and distinctive character; it is the basis for our confidence, our prosperity, and our health. It binds us together, attracts investment, and improves quality of life. DfC is leading in the development of an Executive Culture Arts and Heritage Strategy that will complement this Environmental Improvement Plan.

Plans for creating welcoming and sustainable places will therefore be vital in achieving the Environmental Improvement Plan, as well as delivering community and economic benefits.



3. Our Natural Environment

Our natural environment is our life support system and our greatest asset. For its size, Northern Ireland is amongst the most geologically diverse areas in the world and this shapes its varied and beautiful landscapes and rich nature, wildlife and habitats. The value of our natural heritage is reflected in the abundance and diversity of our wildlife and habitats, from our diverse marine life and internationally significant coastal waters, river and lake systems, to our important peatlands, oak and other native woodland types, semi-natural grasslands and coastal habitats.

Our natural environment contributes to our prosperity and well-being in numerous ways. It provides the essential services for our life and work, from the air we breathe, the food we eat and the water we drink, to the resources for building our infrastructure. It protects our communities from flooding and extreme weather and supports our health and quality of life, providing open spaces for exercise, social engagement and mental well-being.

Our environment is also vital to our economy. Our landscapes and seascapes, wildlife, habitats, water and soil support our farming, food industry, business and tourism sectors and local economies in our rural areas. Healthy ecosystems will play a key role in combating climate change, removing carbon from the atmosphere and locking it into habitats on land and in sea, and helping us to adapt through flood alleviation. We will be increasingly reliant on a resilient and fully functioning natural environment, capable of continuing to provide a wide range of ecosystems services vital to the economy and society as a whole.

However our natural environment is under threat and significant action is needed to restore the health and vigour of the natural systems that sustain us. Pressures such as changes in agricultural practices, water and air pollution, development and invasive species, lead to habitat loss and fragmentation and associated species decline. Better protection and management of our natural capital assets is required to enhance ecosystem resilience and capacity to provide nature-based solutions to today's socio-environmental challenges.

The Kunming-Montreal Global Biodiversity Framework commitments set out an ambitious plan to implement broad-based action to bring about a transformation in society's relationship with biodiversity, ensuring that by 2050 the shared vision of living in harmony with nature is fulfilled. The initial focus is to reverse biodiversity loss and create a nature-positive world by 2030, with the emphasis of this decade being on ecological restoration.

Taking action will create exciting opportunities for Northern Ireland, supporting our ambitions for Green Growth and developing new skills and products whilst supporting communities and helping nature to flourish. Our economy will be stronger and more resilient, and society will be healthier, fairer and more inclusive.



4. Natural Capital

Natural Capital refers to the world's stock of natural resources and includes geology, soils, air, water and all living organisms. These are all elements of the environment around us that provide us with food, clean air and water, wildlife, energy, wood, recreation and protection from hazards.

Natural capital assets provide a wide range of valuable ecosystem services that underpin our economy and society. We obtain benefit from these assets every day but if we keep drawing down our stock of natural capital without allowing or encouraging nature to recover, we run the risk of local, regional or even global ecosystem collapse. Working against nature by over exploiting natural capital can be disastrous as a decline in ecosystem productivity and resilience makes some regions more prone to extreme events such as floods and droughts which may result in substantial costs.

Valuing our natural capital is therefore central to the environment and connects each of the Strategic Environmental Outcomes set out in this Plan. A better understanding of the value and benefits that flow from natural capital will help to encourage more efficient, effective and sustainable use of our environment.

The development of a robust natural capital accounting and ecosystem condition framework will enable better consideration of the role of nature in our economy and our well-being and underpin other cross-cutting NI strategies and programmes. It will support actions in areas such as the circular economy, climate change, biodiversity, resource efficiency and sustainable production. It will also encourage more long-term thinking and consideration of all costs involved in a decision.

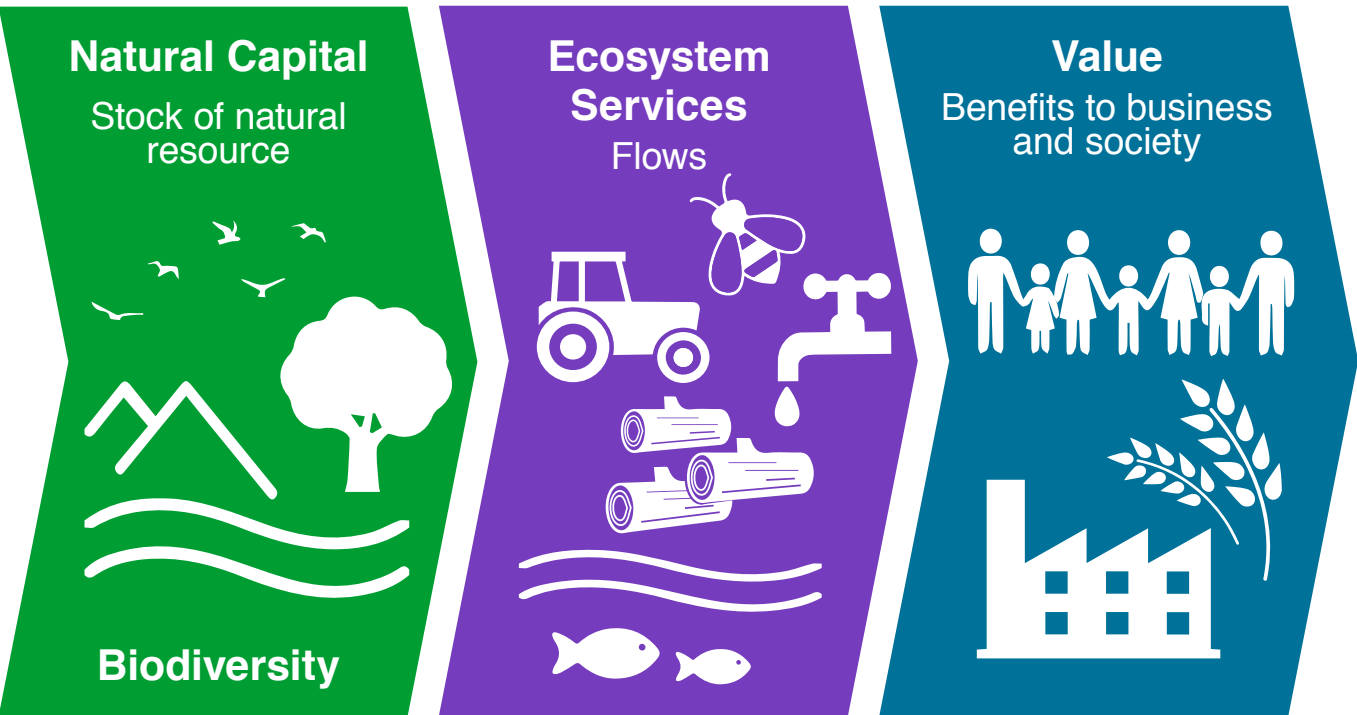
The Dasgupta Review on the Economics of Biodiversity, commissioned by HM Treasury, has called for transformative change in how we consider nature in national accounting and economic decision making.

In adopting a Natural Capital approach in Northern Ireland we will need to draw together economic, social and scientific evidence and provide practical approaches to enable people to value nature systematically and fully when they are making decisions on the ground. This will require high quality data on the location and condition of our natural assets and ecosystems; comprehensive modelling and assessment of how these ecosystems are changing over time; and accessible sources of information in a standard format which are kept up to date.

The aim is to integrate a Natural Capital approach into all policy making and investment decisions, and ensure we value and protect our natural assets to make Northern Ireland more resilient and deliver sustainable economic growth and well-being.



Figure 2: Natural Capital & Ecosystems





5. Strategic Environmental Outcomes

The six Strategic Environmental Outcomes (SEOs) for the Environmental Improvement Plan are as follows (Figure 3). These are based around the DAERA core vision of sustainability at the heart of a living, working, active landscape valued by everyone.

Under each SEO are sets of proposals to improve our environment. Each set includes:

<ul style="list-style-type: none">• Current Position: A summary of the current position in respect of the relevant environmental issue including an indication of performance against targets where appropriate.
<ul style="list-style-type: none">• Actions: The steps departments intend to take to improve the environment (natural, built or historic).
<ul style="list-style-type: none">• Targets: Specific goals or outputs relating to the actions set out in the proposal - these could be to achieve a defined level of performance or publish a key document such as a consultation or guidance for example.
<ul style="list-style-type: none">• Vision/Outcomes: the intended/desired future outcome(s) which will in turn contribute to the achievement of the SEOs.

The other relevant SEOs and UN Sustainable Development Goals (SDGs), which each set of actions contributes to, are shown for each set of proposals.



Figure 3: The Strategic Environmental Outcomes



Excellent air, water
& land quality.



Sustainable production &
consumption on land and
at sea.



Healthy & accessible
environment & landscapes
everyone can connect
with & enjoy.



Zero waste & highly developed
circular economy.



Thriving, resilient & connected
nature and wildlife.



Net zero greenhouse gas
emissions & improved climate
resilience and adaptability.



Strategic Environmental Outcome 1

Excellent air, water & land quality

This Strategic Environmental Outcome covers key elements of our environment including: air quality; water quality; land quality; and local environment quality. For many people, these environmental issues represent their day-to-day experience of 'the environment' - from the air they breathe, to the quality of their drinking water and the condition of their local neighbourhood.

1. Air Quality

Current Status

The current NI regulatory annual mean air quality limit values for the main air pollutants of concern are PM_{2.5} (25 µg/m³), PM₁₀ (40 µg/m³) and Nitrogen Dioxide (40 µg/m³). The 24 hour mean limit value of Sulphur Dioxide is 125 µg/m³ (which is not to be exceeded more than 3 times a year) and the maximum daily 8 hour mean limit for Carbon Monoxide is 10 mg/m³.

Monitoring stations measure air quality and generate reliable data demonstrating compliance, or otherwise, with legislation. Of the five sites that measured PM2.5 in 2021, all pollutants met the EU Stage 1 (25 µg/m³) and EU Stage 2 (20 µg/m³) limit values (2021 report).

Whilst there are positive changes in some pollutant levels, others continue to exceed the more stringent Air Quality Standards objective.

97% of NI's ammonia emissions came from agriculture in 2020. From 2010 to 2017 agricultural ammonia emissions increased by 20%, reaching a level equivalent to the peak emissions of the late 1990s.

This was due to increasing livestock numbers and greater use of indoor housing systems, without a corresponding widespread uptake of ammonia reduction measures. The draft Ammonia Strategy will propose a series of farm measures to reduce ammonia.

