



Priorities for the Environment 2021-26

ver1.0



Northern Ireland
**environment
link**

Introduction

As this document was being prepared in 2020, the issue that dominated our lives and our news was the coronavirus pandemic that swept around the world and for most, immediately and utterly changed our lives and our world view, shaking our comfortable sense of security to its often detached foundations. NIEL hopes that in 2021 we will come out the other side of that pandemic and take a new and better path, based on different economic, environmental and social choices, but as we plan how to emerge from the pandemic, the better protection of our planet has to be a core component of our attempts to reduce the potential development of future pandemics. This was made clear by the Organisation for Economic Co-operation and Development (OECD) which said, in its policy response to the Coronavirus pandemic¹

“The pandemic is inextricably intertwined with global environmental issues such as biodiversity loss, climate change, air and water pollution, and waste management, both in terms of its origin and the implications for environmental outcomes and the future well-being of societies around the world.”

The OECD went on to say²

“Integrating biodiversity considerations into the COVID-19 recovery is not only important for avoiding future pandemics; it is also vital to economic resilience and human well-being.”

NIEL is confident such a move would be popular with the public.

Recent opinion polls have shown there is overwhelming support for change with 91% of the public saying they don't want things to go back to how they were³. As we, hopefully, plan a sustainable recovery from the coronavirus pandemic, we have to deal with a number of major problems. We are facing a public health crisis, an economic crisis, a biodiversity crisis and a climate crisis and the multitude of problems these crises create individually and collectively. There is an opportunity to deal with some of the problems created by two of those crises in the major global conferences which are due to be held later in 2021 dealing with biodiversity (COP 15) and climate change (COP 26). In order to do so, we need to recognise that our livelihoods are in turn threatened by the changes we are precipitating in both of these related spheres. In this context, NIEL welcomes the NI Assembly motion of 3rd February 2020⁴ that recognised that “we are facing climate breakdown and a biodiversity crisis” and which declared a climate emergency. A year on from the passing of that motion though, the response has lacked the urgency implied by an emergency. We need to do more, better and more quickly.

It is also becoming increasingly clear that we cannot find a way out of our current predicament by trying to solve just one aspect of these many different but related crises. We need to look at the big picture, the connections between the problems and the multiple benefits that could result from the potential solutions. NIEL believes that the UN Sustainable Development Goals (SDGs) should be used as the foundation for the next PfG and for future

PfGs to ensure NI develops a sustainable, resilient, low and ultimately zero carbon, healthier, green economy. NIEL believes that this will create a different, better, stronger economy which is better able to meet the demands of a changing society - a 'future proofed' economy - and which will reduce the many inequalities that resulted from the economic models that prevailed up to 2020, which are now seen by many as flawed and inappropriate for our future. The many benefits of a green/er economy have been highlighted and endorsed by many prominent organisations. For example, the United Nations UNEP Green Economy Report (GER)⁵ concluded that

“Greening the economy not only generates growth and in particular gains in natural capital, but it also produces a higher growth in GDP and GDP per capita. Under the GER modelling exercise, a green investment scenario achieves higher economic growth rates than a business as usual scenario within 5-10 years”

The case for developing a green economy was made in the House of Commons Environmental Audit Committee in its “A Green Economy”⁶ report which said

“The whole economy needs to be green and traditional sectors of the economy will need to be transformed”

Later this year, we expect to see our Executive publish another Programme for Government (PfG) outlining its priorities for Northern Ireland up to 2027.

In advance of the next PfG, NIEL wanted to highlight the perspectives of NIEL members on some of the most important environmental issues we face and are likely to have to deal with in the coming years and that is what this document aims to do. As we plan our recovery from the pandemic, NIEL would ask decision makers to change direction, to think, act and legislate in a sustainable way, to ensure there is system change, rather than more extreme climate change and ongoing biodiversity loss. NIEL hopes this document will help guide the thinking as to how that can be achieved.

NIEL would like to thank the authors of each of the papers in this document for their contribution.

NIEL, January 2021.



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All images sourced from Pixabay unless otherwise stated.