The Trends Report 2022: Trends in Critical Load and Critical Level exceedances in the UK provides key information on UK and DA ecosystems relating to air pollution targets and provides the means to develop targeted action for emission reduction policies. Key data from the Trends Report 2022 for designated sites in Northern Ireland:

- 98% of Special Areas of Conservation (SACs) and 83.3% of Special Protection Areas (SPA) had nitrogen deposition rates exceeding their Critical Load. These are NI's most important habitats.
- 95.7% of Areas of Special Scientific Interest (ASSI) which are nationally important sites had nitrogen deposition rates exceeding their Critical Load for at least one feature.
- 100% of SACs, 100% of SPAs and 99.7% of ASSIs in NI had ammonia concentrations greater than 1 µg m³ (the long term annual average Critical Level for lichens and mosses and for ecosystems in which they are important).
- 27.8% of SACs, 21.4% of SPAs and 24.6% of ASSIs in NI had ammonia concentrations greater than 3 µg m³ (the long term annual average Critical Level for higher plants including heathland, semi-natural grassland, and forest ground flora).



Actions & Targets

- By March 2025: Develop a new Operational Protocol to Assess the Impacts of Air Pollution on the natural environment.

- Continue funding improvements in local air quality and explore further funding available.

- Improve traffic data on which to base modelling and projections.



- By March 2025: Develop an Ammonia Strategy to deliver reductions in ammonia emissions from agriculture.

- Secure Executive approval to launch a consultation on the Clean Air Strategy.

- Develop improved monitoring and data collection to allow us to measure the impacts of energy decarbonisation policies on air quality.
- Integrate Farm Business Support Schemes with Ammonia Strategy.
- The draft Ammonia Strategy will include proposals to support and collaborate with the agriculture sector in achieving sustained and tangible reductions in ammonia emissions.

Future Vision/Outcome

Cleaner air in Northern Ireland.

Fewer pollutants released by home heating systems.

Increased public awareness of health effects of poor air quality and sources of pollution.

Improved monitoring network.

Ammonia emissions reduced to a point where critical loads of nitrogen deposition and critical levels of ammonia are not being exceeded at any designated sites.

Actions also contribute to SEOs



UN Sustainable Development Goals





2. Water Resources: Quality & Quantity

Current Status

UK Water Framework Regulation water quality indicators:

No. or % achieving Good Ecological Status (surface water) & Good Chemical Status (groundwater):

- Marine: 10 of 25 (TRaC)
- Rivers: 32%
- Groundwater: 71%
- Lakes: 3 of 21

Rivers and lakes are showing deterioration, whilst our coastal and transitional water bodies remain unchanged.

In some areas, phosphorus & nitrogen levels in rivers & lakes are increasing due to agricultural inputs. This is a major concern, as around 39% of our water bodies do not meet targets for good water quality for phosphorus reasons, and nitrogen can negatively impact marine & groundwater bodies.

Nutrients Action Programme (NAP) measures are in place and apply to all farms in NI. The current Action Programme is being reviewed with the aim of implementing a revised Action Programme in 2025.

The NI Executive’s Long-Term Water Strategy (2015-2040) currently links all aspects of water management and sets out the principles behind the need for an integrated approach.

NI Water has a number of statutory environmental responsibilities and obligations. These include drinking water quality, wastewater quality, reducing pollution and a duty to prepare and maintain a water resources management plan (now called the ‘Water Resource and Supply Resilience Plan’).

NI Water’s Water Strategy 2021-2046 emphasises that it contributes to, and relies upon, the quality of the natural environment and sets out how it strives to protect it by working in an environmentally responsible manner, demonstrating high standards of environmental care and operational performance.

Actions & Targets

- 2024: Publish final RBMP setting out actions to achieve Good Status in our water bodies.
- By March 2024: Commission a Strategic Environmental Assessment of the next Nutrients Action Programme: Launch public consultation on SEA Environmental Report by December 2024.

- By 2031: achieve the sustainable management and efficient use of natural resources including water & soils.
- By 2027: 100% of waterbodies at Good Ecological Status (surface water) & Good Chemical Status (groundwater).
- By 2025 introduce Phosphorus and Nitrogen Balance targets for the NI agricultural sector, with a phased reduction to 2033 targets.



- River Basin Management Plans (RBMP) Programme of Measures by 2027:
 - Reduce phosphorus and protein content of concentrate animal feeds.
 - Reduce use of chemical fertilisers.
 - Minimised and correct use of pesticides.
- By 2025 deliver independent advice and capital grant support to address agricultural pressures on water quality in five priority catchments, through the Sustainable Catchment Programme.
- By end of 2027 provide soil sampling, analysis, run off risk maps and nutrient management training for farmers throughout NI who are participating in the Soil Nutrient Health Scheme.
- By end of 2028, reduce the amount of phosphorus applied in chemical fertilisers by 50% on 2023 levels, through improved nutrient management on farms and recycling of organic nutrients.

Future Vision/Outcome

An environment with high water environment standards which supports biodiversity and contributes to health and well-being and a living and productive landscape.

More sustainable nutrient management on farms - chemical and organic fertilisers are only applied based on soil nutrient status and crop requirements.

Reduced levels of nitrates and phosphorus in NI waterbodies.

Increased sustainable processing of livestock slurry to separate excess phosphorus and generate renewable energy.

Actions also contribute to SEOs



UN Sustainable Development Goals





3. Marine and Coastal Water Resources: Quality & Quantity

Current Status

NI Water Framework Regulation standards - in 2018, 10 of 25 marine waterbodies achieved Good Ecological Status (in transitional and coastal waters).

60% failed to achieve Good Status due to elevated nutrient levels and the presence of certain pesticides with the main cause of failure from catchment-based inputs.

Nutrient pollution (eutrophication) is not an issue in waters more than one mile from shore and outside the sea loughs.

UK Marine Strategy environmental status assessments in 2018: for nutrient pollution, contaminants, and contaminants in seafood - Good Environmental Status was largely achieved. Marine litter did not achieve Good Environmental Status. Underwater noise requires more study of impacts before a status assessment can be made.

In 2022 22% of Shellfish Water Protected Areas met guideline standards.

In 2022 96% of identified bathing waters achieved the minimum standard, with 80% achieving the excellent standard.

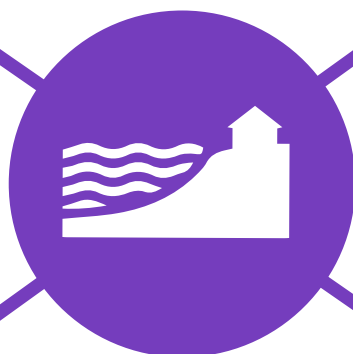
Climate change pressures on the Northern Ireland marine area include: sea level rise, increased storminess, ocean acidification, and rising temperatures.

Action & Targets

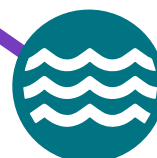
- By end of 2026: Complete the Review of Northern Ireland Bathing Waters, including possible extension of bathing season.



- By 2028: Develop & apply ecological modelling frameworks that integrate catchment management with coastal water quality & shellfish production for Dundrum Bay, Carlingford Lough, Belfast Lough (and other emerging areas as appropriate) to advance management measures for water quality improvement.



- By 2030, develop a Northern Ireland Marine Strategy to achieve Good Environmental Status in our local seas, aligning with the UK Marine Strategy and regional approaches.



- By 2030, to have protected our Bathing Waters and Sensitive Areas including Shellfish Water Protected Areas from storm sewage discharges and reduce impacts of agriculture on such areas.



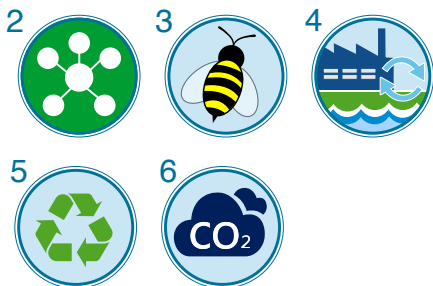
- Ongoing implementation of the UK Marine Strategy Programme of Measures and work with UK Government Administrations to agree an updated Programme.
- Targeted investment in sewage infrastructure & treatment works, and wider catchment solutions, through application of integrated ecological modelling frameworks.
- By 2025: Implement Shellfish Water Protected Area Action Plans and review those for sites not meeting objectives.
- By 2028: Develop an Underwater Noise Action Plan to support sustainable fisheries targets and protecting nature at sea, including establishment of a long-term monitoring programme.
- By 2030: Maintain at least Sufficient status for all Bathing Waters, with 70% achieving Good or Excellent status throughout the bathing season
- By 2030: Manage all Shellfish Water Protected Areas (SWPAs) to ensure that they meet their ecological and chemical objectives under the Water Environment (Water Framework Directive (WFD)) Regulations 2017 and meet at least Class B under the EU Hygiene Regulations. SWPAs must also make progress towards the WFD microbiological guideline standard of $\geq 75\%$ of samples contain ≤ 230 E.coli in the shellfish flesh and intervalvular liquid.

Future Vision/Outcome

A healthy NI marine area which is managed sustainably for the economic, environmental and social prosperity of present and future generations.

We aim to achieve this by managing and protecting the marine environment, preventing its deterioration and restoring it where practical, while allowing sustainable use of marine resources, and ensuring it is resilient and adaptable to climate change.

Actions also contribute to SEOs



UN Sustainable Development Goals





4. Local Environment Quality

Current Status

DAERA introduced the 2011 Clean Neighbourhoods & Environment Act.

With effect from 30 December 2022 Councils can now issue fines of up to £200 for litter offences. The number of fixed penalties issued rose to a peak of 4,218 in 2017 but has declined since.

The annual litter survey indicates that litter volumes have been increasing again in recent years and many Councils have requested the power to increase fines.

Northern Ireland doesn't currently have an overarching Litter Strategy.

Keep NI Beautiful's 'Live Here, Love Here' annual survey includes 'admitted littering'. This will be the initial means of measuring societal attitudes to littering.

Actions & Targets

- Publish Northern Ireland's first Litter Strategy by 2027.



- Adopt-a-Spot: A network of 500 groups engaging 300,000 volunteers from 2025.

- Continued grant support to improve local environment quality & civic pride.

Future Vision/Outcome

By 2030, create cleaner communities with less litter and instil communities with civic pride.

By 2035, bring about a societal behavioural shift, where littering is socially unacceptable and the costs for clearing litter are significantly reduced in real terms.

Actions also contribute to SEOs



UN Sustainable Development Goals





Strategic Environmental Outcome 2

Healthy & accessible environment & landscapes everyone can connect with & enjoy

There is no debating the fact that our environment is our single greatest asset. It is key to our well-being, both in an economic sense and in terms of our general physical, mental and social health - as individuals and as a society.

Engaging with people of all ages, communities, business, local and central government and the third sector will be crucial to the delivery and success of the Environmental Improvement Plan. This includes both physically engaging people with the natural and historic environment - through the provision of quality natural spaces and opportunities for outdoor recreation & learning - and engaging people and organisations with the processes and interventions that will improve our environment in the coming years and decades.

5. Connecting People to the Environment: Landscapes, Seascapes & Natural Beauty

Current Status

Northern Ireland's stunning range of landscapes and seascapes are a vital resource, valued for their scenic, ecological and historical qualities which contribute to NI's distinctive identity.

Shaped by nature and people, the variations in geology, soils, landform, biodiversity, land use, vegetation, field boundaries, settlement patterns, building styles and cultural or historical associations all combine to give rise to different landscapes, each with its own distinctive character and sense of place.

The incredible diversity of NI's landscape character has been highlighted in the NI Landscape Character Assessment Series, the NI Regional Landscape Character Assessment and the NI Regional Seascape Character Assessment.

There are also special concentrations of landscape and seascape assets across NI, many of which have been recognised by their designation as Areas of Outstanding Natural Beauty (AONBs) for reasons of scenic quality, unspoilt character, sense of place, conservation interest, cultural and recreational value. In addition NI hosts the spectacular Giant's Causeway & Causeway Coast World Heritage Site (WHS) which is recognised worldwide for its Outstanding Universal Value.

The UK government has signed and ratified the European Landscape Convention (ELC) under which each party undertakes to: put landscape policies into effect; to introduce instruments aimed at the protection, management and planning of our landscapes; and to identify and assess landscapes. It provides a people-centred and forward-looking way to reconcile management of the environment with the social and economic challenges of the future, and aims to help people reconnect with place. The ELC provides a definition of 'landscape' that encompasses character and underpins commitments to value all our landscapes in all their variety and condition. The scope of the ELC applies equally to natural, man-made, rural and urban areas and includes land, inland water and marine areas.



Actions & Targets

- Complete a landscape policy/legislation review by 31 March 2027.



- Subject to policy/legislation review publish a Landscape Strategy by 31 March 2027.

- By 2025: 110 internationally awarded Green & Blue sites.

- Develop a rolling multi-year Landscape Action Plan by December 2025.

- The Department for Infrastructure and local government will work co-operatively with DAERA in its role as the statutory nature conservation body for Northern Ireland, on any potential implications for the planning system when bringing forward any new environmental policy.

Future Vision/Outcome

The natural beauty and character of our landscapes & seascapes is protected, maintained, enhanced & enjoyed by everyone responsibly.

Actions also contribute to SEOs



UN Sustainable Development Goals





6. Connecting People to the Environment: Outdoor Recreation & Natural Space Provision

Current Status

There is evidence that increased connection with nature during time spent outdoors is aligned with greater care and concern for the environment and increased pro-nature conservation behaviours.

Outdoor recreation plays a vital role in NI, bringing benefits to society by contributing to a wide range of areas, including improving health and well-being, protecting the environment, tackling inequality, growing and greening the economy, increasing active travel, and enhancing education and learning.

There are lessons to be learnt from the Covid-19 Pandemic and how people relied on outdoor physical activities for their daily exercise. This highlighted the need for safe, high quality, accessible and welcoming spaces and places.

There is fragmented provision of varying quality and accessibility of walking, cycling and equestrian routes and green spaces across NI. The Community Planning process for each district council area has identified the public need for increased provision of access to quality natural space and trails.

Open space strategies and outdoor recreation plans have been drawn up for a number of councils and Areas of Outstanding Natural Beauty.

Protection and promotion of access to and sustainable use of publicly owned land for sport and physical activity.

Implementation of Strategic Planning Policy Statement including section on Open Space, Sport and Outdoor Recreation.

Existing legislation for the provision of outdoor recreation is under review.

Research shows that 73% of the NI population do not meet the Chief Medical Officer's physical activity targets (150+ minutes/week or 75+ minutes at a vigorous level).

The 2023 Environmental Statistics Report recorded that 50.3% of households do not have publicly accessible green space >2 hectares within 400m and at least one site >20ha in size within 2km. This increases to 90% of households in rural areas.

In 2019 outdoor recreation in NI was worth around £130m and was associated with nearly 5,000 full time equivalent employees.



Actions & Targets

- By 2028: Develop a Community Trail Network & Green/Blue Places Plan in all district council areas.

- By 2028: development of revised/new fit for purpose outdoor recreation legislation.



- Improve quantity, quality & accessibility of existing natural spaces, parks, recreational routes and marine & freshwaters.

- Increase the off-road network of both local community trails and regionally significant NI wide routes including recreational walking, cycling and horse riding.

- Progress the implementation plan for the Strategy for Sport and Physical Activity for the next 10 years and beyond.

- Publish an Outdoor Recreation Strategy.
- By 2026: Review and update the Outdoor Recreation Action Plan for NI.
- Increase the facilitation/provision of recreation facilities on government owned land.
- Annual increase in % of households that have publicly accessible quality natural space >2ha within 400m and at least one site >20ha in size within 2km.
- Increase grants to support development of new and improved outdoor recreation trails and accessible natural spaces, and programmes to encourage people to understand and sustainably use these places responsibly.
- Continue the People in the Outdoors Monitor (POMNI) 3-yearly population level survey of outdoor recreation use & engagement with the natural environment.
- By 2027: Create a consolidated and expanded geospatial map of all publicly accessible natural space and trails incorporating Accessible Space Standards for NI.
- By 2025: Develop a 'Changing Places Action Plan' for a regional network of inclusive outdoor recreation locations to increase the accessibility of outdoor recreation for people with special needs or disabilities.
- Ensure by 2024 that the 'Active Living - No Limits' Disability Sport Action Plan is fully aligned to the Active Living Strategy.
- Form partnerships between relevant Departments, Councils and other bodies to encourage and develop an inclusive outdoors.
- Implement 'Exercise-Explore-Enjoy: A Strategic Plan for Greenways' & 'Making Belfast an Active City: Belfast Cycling Network 2021'.



- Increase awareness of accessible community transport schemes and accessibility of natural outdoor spaces and facilities to reduce barriers to access and participation in outdoor sport and recreational opportunities.
- Continue communication and education to engender responsible use and behaviour by those enjoying the countryside, trails and natural spaces.
- The Department for Infrastructure and local planning authorities will work co-operatively with DAERA, in its role as a statutory consultee in the planning system, to inform Local Development Plans and the determination of planning applications.

Future Vision/Outcome

People, places and nature are connected through nature rich routes.

Everyone is enabled to connect to the natural environment, each other and their local services through a network of sustainable quality off-road nature rich routes and spaces.

Everyone has access to inclusive, shared, welcoming and high-quality outdoor sports and physical activity infrastructure.

A safe, economically and environmentally sustainable local and regional sports and physical activity infrastructure.

A national greenways network linking population centres and our best landscapes and nature rich spaces, encouraging active travel, understanding of and benefits for the environment, people's health and well-being and the rural and tourism economy.

Local people are engaged in protecting, managing and improving these routes and places.

Everyone appreciates and respects the environments they visit and the impact of their behaviour on the countryside, nature and farmers.

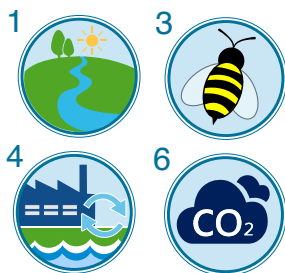
Landowners and managers are enabled to provide formal and informal outdoor recreation on their properties without significant disruption to their business.

By 2050:

84% of households have publicly accessible quality natural space >2ha within 400m and at least one site >20ha in size within 2km.

90% of the population visit the natural outdoors at least once a week.

Actions also contribute to SEOs



UN Sustainable Development Goals





7. The Next Generation

Current Status

Eco-Schools is a highly successful global programme in which NI has been a leading performer.

As of 2015, every school in Northern Ireland is a registered Eco-School - a world first.

Councils, environmental NGOs and partners raise young people's awareness and appreciation of environmental issues through the curriculum, programmes, initiatives, outdoor classroom activities and encourage environmental action.

KNIB's Eco-Schools programme and Ulster Wildlife's '*Our Bright Future*' (a partnership led by the Wildlife Trusts, bringing together the youth and environmental sectors to deliver change for the local environment) have been instrumental in engaging the next generation in the development of the Environmental Improvement Plan.

The NI Executive's Children & Young People's Strategy 2020-2030 aims to improve the environmental well-being of all our children and young people.

The NI ESDF Education for Sustainability Strategy and Action Plan was published in 2021.

National Museums NI's (NMNI) Natural Sciences collections and the Centre for Environmental Data and Recording (CEDaR) are two key resources for unlocking public access to and understanding of environmental issues. NMNI recently joined the EC's Global Coalition for Biodiversity.

Libraries NI reading programmes for children encourage greater understanding of environmental issues. Reading challenges have encouraged more than 12,000 children to read more and to engage in environmental activities.

Education is one of the most important keys to tackling climate change. The Northern Ireland Curriculum will continue to play a vital role in supporting the green economy and nurturing environmentally conscious citizens. Through the integration of topics related to sustainability, climate change, and green growth, schools can equip children and young people with the knowledge, understanding, skills, and values necessary to contribute actively to a greener future; a curriculum that emphasizes the green economy can also prepare our children for future careers in sectors such as renewable energy, sustainable agriculture, and green technology.

To support the above, the Department for Education is considering how best green growth and climate change can be enhanced in the curriculum. Education acts as a catalyst, enabling the widespread adoption of sustainable practices, encouraging responsible consumption, and inspiring our children and young people as the next generation of environmental leaders and change-makers.



Actions & Targets

- Engage with our children and young people to provide them with opportunities to learn about, actively engage with, and positively shape the natural environment.
- By 2024: Champion a group of ‘30 under 30’ environmental leaders.
- By 2030 every child spends time in the natural outdoors at least once a week.

- Implement the Education for Sustainability Strategy and Action Plan.
- 500 Adopt A Spot Groups and 300,000 volunteers engaged in practical environmental programmes from 2025.
- 2025: 160,000 pupils and students actively engaged in Eco-Schools.
- 2025: 50% of schools will have an Eco-Schools Green Flag.

- Develop an online hub for Education for Sustainability information accessible to all.
- Build change-makers through the development of training and learning programmes for teachers and leaders, including young people to build their confidence and capacity to deliver experiential learning for the environment, sustainability, and climate.
- Programmes supporting the environment and biodiversity including Climate Change exhibitions, Seed Libraries, Wildflower Planting, Community Gardening Clubs and Migratory Bird projects will be developed and implemented in a range of libraries by 31 March 2024.

Future Vision/Outcome

Highly engaged and well educated future generations with the necessary knowledge, skills and behaviours to drive societal change.