1. [OECD Policy Responses to Coronavirus - Making the green recovery work for jobs, income and growth](#)
2. [OECD Policy Responses to Coronavirus - Biodiversity and the economic response to COVID-19: Ensuring a green and resilient recovery](#)
3. [Food, Farming and Countryside Commission and the Food Foundation 2020 survey](#)
4. [NI Assembly Hansard Official Report: Monday 03 February 2020](#)
5. [United Nations UNEP Green Economy Report \(GER\)](#)
6. [House of Commons Environmental Audit Committee - A Green Economy Twelfth report of session 2010-12 Volume 1 HC1025](#)



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Access and Outdoor Recreation



Context

Our outdoors, including green and blue spaces in urban, semi urban and rural areas, provide opportunities for outdoor recreation that are of immense importance to our society. Such places enable people to engage with nature in ways which are vital to our physical and mental well-being. Studies supported by Sport NI show that we all benefit from regular exercise in the outdoor environment. Furthermore, our understanding and respect for nature increases the more access we have to natural areas and green/blue spaces.

Northern Ireland lags behind the rest of the UK in the quantity and quality of access its citizens have to the outdoors. This situation has not benefitted from access legislation which is considered outdated and unfit for purpose. The last review of the access legislation in 1999, saw no positive change, unlike in England and Wales where the Countryside Rights of Way Act (2000) and the Land Reform Act in Scotland (2003) has led to significant increased access. Never before in Northern Ireland has the demand for high quality access been so apparent. COVID-19 has brought with it an increased demand for outdoor places – as evident in numbers visiting sites such as Divis Mountain, Cuilcagh in Fermanagh and the cycle trails in Rostrevor Forest.

Providing outdoor recreation opportunities which are challenging and exciting will also attract visitors to Northern Ireland and has the potential to boost local economies. To give visitors memorable experiences, all our outdoor facilities need to be of the highest quality.

Recommendations

DAERA should include the following proposals in its Environment Strategy to bring about a sea change in the way people in Northern Ireland engage with their natural environment:

- ❖ Introduce new legislation to facilitate access to the outdoors, including a responsibility on district councils to provide a network of core paths/community trails in their area;
- ❖ Include maintenance of access within the measures eligible for funding through post-Brexit farm support payments;
- ❖ Work with councils to provide new green and blue infrastructure in urban, semi urban and rural areas, especially those that are deprived
- ❖ Consider how environmental therapies could be delivered through the NHS;
- ❖ Continue to give support through the Environment Fund to eNGOs and councils who provide new or enhanced opportunities for outdoor recreation;
- ❖ Endorse the Principles and Standards for Trail Development published by ORNI (2014 and updated in 2021) to ensure quality standards on existing or new walking and cycling trails, including the Ulster Way

Suggested targets/indicators

- ❖ % of the population within 5 minutes walking distance of their nearest local green/blue space;
- ❖ % of the population visiting the outdoors once a week; and
- ❖ Community Trail Plans in place for each Council area.

Behaviour Change



Context

We are faced with the global breakdown of our climate and ecosystems. We have less than a decade to make sufficient changes to the way we do things to avoid the worst of these catastrophes. Contributing factors include the way we casually pollute the environment, whether with litter, plastic or industrial or agricultural chemicals. A growing population in a system that revolves around increasing consumption exacerbates these problems. Behaviour change at all levels, in government, in business and in individual decisions and actions, are critical to the success of all the significant changes required to protect and, where needed, restore our environment for current and future generations.

To avoid the worst outcomes requires rapid and significant behaviour change, whether as an individual or an organisation. Making successful changes may require the public, government and businesses, supported by eNGOs, to change behaviours in tandem to be successful. For example, public support for changes to business models. Buy-in from the public first needs people to understand and value the environment (see [Education and Awareness chapter](#)). We then need to change our behaviour towards how we treat the environment, from the negative (e.g. littering, overconsumption, destruction of habitats) to the positive (e.g. adopting areas, restoring habitats, developing a sharing economy). Legislative tools will be important but these will require public buy-in. The science of behaviour change and implementation of behaviour change tools to engage the public in acting appropriately toward the environment is going to become increasingly important as the deadlines for action move swiftly closer.

According to the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), 1,000,000 species are threatened with extinction, many within just a few decades.