Children and young people can: access and interact with the natural environment at home, in school and in daily activities; and work to improve and enhance the quality of the environments in which they live, learn and play.

Museum collections National Museums NI Natural Sciences Collections (numbering hundreds of thousands of specimens) and the knowledge we hold about them will be recognised as essential ‘big data’, routinely accessed to progress research, inform debate and influence decision making and policy development; with a 10% increase in enquiries and access requests to be recorded by 2026.



National Museums NI Natural Sciences experts will help audiences understand the environmental issues that affect society and how they can take action and make a difference, at a personal and local level. This will be prototyped across our museums from 2023 onwards, and be central to new interpretation and programming as part of 'Reawakening the Ulster Folk Museum', due to complete in 2027, and 'Building for the Future at the Ulster Museum', due to complete in 2028.

Actions also contribute to SEOs



UN Sustainable Development Goals





8. Sustainable Settlements

Current Status

The challenges facing our settlements reflect the changing way that we use them. Trends have been developing for many years, and the Covid restrictions have accelerated the pace. The model of the last few generations of settlement centres being for retail activity, and the non-central areas for living, is evolving into different uses for the centre as populations age, household sizes reduce, retail models evolve and importance of active travel (and reducing our reliance on private cars) becomes more prominent in light of climate legislation. As with any such change, this presents opportunities as well as challenges.

It supports the idea of more town centre living, which reduces emissions and increases vibrancy of the centres in the evenings as well as the days. This changes the nature of what makes a 'high street' sustainable. From a policy perspective, we therefore need to support interventions which contribute to the building and maintenance of thriving, sustainable, inclusive communities and places.

These interventions will bring together responsibilities of a number of Departments and other bodies. They will need to include an appropriate development planning framework, at both regional and district level; appropriate arrangements for both water and waste water (subject to funding availability); transport arrangements which are both inclusive and sustainable; liveable communities easily and sustainably connected to necessary services; and placemaking interventions in both urban and rural settings.

The impact of the Coronavirus Pandemic and the resultant impact on village, town and city centres has reinforced the need for a coordinated strategic response to both the immediate and longer term recovery priorities.

DfC is developing a Housing Supply Strategy that includes a key objective to build and maintain thriving and inclusive communities and places that can support the wellbeing and diverse needs of those who live there. One of the key ingredients in the creation of such places is the provision of a range of affordable housing options across a mix of tenures that meet people's needs across all stages of their lives. DfC has supported the development of placemaking plans and provides financial support for Public Realm and Environmental Improvement schemes, Comprehensive Development schemes, the award of Urban Development Grants, Revitalisation schemes, the Heritage Environment Fund Regeneration funding stream and support for the development of Business Improvement Districts.

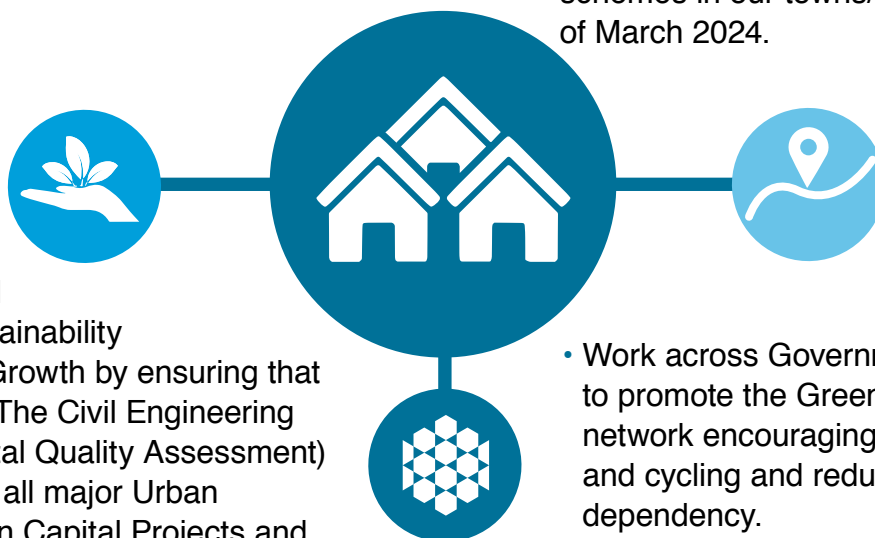
DfI has invested in walking & cycling infrastructure and sustainable public transport to support the promotion of active travel.

Public Realm schemes increasingly support walking, cycle provision, and increased soft landscaping to improve active travel and increase green infrastructure and sustainable environments.



Actions & Targets

- Build and strengthen the resilience of our villages, towns and cities to create places where people want to live and work, to visit and invest by progressing 15 Public Realm, Environmental Improvement and Revitalisation schemes in our towns/cities by the end of March 2024.



- Develop and support sustainability and Green Growth by ensuring that CEEQUAL (The Civil Engineering Environmental Quality Assessment) is applied to all major Urban Regeneration Capital Projects and meet the good or better rating.

- Work across Government to promote the Greenway network encouraging walking and cycling and reducing car dependency.

- Join up investment approaches in places including in regeneration, community assets and all parts of our housing economy, maximising social value and adopting a people centred approach to investment in our towns and cities.
- Implementation of Greenways, Bicycle Plans and Development of Transport Plans to promote health and wellbeing, better cities and towns and sustainable transport.
- Ensure scheme designs are climate resilient, water management such as attenuation of storm water run-off (SuDS), and address air quality issues through the use of soft landscaping.
- Integrate existing, and incorporate new, natural features into housing development to support quality of place, biodiversity and water management, and address climate change mitigation and resilience.



Ensure the planning system, including Local Development Plans, helps support the delivery of the appropriate supply of housing, reflecting the changing nature of need and demand with consideration to wider policy influences including adaptive reuse and climate change.

Work in new and different ways with local Councils and Community Planning Partnerships to realise opportunities to increase and maintain housing supply and help create sustainable and inclusive urban and rural places. This will include capturing the lived experiences of those affected by different life challenges.

Future Vision/Outcome

Sustainable city, town and village centres which are thriving places for people to do business, visit, socialise, shop, be creative and use public services as well as being great places to live.

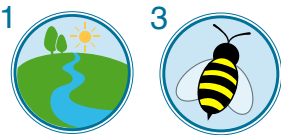
Changed perceptions from a traditional economic model to a more sustainable, Living High Streets model that addresses social, environmental and economic aspects of our High Streets.

Well-designed, sustainable places with a strong identity give their users, occupiers and owners a sense of pride, helping to create and sustain communities and neighbourhoods.

Better health and well-being through promotion and uptake of walking, cycling and sustainable transport.

Better connected communities and city centres through greenway, community trails & cycleway networks.

Actions also contribute to SEOs



UN Sustainable Development Goals





9. Historic Environment

Current Status

The historic environment is the basis for our confidence, our prosperity, and our health. There are over 17,000 heritage assets on the Sites and Monuments Record, and over 9,000 listed buildings. Condition surveys have shown that overall condition of the assets is declining, and there is growth in the number of entries on the Heritage at Risk register.

Around 90% of monuments are on agricultural land and the condition of many of them is deteriorating.

The planning policy framework in place for the last 20 years is being replaced with Local Development Plans.

Heritage assets are becoming subject to new and varied threats through the impacts of Climate Change.

Health and well-being benefits of the historic environment for communities need to be better understood and valued.

The UK Fisheries Act 2020 has highlighted that heritage assets are an intrinsic part of the marine & aquatic environment.

The Rules annexed to the 2001 UNESCO Convention on the Protection of the Underwater Cultural Heritage have been adopted by HM Government as being ‘*best practice*’.

Actions & Targets

- Develop and implement a Culture Arts and Heritage Strategy which embeds environmental outcomes.
- Update condition surveys and ensure appropriate actions are planned as a result of them.
- Continue to provide a focus on supporting owners and communities to identify sustainable uses and management of heritage assets for current and future generations.
- Integrate marine and aquatic historic environment considerations into all decision-making processes and assessments of environmental impacts.
- Continue to work across the historic environment sector and with communities to increase resilience and progress actions which support delivery of PfG outcomes and key strategies.

The diagram features a central blue circle with a white castle icon and the text 'PfG' in white. Five lines radiate from this central circle to five surrounding circles. Clockwise from the top-left, these are: a light blue circle with a document icon labeled 'Strategy', a green circle with a hexagonal pattern, a blue circle with a fish icon, a dark green circle with the text 'PfG' (which is the central circle itself), and a light blue circle with a document icon labeled 'Report'.



- Work with councils to inform local development plans and development management decisions which align with treaties and best practice to conserve, protect, enhance and realise the value of our historic environment; alongside management of licensing and consenting regimes which also support this.
- Work with DAERA to ensure heritage assets have been included within the NI Marine Plan and by 2025 within the NI Fisheries Act.
- Progress research on the specific climate change challenges and opportunities for heritage assets, and use this as the basis for advice, guidance and action.
- Ensure that Government Departments and their ALBs lead by example, as required by the Protocol for the Care of the Government Historic Estate.

Future Vision/Outcome

A well-maintained historic environment which supports our prosperity, strengthens our society and shapes our character.

An historic environment which is protected for future generations.

Resilient communities which gain physical, educational and well-being benefits from the historic environment.

An historic environment which is sustainable connected and managed as a vital part of our diverse environment.

Increased understanding of the relationships between our natural and historic environment, culture and arts, enabling collaboration and leading to benefits for our local communities and economy.

Actions also contribute to SEOs



UN Sustainable Development Goals





Strategic Environmental Outcome 3

Thriving, resilient & connected nature and wildlife

We are an integral part of nature, and reliant on nature to sustain life. We can positively impact nature as we engage with it, protecting, maintaining and enhancing a clean and healthy environment as we live, work and play. However we can also cause harm to the environment, and this negative engagement is increasingly causing impacts to health, well-being and future sustainability.

10. Protecting Nature on Land

Current Status

Further work is required to halt and reverse biodiversity loss, achieve favourable conservation status for Northern Ireland’s priority habitats and species and to deliver resilient, functioning ecosystems capable of providing nature-based solutions to climate change.

The protected site network of Special Areas of Conservation (SAC), Special Protection Areas (SPA) and Areas of Special Scientific Interest (ASSI) covers 8.9% of Northern Ireland. Much of our priority habitats and species occur outside protected areas.

Actions & Targets

- By 2030: At least 30% of land and freshwater protected, connected and managed for nature.
- Increase NI woodland cover to at least 9% (124,000 hectares) by 2030.
- By December 2024: Publish the NI Peatland Strategy to set the long-term vision for peatland protection, restoration & maintenance to 2040, which will assist in mitigating against climate change.

- Develop and put into operation a Nature Recovery Plan to support nature recovery and climate resilience.
- By 2026: Develop measures to support delivery of 30x30 and other KM-GBF targets.
- All semi-natural peatlands are conserved or restored to healthy, functioning ecosystems by 2040.



- By end of 2024: Publish conservation management plans & habitat maps for 40 of our terrestrial and freshwater Special Areas of Conservation to set out the necessary conservation measures required to achieve favourable condition, and inform effective management for these key areas for biodiversity.
- By March 2025: Complete the first stage of 'Islands to Networks', a review of Northern Ireland's terrestrial protected sites to establish what is needed to complete the protected site network as part of broader goals to protect 30% of land for biodiversity.
- By end of 2024: Develop a new 'Nature Recovery Strategy 2032' which will set the direction for Northern Ireland's contribution to the UK's commitment to the International Global Biodiversity Framework, designed to halt & reverse the loss of biodiversity, and restore degraded ecosystems, habitats & species, and build climate resilience.
- Develop action plans to address specific pressures on nature including nutrient pollution, wildfires, invasive species and climate change by 2026.
- By 2026 develop and implement nature recovery plans and programmes, including nature based solutions, for protected areas, priority habitats and species, nature recovery networks and other effective conservation measures (OECMs).
- DAERA will work in conjunction with other government departments, authorities and stakeholders to align policies and programmes to enhance protection for nature and ecological connectivity, deliver biodiversity gain and support landscape scale ecosystem restoration.
- By 2030: 95% of the features underlying the designation of ASSIs to be in, or approaching, favourable conservation condition.
- By 2027: Review our terrestrial biodiversity monitoring and evidence needs and devise and implement a comprehensive mapping, monitoring and evidence programme and platform to support conservation action, and biodiversity reporting and natural capital accounting
- Deliver the 'Forests for our Future' Programme including associated conservation and protection measures for long established semi-natural woodland and habitats of conservation concern.
- Review our existing protected site network and its effectiveness in safeguarding priority habitats and species and contributing to ecological and climate resilience, to inform the completion of our designation programme and meeting our 30x30 and other related commitments.
- Develop funding mechanisms to support stakeholder action to meet 'nature positive' by 2030 objective including partnership and Green Finance solutions for nature recovery and nature-based solutions.
- By 2030: Create or commence restoration of 20,000 ha of wildlife rich habitat outside the protected site network (to support nature recovery networks and nature-based solutions).
- Publish the first Living Map of Northern Ireland by 2024 (habitat/land cover model).



- Develop and agree a framework for delivering the 30x30 target and Nature Recovery Networks, incorporating key areas for Nature-based Solutions for climate action and implement through a range of delivery mechanisms and conservation programmes.
- Publish a suite of annual biodiversity indicators to report on progress against biodiversity targets, and to meet Environment Act, Kunming-Montreal Global Biodiversity Framework, Climate Change Act and NICCAP, and Green Growth Strategy reporting requirements.

Future Vision/Outcome

Northern Ireland will be Nature Positive by 2030 and living in harmony with nature by 2050.

Healthy, functioning, thriving and resilient nature and ecosystems across Northern Ireland's landscapes, which contributes valuable ecosystem services, climate resilience and well-being for current and future generations.

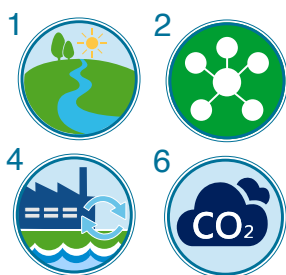
We will do this by protecting, managing, restoring, extending and connecting our natural ecosystems and the species that rely on them.

Measures are in place to address pressures and threats originating from human activity and ensure our nature is resilient and adaptable to climate change.

Biodiversity loss in NI is halted and reversed, gains in biodiversity are real and measurable, habitats and species have achieved favourable status.

Increased woodland cover has improved our carbon sink, created new woodland habitat and enhanced biodiversity as part of a wider nature recovery network, helped with flood alleviation, improved water quality and is valued and protected as an integral part of the lives of all citizens living in NI. 12% woodland cover by 2050.

Actions also contribute to SEOs



UN Sustainable Development Goals





11. Protecting Nature at Sea

Current Status

Further work is required to achieve Good Environmental Status under the UK Marine Strategy descriptors for biodiversity and food webs.

The MPA network represents 38.1% of the Northern Ireland inshore region.

84% of marine features within the MPA network are currently assessed to be in Favourable Condition.

The area of marine protected sites under appropriate management is 21,168 hectares in 2022/23, which represents 10.5% percent of the inshore MPA network.

Management plans are being developed for all MPAs.

Climate change impacts on the Northern Ireland (NI) marine area include: sea level rise, increased storminess, ocean acidification, and rising temperatures, all of which affect species distributions and habitat extent.

Actions & Targets

- By 2030: 30% of seas protected, ensuring an ecologically coherent & well managed MPA network.
- By 2030: Nature-based solutions to coastal erosion, where appropriate, will be implemented in collaboration with the Coastal Forum and new policy development.

- By 2024: Integrate the Kunming-Montreal Global Biodiversity Framework commitments relating to biologically diverse and healthy seas, and climate change into DAERA strategies.
- By 2030: Key marine priority habitats and species are in recovery
- By 2030: 85% of designated features in the MPA network to be in favourable condition, with 10% of the remainder in recovering condition*.



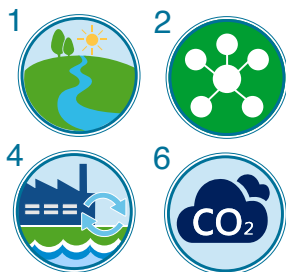
- By 2024: Develop and consult on a Seabird Conservation Strategy for NI to protect marine biodiversity.
 - By 2024: Develop and consult on an Elasmobranch Strategy for NI to protect marine biodiversity.
 - By 2024: Develop and consult on a Blue Carbon Action Plan for NI to help address the Climate Emergency.
 - By 2024: Develop and consult on a revised NI Inshore MPA Strategy in partnership with stakeholders to protect marine biodiversity.
 - By 2025: Develop and implement NI Marine Invasive Species Action Plans.
 - By 2026: Develop and publish management measures for NI Offshore MPAs in partnership with stakeholders.
 - By 2028: Develop and implement effective NI MPA management and restoration plans, including (i) additional designations to ensure ecologically coherent network, (ii) implementation of management measures.
 - By 2028: through a number of draft actions within the review of the MPA Strategy for Northern Ireland, DAERA will increase climate resilience within the MPA network and increase protection of carbon storage habitats.
- * MPAs are considered to be 'recovering' once all pressures which the features are sensitive to, are reduced or removed.

Future Vision/Outcome

A healthy Northern Ireland marine area which is managed sustainably for the economic, environmental and social prosperity of present and future generations.

We aim to achieve this by managing and protecting the marine environment, preventing its deterioration and restoring it where practical, while allowing sustainable use of marine resources, and ensuring it is resilient and adaptable to climate change.

Actions also contribute to SEOs



UN Sustainable Development Goals





12. Natural Capital

Current Status

There is a recognised need for a comprehensive Natural Capital (NC) and ecosystem framework for NI, clearly identifying linkages to Biodiversity, Climate Action Plan and environment strategies, and as set out in Target 14* of the Kunming-Montreal Global Biodiversity Framework, incorporating ecosystem condition monitoring and NC ecosystem assessment systems which aligns with progress in the rest of the UK and the recommendations from HM Treasury’s Dasgupta Review of the ‘Economics of Biodiversity’.

Preliminary work in NI includes: the development of a dynamic land cover and habitat classification map for Northern Ireland (‘Living Map’ of NI), enhancement of existing evidence base, including the commissioning of for a new NI Countryside Survey, and case studies on natural capital value.

In relation to marine environment, an indicative study indicates the value of societal benefits from NI marine waters is in the region of £68.59m and the current MPA network provides societal benefits in the region of £27.86m.

*KM-GBF Target 14: Ensure the full integration of biodiversity and its multiple values into policies, regulations, planning and development processes, poverty eradication strategies, strategic environmental assessments, environmental impact assessments and, as appropriate, national accounting, within and across all levels of government and across all sectors, in particular those with significant impacts on biodiversity, progressively aligning all relevant public and private activities, fiscal and financial flows with the goals and targets of this framework.

Actions & Targets

- Review natural capital evidence base and establish needs to inform a natural capital assets framework for Northern Ireland.

- By 2027: Scope and develop a robust NC and ecosystem assessment framework for NI for government departments and public bodies, etc.
- By 2027: Enhance our natural capital reporting, data and habitat mapping systems to make natural capital and ecosystem datasets more readily available and integrate into natural capital accounting and reporting systems (natural capital and ecosystems assessment platform).



- Enhance our evidence on the extent, condition, functioning and connectivity of NI ecosystems, using a range of earth observation, survey methodologies and land cover assessments.
- Publish a natural capital policy position for NI to define NI natural capital/ecosystem assessments approach, in line with KM-GBF target 14.
- Consider extension to Cultural Capital, connecting to work by HM Treasury & DCMS.
- Consider and integrate biodiversity values into all decision-making processes at all levels.

Future Vision/Outcome

The value of our natural resources is recognised and embedded in all our investment decisions and is an integral part of everyday life and work.

Actions also contribute to SEOs



UN Sustainable Development Goals





Strategic Environmental Outcome 4

Sustainable production & consumption on land and at sea

Sustainable production & consumption involves the production and use of products and services in a manner that is environmentally benign, socially beneficial and economically viable over their whole life cycle. Key to this is ‘*resource efficiency*’, commonly defined as using the Earth’s limited resources in a sustainable manner while minimising impacts on the environment. This is something that applies across all sectors - including industry, agriculture and energy.

13. Future Agricultural Policy

Current Status

The Future Agricultural Framework Portfolio was published in August 2021. The document sets out a framework for future policy around 4 key outcomes:

- increased productivity and profitability
- environmental sustainability
- improved resilience
- an effective functioning supply chain

The public consultation on ‘Future Agricultural Policy Proposals’ to deliver these outcomes closed in February 2022.

Following consultation and analysis of the responses the Department has been working on some 14 Actions and Enabling Measures.

Substantial work is ongoing on the development and roll-out of these Actions and Enabling Measures as part of the Farm Support and Development Programme.

Action & Targets



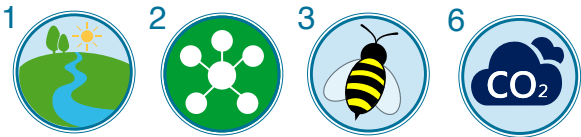
- Roll-out of the new Actions and Enabling Schemes began from 2024 to deliver the 4 key outcomes.