Recommendations

- ❖ Establish a behaviour change knowledge resource in NI to summarise and disseminate research appropriate for use by government and eNGOs.
- ❖ Carry out local research as needed to ensure suitability of findings elsewhere for NI culture and norms.
- ❖ Engage the public when deciding on the priorities for which behaviours need to change.
- ❖ Encourage and support experimentation with interventions to test innovative behaviour change approaches.
- ❖ Use opportunities, such as changes to EU legislation on plastics and litter, to invest in behaviour change campaigns.
- ❖ Grow opportunities for young people to take action on the environment and nurture and encourage the next generation of environmentally responsible citizens.
- ❖ Implement an environmental engagement index to measure people's activities and willingness to act and establish new values in parallel to today's dominant financial framework. A baseline measure will be required initially to determine future progress.

Suggested targets/indicators

- ❖ Establish baseline awareness levels of the main environmental issues e.g. climate change, biodiversity loss, waste management and recycling, access to green space, pollution and levels of engagement with these issues, monitor and record changes in these levels on an annual basis.
- ❖ Establish baseline levels and monitor the implementation of the UN Sustainable Development Goals in NI.

Climate Change



Context

The Intergovernmental Panel on Climate Change (IPCC) stated in 2018 that “Global warming is likely to reach 1.5°C” by as early as 2030 “if it continues to increase at the current rate.” Climate Change is perhaps the most significant risk multiplier for every other environmental issue. In fact, it is no overstatement to label it as the single greatest existential emergency we face today; acting as the catalyst for increases in frequency and severity of loss and damage due to issues such as extreme weather or food security.

At the time of writing, in 2020, NI was the only administration in the UK not to have domestic legislation to tackle climate change and was also the only part of the UK where emissions are increasing. This is symbolic of the wider failure of the region to grasp both the scale of the risks and opportunities. Citizens are desperately looking to government for leadership. We need solutions-based policy to deliver real transformative change in areas including land use and agriculture, sustainable energy and transport options and food security, in order to provide incentives for the public and private business to meet this challenge. It is clear we need a climate change bill in Northern Ireland as a matter of urgency. To tackle climate change effectively, we need to action all the detailed recommendations from the Committee on Climate Change (CCC). This must also include detail on NI commitments to achieving net-zero and planning for climate change, so that public bodies, local councils and civil society organisations can undertake and resource adaptation planning.

Recommendations

- ❖ A Climate Change Bill is essential, to outline NI's commitment to achieving net zero no later than 2050 (in line with the UK target), and to allow public bodies and civil society to plan for climate change.
- ❖ Implement recommendations of the UK Committee on Climate Change's Sixth Carbon Budget which concluded that there is no purely technical reason why Net Zero is not possible in Northern Ireland. The UK CCC report concluded that Net Zero GHGs in Northern Ireland would mean one (or both) of the following: a substantial reduction in output from Northern Ireland's livestock farming sector that goes beyond the stretching scenarios the UK CCC analysed and/or a much greater than equal share of all UK greenhouse gas removals being located in Northern Ireland compared to its current emissions, population or economic output.

Suggested targets/indicators

- ❖ The key target will be a NI-wide emissions reduction in line with the new Net-Zero pledge in the amended UK Climate Act.
- ❖ Specific targets and indicators for sectors listed in the UK CCC's Sixth Carbon Budget to ensure the achievement of the UK's 'Net-Zero' targets
- ❖ Specific targets and indicators are listed in '*2019 Northern Ireland Climate Change Adaptation Programme*' and '*Civil Society and Local Government Adapts*'

Delivering Healthy and Productive Seas



Context

The Northern Ireland marine area spans over 6,000 km², and includes a coastline of over 650 km. Our coast supports important tourism and recreation assets and 44 ports and harbours including five commercial ports and three major fishing ports. More than half of Northern Ireland's biodiversity is in our seas, including whales, dolphins and porpoises, grey seals, puffins and gannets, horse mussels and cold water corals. Strangford Lough alone is home to over 2,000 marine species and attracts up to 80% of the world's population of light-bellied Brent geese throughout October and November, which come to feed on the eelgrass on the mudflats.

The impact of human activity on fragile marine habitats is widely evident, including the increasing amount of marine litter and the decline in marine biodiversity and the consequences of climate change which include increasing sea temperature, sea level rise and ocean acidification. The Northern Ireland marine area currently has 48 Marine Protected Areas (MPAs), occupying 38% of NI's inshore region. However, only 4.48% of these MPAs are considered to be 'under favourable management', a reflection of the general poor health of our seas. The UK was committed to achieving Good Environmental Status (GES) of its waters by 2020, however, according to the 2019 UK Marine Strategy assessment of progress towards achieving GES, only 4 out of 15 indicators for healthy seas are currently being met. We are at a critical juncture for our oceans and so a future strategy for our environment must act to halt and reverse the decline in the health of our seas.