Future Vision/Outcome

An industry that: pursues increased productivity in international terms as a means of sustained profitability, closing the productivity gap which has been opening up with other major suppliers; is environmentally sustainable in terms of its impact on, and guardianship of, air and water quality, soil health and biodiversity, while making its fair contribution to achieving net zero carbon targets; displays improved resilience to external shocks which are ever more frequent and to which the industry has become very exposed; and which operates within an integrated, profitable, efficient, sustainable, competitive and responsive supply chain, with clear transmission of market signals and an overriding focus on high quality food and the end consumer.

Actions also contribute to SEOs



UN Sustainable Development Goals





14. Energy

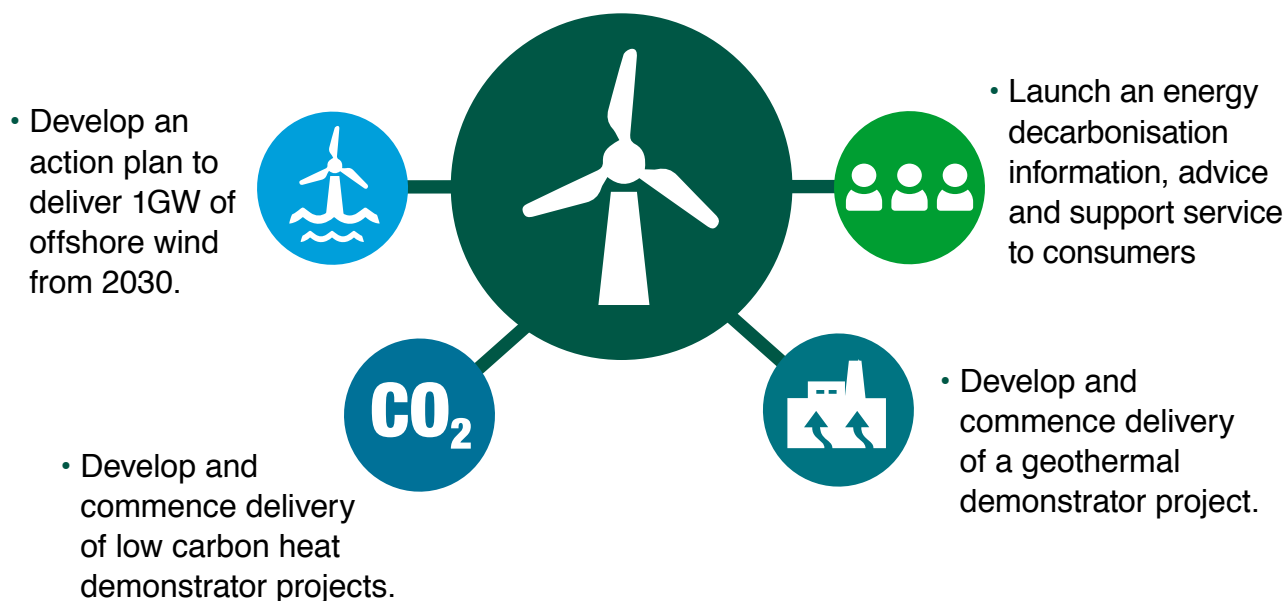
Current Status

The Energy Strategy for Northern Ireland, 'The Path to Net Zero Energy', was approved by the Executive and launched in December 2021. It outlines a roadmap to 2030 aiming to deliver a 56% reduction in our energy-related emissions, on the pathway to deliver the 2050 vision of net zero carbon and affordable, renewable energy.

DfE published a 22-point Action Plan for 2022 which contained a suite of new initiatives including a £10m green innovation fund, a hydrogen centre of excellence and one stop shop for energy advice. An Action Plan Report for 2022 was subsequently published in February 2023, outlining the progress made against each Action Point.

Delivery of the NI Energy Strategy continues, with the publication of the Action Plan 2023 in March 2023. This outlines 12 priority areas of action and the associated tasks for Year 2 of the programme - some of which are outlined below.

Actions & Targets





Future Vision/Outcome

The Energy Strategy provides a pathway to ‘net zero carbon and affordable energy’ and will be a key driver toward the Department for Economy meeting its Climate Change obligations, with the first strategic review to take place in 2025. It will do this by following five principles:

- Placing you at the heart of our energy future;
- Grow the green economy;
- Do more with less;
- Replace fossil fuels with renewable energy; and
- Create a flexible, resilient and integrated energy system.

Actions also contribute to SEOs



UN Sustainable Development Goals





15. Productive & Sustainably Used Seas

Current Status

The Northern Ireland marine area is over 6,800 km² and provides opportunities for Green Growth through a sustainable blue economy.

UK Marine Strategy 2018 Environmental Status assessment of commercial fish and shellfish - Good Environmental Status was not achieved, but there has been an improving situation since 2012.

A draft Marine Plan for NI has been produced and consulted on in 2018.

UK Fisheries Act 2020 establishes the framework for managing all UK fisheries sustainably as an independent coastal state.

Fishing and aquaculture makes an important contribution to the Northern Ireland economy and in particular the economy of coastal communities. In 2021, there were 816 fishers in Northern Ireland and fish landings were 21,087 tonnes, with a value of approximately £27.3 million.

Indirectly, commercial fishing supports a variety of other jobs, such as ancillary engineering and service industries. The fish and shellfish processing sector employed 573 full time equivalents in 2018 and had a value of approximately £90m.

In 2020 aquaculture production totalled 2,621 tonnes with a value of approximately £10.7m.

Climate change pressures on the Northern Ireland marine area include: sea level rise, increased storminess, ocean acidification, and rising temperatures.

Actions & Targets

- By 2030: Ensure that all fish stocks are recovered to and maintained at levels that can produce their maximum sustainable yield, within constraints of climate change.
- By December 2024: Publish an adopted Marine Plan for Northern Ireland.

- By 2030: Support the development of offshore renewable energy while protecting our marine environment.
- By December 2024: develop & consult on Fisheries Management Plans for NI Inshore and Irish Sea Demersal & Pelagic stocks.
- By November 2025, review and report on the UK Joint Fisheries Statement and Fisheries Management Plans in accordance with the relevant provisions of the Fisheries Act 2020.



These targets will be supported by the following key programmes:

- Implementation of DAERA funding programmes to support sustainable growth of the blue economy, transition to a low carbon blue economy and the protection and enhancement of blue carbon habitats and the wider marine environment.
- Ongoing evaluation of climate change scenarios and understanding of potential impacts to coastal habitats, fisheries and aquaculture, including adaptation actions required.
- Delivery of water quality objectives to support the aquaculture industry.

Future Vision/Outcome

Future vision:

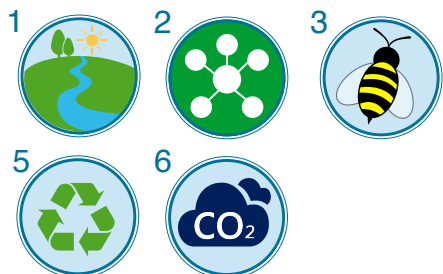
Our vision is a healthy NI marine area which is managed sustainably for the economic, environmental and social prosperity of present and future generations.

We aim to achieve this by managing and protecting the marine environment, preventing its deterioration and restoring it where practical, while allowing sustainable use of marine resources, and ensuring it is resilient and adaptable to climate change.

Outcome:

Achievement of Good Environmental Status of our seas and a thriving blue economy.

Actions also contribute to SEOs



UN Sustainable Development Goals





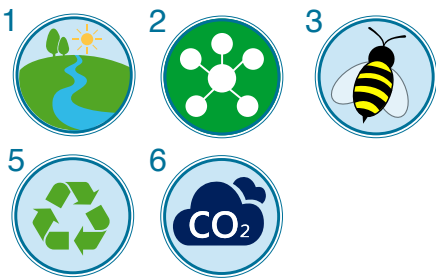
Future Vision/Outcome

• By October 2024: A consultation on the Plan to Eliminate Plastic Pollution has been developed and is progressing through internal review ahead of submission to Minister for consideration on the way forward. Suppliers to look for sustainable alternatives to single-use plastic products.

Consumers to refuse single-use plastic, demand refill options and reuse plastic items. If these options are not feasible then consumers to recycle their plastic.

Reduce the use of single use plastic cups and food containers.

Actions also contribute to SEOs



UN Sustainable Development Goals





18. Chemicals

Current Status

Defra and the Devolved Administrations are developing a Chemicals Strategy to ensure the safe use and management of chemicals across their lifecycle. This will significantly reduce the harmful effects that exposure to some chemicals can have on our environment and on human health.

This will aim to reduce chemical pollution and address legacy substances, delivering commitments as outlined in the UK 25 Year Environment Plan and is hoped to be UK wide in scope (depending on devolved administration buy-in). Various engagement has occurred between Defra and DAERA in relation to this strategy since 2020. From 2021 a working group with representatives from the DAERA, Defra and other devolved administrations has been exploring what shape this new Chemicals Strategy will take.

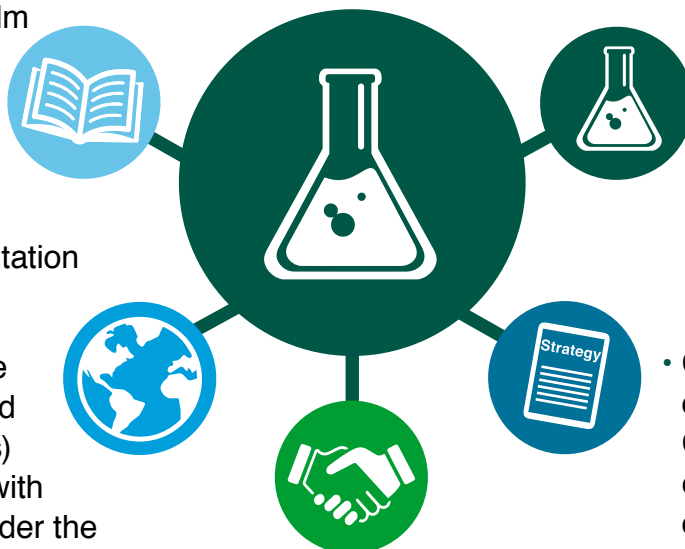
Following a UK wide consultation in 2021 the agreed National Implementation Plan (NIP) for the Stockholm Convention on Persistent Organic Pollutants (POPs) United Kingdom of Great Britain and Northern Ireland was published on the Conventions web site in June 2022. The Stockholm Convention is a global treaty with an objective to protect human health and the environment from POPs. The current UK NIP sets out the actions it plans to undertake in relation to POPs to achieve this.

A key component of the NIP is the development and maintenance of the Toxic Organic Micro-Pollutants (TOMPS) network, which measures ambient air concentrations for a range of pollutants at rural and urban locations in the UK. The network was set up in 1990 network and now provides 30 years of data which can be used to provide estimates of the change in atmospheric concentrations over time. In early 2022 DAERA officials completed work with DEFRA, the Environment Agency (EA) for England and Wales, Lancaster University and Lisburn & Castlereagh Council to extend the UK TOMPS network to NI. As a result a new POPs monitoring station has been set up in Lisburn, allowing NI to have an active role within this monitoring programme.



Actions & Targets

- To fulfil commitments under the Stockholm Convention on persistent organic pollutants (POPs) as outlined in the UK's most recent National Implementation Plan.
- Eliminate the use of Polychlorinated Biphenyls (PCBs) by 2025, in line with commitments under the Stockholm Convention.
 - To work with staff in the Environment Agency for England on the developed of a prioritisation and early warning system for chemicals of emerging concern (PEWS) and the Chemicals Regulatory Strategy Tool (CREST), which extends to Northern Ireland.
- Substantially increase the amount of persistent organic pollutants (POPs) material being destroyed or irreversibly transformed by 2030, to make sure there are negligible emissions to the environment.
- Contribute to the development of the UK Chemical Strategy to ensure it takes account of NI's unique position in relation to chemical legislation included in Annex II of the Windsor Framework.



Future Vision/Outcome

To set out a clear, ambitious vision for the type of chemicals environment we hope to be living in by 2040.

To contribute to wider government ambitions including the move to a circular economy, achieving net zero, reversing biodiversity loss, and supporting the green recovery.

To deliver reduced exposure to chemicals in the NI environment through regulation, enforcement, monitoring and assessment.

Remove all equipment from use in NI with PCB contaminant levels above legal limits.

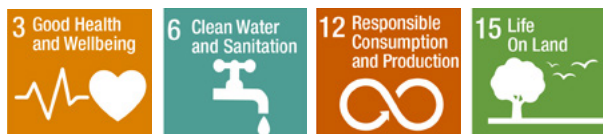
Build on existing strategies and principles set out in the Environment Act 2021. In particular:

- the precautionary principle; and
- the polluter pays principle.

Actions also contribute to SEOs



UN Sustainable Development Goals





19. Antimicrobial & Disinfectant Contamination

Current Status

Development of resistant microorganisms that cause simple infections to become untreatable by current antimicrobials (AM) is one of the biggest and most imminent threats in the world. It is accelerated by inappropriate use of AM in humans but also in animals and plants. The UK has a National Action Plan to fight antimicrobial resistance (AMR) and NI has adopted a five year action plan with the same aim (2019-2024).

Actions & Targets

- Monitor AMR through 300 annual abattoir samples and passive surveillance.

- Collect AM Sales and Usage data from 2023 for specified food producing animals: dairy, beef, sheep, poultry and pigs.
- Develop whole genome sequencing capacity in Agri-food & Biosciences Institute (AFBI) by August 2024.

- Development of AMR digital platform with public facing elements by 2024.

Future Vision/Outcome

Change the mentality and ethos of farming with regards to AM use.

Develop a culture of prevention of disease rather than cure.

Reduction of antibiotics, antiparasitics, antifungals and disinfectants can be achieved by preventive medicine, biosecurity, better farm structures with respect to the environment and its biodiversity and strong collaboration between government, educators, professionals and animal owners.

Actions also contribute to SEOs



UN Sustainable Development Goals





Strategic Environmental Outcome 5

Zero waste & highly developed circular economy

The Circular Economy is an economic system which reduces overall demand for resources, retains the value of resources and seeks to regenerate our natural ecosystems. By designing things differently, we can reduce overall demand for raw materials, reduce waste generation and create things that retain value throughout their entire life cycle. By keeping technical and natural materials in circulation for longer at their highest value we retain their embodied carbon and can increase nature’s ability to sequester carbon.

A circular economy is fuelled by renewable energy and while the decarbonisation of the energy sector is a necessary part of achieving net zero, the circular economy is an equally essential element because by its application we create more sustainable production and consumption patterns which are needed to tackle resource scarcity, inequality and waste generation.

The circulation of natural materials can create new bio-economy enterprises and will help regenerate natural systems. In a Circular Economy system we create places where people have greater access to products, businesses thrive by becoming more resource efficient and we improve the health of natural ecosystems.

20. Circular Economy

Current Status
<p>The Department for the Economy (DfE) is leading in developing a Circular Economy Strategy (CES) for NI.</p> <p>In January 2023 DfE launched a public consultation on the draft CES. The draft strategy sets out its vision to create an innovative, inclusive and competitive economy, with responsible production and consumption at its core.</p> <p>Developing a strong evidence base has been key to progressing the draft strategy. Circle Economy were commissioned in January 2021 to undertake a Circularity Gap Report (CGR) for Northern Ireland. The Gap Report, completed in June 2022, has informed the evidence base underpinning the development of the draft Circular Economy Strategy.</p> <p>The draft Circular Economy Strategy is a starting point to make the transition from our current linear economy to a circular economy. It provides a vision, a target and direction of travel for what can be achieved with the right investment and commitment across government, business and society. The draft strategy identifies twelve Proposals for Change that will make the transition to a Circular Economy a reality.</p>



Actions & Targets

- By 2050 we will have reduced our annual material footprint to 8 tonnes per person.



- Raise awareness of CE and increase circular thinking.

- Draft CE strategy outlines 12 proposals for change which will create more sustainable production and consumption patterns in NI.

- Examine options for a delivery unit, in partnership with DAERA, to translate the proposals for change into action plans.

Future Vision/Outcome

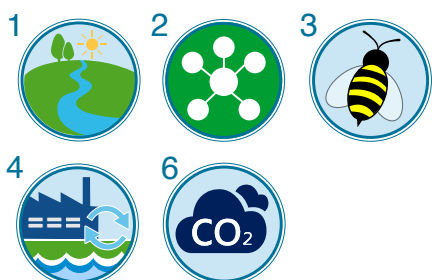
The draft Circular Economy Strategy sets out a clear vision that by 2050, Northern Ireland will have an innovative, inclusive and competitive economy where business, people and planet flourish, with responsible production and consumption at its core. The goal is to adopt a circular model and reduce our material footprint to live responsibly, build resilience and exploit new opportunities.

The CES will inform upcoming environmental, economic and social policy development, raise awareness within the private and public sectors as well as the third sector of what a Circular Economy (CE) is and will identify where opportunities exist to create a more circular NI economy.

It will increase collaboration and create a joined-up approach to CE across central government.

DfE has committed to take forward key actions of embedding circular economy principles in development of the Climate Action Plan, raise awareness of a Circular Economy and work in partnership with DAERA to examine next step options for delivery of a Circular Economy for Northern Ireland.

Actions also contribute to SEOs



UN Sustainable Development Goals





21. Waste Management

Current Status

Waste Management Strategy

Current Waste Management Plan in place from 2019 as a statutory requirement under Article 19 of the Waste and Contaminated Land (NI) Order 1997.

Work on developing a new Waste Management Strategy began in 2022.

Prevention & Reuse

Northern Ireland's Waste Prevention Programme '*Stopping Waste in its Tracks*' was published in 2020.

This programme included new and ongoing actions aimed at improving waste prevention and increasing education and awareness.

Food Waste

The Food Waste Regulations (NI) 2015 provide for separate collection, transport & treatment of food waste.

The Regulations contain a range of measures, most notably requiring district councils to provide for separate collection of food waste for households and placing a duty on food businesses producing in excess of 5kg of food waste/week to present food waste for separate collection.

Since the introduction of the Regulations, over one million tonnes of biodegradable waste have been diverted from landfill, positively impacting the levels and quality of waste recycling.

Illegal Waste & Fly-tipping

The outstanding sections of the Waste and Contaminated Land (Amendment) Act (NI) 2011 were commenced on 2 January 2023.

Given that sections 4 and 5 provide analogous powers to both the Department and district councils in addressing illegal waste disposal (enforcement and clean up), NIEA has offered assistance to district councils regarding appropriate enforcement training.



Actions & Targets



NI to contribute to meeting Sustainable Development Goal 12.3 - to halve UK per capita food waste by 2030.

Measures will include:

- Work with delivery partners to develop behaviour change campaigns.
- Continued education & awareness raising initiatives to encourage the removal of as much food waste as possible from residual household waste streams.
- Continue to work with food redistribution charities to use NI's food surplus to help feed some of the most vulnerable members of society.
- Consistent approach to data collection across NI regarding Fly-tipping and illegal waste disposal.
- Scoping of a fly-tipping app to improve data recording.
- Develop process for improved data recording.
- 2024/25: Complete a review of, and update, current fees & refunds policy for Trans-frontier Shipment of Notifiable Waste.



Future Vision/Outcome

A low carbon, resource efficient society in which resources are valued and reused, putting them back into the economy and waste is prevented.

Increased recycling rates with targets set to support this.

Changed consumer attitudes to reuse & repair and waste prevention.

Increased food redistribution.

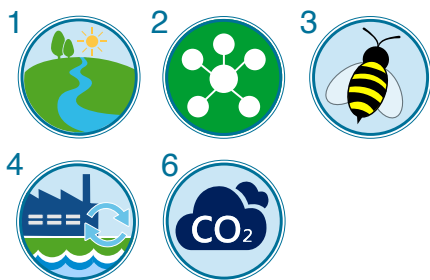
All in society aware of the problem of food waste and take active steps to reduce this.

DAERA and all 11 district councils will use the full range of powers available and will learn from each other in relation to best practice and impact.

NIEA will continue to honour provisions set out in the Fly-tipping Protocol to provide a clear approach to tackling fly-tipping.

A partnership approach that includes the development of systems and processes which will better record the levels of illegal disposal and fly-tipping (including enforcement and clean-up costs).

Actions also contribute to SEOs



UN Sustainable Development Goals





Strategic Environmental Outcome 6

Net Zero greenhouse gas emissions & improved climate resilience and adaptability

There is broad acceptance of the desirability of shifting towards a low-carbon economy and ensuring society can respond and adapt to the impacts of climate change.

The Northern Ireland Assembly passed the Climate Change Act (Northern Ireland) 2022 on 8 March 2022. This Act sets an overall net zero emissions reduction by 2050 target, and it will be a strong driver towards growing a low carbon skills base to enable Northern Ireland to play its part in limiting the rise in global temperatures to 1.5°C.

A key requirement in the Climate Change Act (NI) 2022 is around the development and publication of 5-year climate action plans which will set out how carbon budgets and longer-term emissions reduction targets will be met. These plans have to include targets on soil quality, biodiversity and air quality and the Act also requires Northern Ireland departments, in deciding on policies and proposals for inclusion in climate action plans, to have regard to the desirability of using and supporting nature-based projects.

The Act includes a range of further requirements, including the establishment of a public body reporting regime, the establishment of a Northern Ireland Climate Commissioner and Just Transition Commission and a need to consider carbon leakage risks and just transition objectives when developing policies and proposals for inclusion in climate action plans.

22. Climate Change

Current Status
<p>Legislation</p> <p>The UK Climate Change Act 2008 extends to Northern Ireland, and it is implicit that Northern Ireland must contribute to the UK-wide net zero by 2050 target under that Act.</p> <p>The UK Act provides for the establishment of the UK Climate Change Committee, as independent statutory advisors to the UK Government & Devolved Administrations, on matters relating to climate change. The Act also places specific requirements on Northern Ireland departments to set out their adaptation policies & proposals in response to the latest UK Climate Change Risk Assessment (CCRA) through a Climate Change Adaptation Programme.</p> <p>The Climate Change Act (Northern Ireland) 2022 sets the local framework for tackling climate change in Northern Ireland by building on and complementing the requirements of the UK Act including through the setting of a net zero by 2050 target for Northern Ireland.</p> <p>The UK Emissions Trading Scheme (ETS) has been implemented to replace the EU ETS at a UK level from January 2021. Due to NI Protocol requirements, NI participates in both the UK ETS and the EU ETS.</p> <p>The UK ETS operates a ‘cap and trade’ system designed to reduce the effects of CO₂ emissions on climate from energy intensive industrial and electricity generating installations and aviation.</p>



The scheme sets a cap on the total greenhouse gases that can be emitted by the participants in the scheme. The cap decreases over time to help bring down total emissions.

This cap is converted into tradable emission allowances, allocated to participants via a mixture of free allocation and auctions.

These allowances give holders the right to emit an equivalent amount of CO₂ - one tonne for one allowance. In return, they must monitor and report their emissions each year. Any company likely to emit more than its allocation can choose between taking measures to reduce their emissions or buying additional allowances, including from other participants.

The UK ETS is very similar to the EU ETS, albeit with an initial 5% lower cap in light of the UK's climate ambitions.

In spring 2022, DAERA, along with the UK Department for Energy Security and Net Zero (DESNZ) (formerly Business, Energy and Industrial Strategy (BEIS)) and the Scottish and Welsh Governments, consulted on proposals to develop the UK ETS, to align its design with UKG and DA net zero objectives.

The response to this consultation, published in July 2023, signaled the intention to implement a net zero aligned emissions cap with effect from 1 January 2024, in addition to other scheme developments such as signaling the intention to expand the scope to cover emissions from domestic maritime journeys and energy from waste / waste incineration installations.

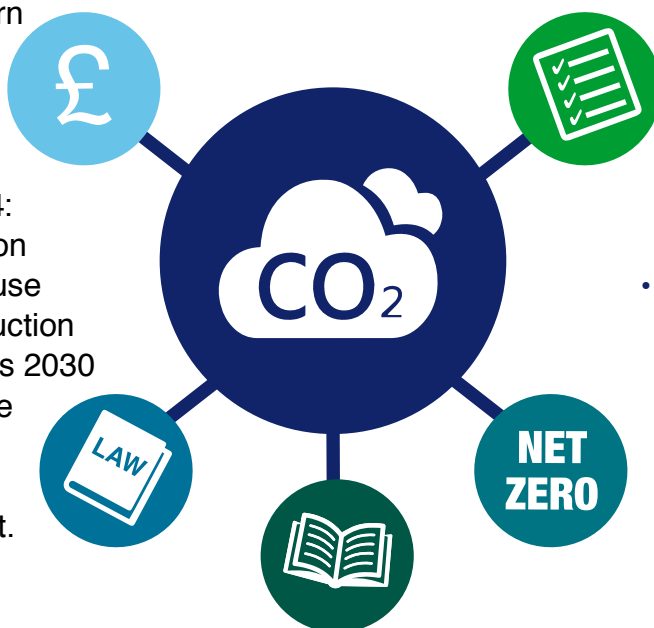
The first principal set of Regulations which set climate change reporting duties on specified public bodies came into operation on 3 May 2024. DAERA will review these Regulations at a future point, to explore expanding the scope of the Regulations including who is required to report, through amending Regulations.

Actions & Targets

- Agree, and set in new legislation, Northern Ireland's first three carbon budgets.

- By December 2024: Make new legislation to ensure greenhouse gas emissions reduction targets for the years 2030 and 2040 are in line with the Climate Change Act's net zero by 2050 target.

- By March 2025: Complete the development of the third Northern Ireland Climate Change Adaptation Programme (NICCAP3) setting out actions for climate change adaptation.



- Publish a Nature-based Solutions Plan to enhance ecological and climate resilience.

- Establish a Just Transition Commission to oversee the implementation of the just transition elements of the Climate Change Act (NI) 2022 & to provide advice to NI departments on just transition matters, to help ensure that Northern Ireland's pathway to net zero is fair for everyone.



- Publish Northern Ireland’s first Climate Action Plan to set out Northern Ireland’s approach to meeting the first carbon budget through a set of policies and proposals for emissions reductions. The Climate Action Plan will also establish a pathway towards the interim targets for 2030 and 2040 and the overall net zero by 2050 target.
- Working with the Department of Energy Security and Net Zero (DESNZ) and the governments of Scotland and Wales, acting jointly as the UKETS Authority, work to further developments to the UK ETS in line with UKG & DA net zero objectives.
- First draft of Regulations to establish a NI Climate Change Commissioner to be laid in Assembly by December 2024 (TEO).

Future Vision/Outcome

Implementation of the Climate Change Act (Northern Ireland) 2022, including development and implementation of 5 yearly climate action plans in order to achieve the statutory 5 yearly carbon budgets which will be set under the Act and the 2030, 2040 and 2050 emissions reduction targets within the Act.

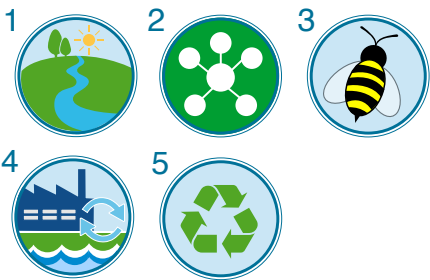
Net zero Northern Ireland greenhouse gas emissions by 2050.

Reduce unnecessary emissions and review cap on number of carbon allowances in the UK ETS.

Transition to a net zero carbon, affordable & resilient energy system.

An environment, society & economy which are resilient & adapted to the current and predicted impacts of climate change.

Actions also contribute to SEOs



UN Sustainable Development Goals





6. Departmental Activities

Whilst it is incumbent upon all of us to play our part in protecting the environment, the public sector should be seen to lead by example and it is doing so in a variety of ways.

From 1 April 2020, the NI Civil Service (NICS) has ensured that 100% of electricity in Department of Finance (DoF) owned buildings is supplied by renewables. As Government is a significant energy user, this move to 100% renewable electricity will help the Executive meet its carbon reduction targets.

A Hybrid Working Policy for the NICS was initially launched in December 2021 and formally implemented in June 2022 to support new ways of working, promote better work-life balance for employees and deliver environmental benefits by reducing commuting to and from the workplace by circa 40%.

The Construction Toolkit - Procurement (finance-ni.gov.uk) published on the DoF Website in September 2022 highlights the Cabinet Office Guidance on Promoting Net Zero Carbon and Sustainability in Construction (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1102389/20220901-Carbon-Net-Zero-Guidance-Note.pdf).

The Department for Communities (DfC) has published Annual Climate Change Action Plans for 2021/22 and 2022/23. These have included commitments around how to progress the retrofitting of homes to meet commitments on emissions; building further on environmental standards in regeneration interventions; and embedding climate change issues more explicitly in grant conditions and in investment decisions. Elements of this connect to the Department's work across its responsibilities, including a Sports Strategy, and ensuring that the opportunities in Green Growth read across to employability and skills programmes.

DfC is in the lead on the concept of a 'Dark Sky City', utilising smart lighting management systems, low colour temperature amber LEDs, minimising waste and promoting a sustainable environment, reducing unnecessary light emissions as an element in reducing energy usage and the impact on nature.

Climate Change related challenges may have significant implications for heritage assets over coming years, with the potential to accelerate/exacerbate many decay mechanisms. DfC has the policy lead for the historic environment, working with colleagues across other departments and within local government to identify and address climate change impacts on cultural heritage and shared challenges or opportunities. DfC has engaged with district councils through their Community Planning process to advise them of the potential of the historic environment and provide advice through the Local Development Plan process toward developing plan policies which conserve, protect and enhance the historic environment - including steps to consider the future impacts of climate change. The Protocol for the Care of the Government Historic Estate commits Executive Departments and their Arm's Length Bodies to lead by example



in their management of these assets, and includes requirements to embed climate change considerations in doing so.

The Department for Infrastructure has contributed in promoting walking, wheeling and cycling and sustainable public transport to reduce the harmful effects of transport emissions through investments in projects which benefit the environment, including creation of greenways and active travel schemes. DfI has introduced a pilot scheme to trial electric vehicles within the Department's operational fleet and is working to reduce diesel emissions from the Strangford Ferry Service.

All departments continue to take steps to minimise waste production and actively encourage recycling across all NICS buildings. The NICS wide Plastic Reduction Action Plan has reduced unnecessary single use plastics throughout the government estate. An outright ban came into force in October 2021 and all NICS departments are continuing to implement the plan.

The Department of Justice is seeking to reverse biodiversity loss across the Prisons estate. Work has already been undertaken to create and enhance wildlife habitats through the creation and management of an Area of Special Scientific Interest (ASSI) at one of the Prisons together with other initiatives which include measures to support the cultivation and reintroduction of native tree species.

The Department of Education published the NI Executive's '*Children & Young People's Strategy 2020-2030*' (CYPS) in January 2021. CYPS aims to support the rights and improve the well-being of all our children and young people, including their environmental well-being. CYPS seeks to build on the interest that children and young people already have in the environment and provide opportunities for them to access and interact with the natural environment at home, in school and in daily activities; and work to improve and enhance the quality of the environments in which they live, learn and play. It is important that children and young people have an understanding of and respect for the environment; that they have access to the natural environment; and that they live in environments which promote their health and well-being.

The Executive Office is directly encouraging sustainable and environmental approaches to regeneration in its engagement with young people as part of the '*Together: Building a United Community (T:BUC) Strategy*'. One of the headline actions of the T:BUC Strategy is engagement through the T:BUC Camps Programme, delivered in partnership with the Department of Education and the Education Authority.

The Urban Villages Initiative aims to foster positive community identities; build community capacity; and improve the physical environment. Projects seek to: improve physical and mental health; encourage public engagement with the environment (including school and community based elements); and enhance ways central and local government and communities can work better together.

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