Recommendations

It is essential that there is co-ordinated, robust action to ensure, amongst other things, NI's seas achieve Good Environmental Status, including the completion of an ecologically coherent network of well-managed MPAs, the implementation of an effective NI Marine Plan and an ecosystem-based fisheries management system. These goals must be encompassed within a legally underpinned, ambitious and well-resourced framework, which has SMART indicators and targets which includes the following:

- ❖ An ambitious overarching vision for the sustainable management of our seas which balances economic and social benefits while ensuring the continued health of the marine environment
- ❖ A specific goal for the protection of the marine environment within any future NI environment strategy and bill or Act, in line with the UK Marine Policy Statement vision for “clean, healthy, safe and biologically diverse oceans and seas”
- ❖ Integration of existing international, EU and domestic marine goals and targets
- ❖ Specific actions to ensure NI's seas achieve Good Environmental Status, the completion of an ecologically coherent network of well-managed MPAs, recovering species populations, and improving the spatial extent and condition of important habitats and the implementation of ecosystem-based fisheries management and the principle of maximum sustainable yield
- ❖ A built-in review process for the strategy with a commitment to yearly updates on progress

Suggested targets/indicators

There has been significant effort in compiling data, criteria, targets and indicators for the UK Marine Strategy, and as such, these should be replicated in any NI environment strategy and bill or Act. However, the existing and proposed indicators within part one of the UK Marine Strategy (2019) must be more ambitious and SMART in order to halt and reverse the evident decline in the health of our seas.

- ❖ Full implementation of the NI Marine Plan
- ❖ 30% of NI's marine environment to be in well managed Marine Protected Areas (MPAs) which halt and ultimately reverse losses/declines of those habitats and species for which the MPA was designated
- ❖ All Marine Protected Areas (MPAs) to have a management plan and management measures implemented that are also 'climate smart' i.e., that incorporate climate change considerations in the design and management of MPAs. These considerations should as far as possible apply nature-based solutions to climate change, planning, shoreline management and marine licensing
- ❖ In suitable sites, the whole MPA is protected and managed, not just the 'feature' for which the site was designated. This is a move away from feature based protection to whole site protection or the 'whole site approach'
- ❖ 10% of Northern Ireland's marine area is highly protected, that is closed to all extractive activity. These Highly Protected Marine Areas (HPMAs) could be within existing MPAs or could be new sites. These HPMAs may still allow certain activities but this would need to be assessed on a case by case basis.

Indicators

- ❖ Proportion of quota-managed fish stocks that are fished below Maximum Sustainable Yield
- ❖ Proportion of fish stocks that have catch limits set at or below the levels recommended by independent scientific advice, with this advice based on an ecosystem-based fisheries management approach such as incorporation of climate/environmental forcing and multi-species interactions, as soon as evidence allows
- ❖ Number of Northern Ireland fisheries that are Marine Stewardship Council (or equivalent) certified, or are committed to a credible Fishery Improvement Project (e.g. FisheryProgress.org, Project UK Fisheries)
- ❖ An increase in the proportion of NI shellfish growing waters that are class A; with the aim of 60% by 2035
- ❖ Spatial management of fisheries, including those vessels <12m that do not currently have a vessel monitoring system (implementation of inshore VMS to all vessels)
- ❖ Microplastics in marine sediments and surface waters do not increase
- ❖ 40 fishing vessels are active annually in the Fishing For Litter scheme (via Northern Ireland Fishery Harbour Authority)
- ❖ Underwater noise is monitored at a minimum of 3 locations in the NI marine environment
- ❖ Long-term oceanographic monitoring is supported to understand local climate change impacts and data provided to underpin ecosystem-based management.

Delivering Sustainable Tourism



Context

The 2030 Sustainable Development Agenda with its 17 Sustainable Development Goals (SDGs) requires all sectors of society to work toward the attainment of these goals. Tourism, as a cross-sectoral industry, is no exception. As an economic powerhouse – creating 1 in 10 jobs worldwide, generating 10.4% of global GDP and experiencing growth of 3.9% in 2018 – tourism has the potential to contribute directly and indirectly to all 17 SDGs; and in particular to those relating to sustainable economic growth, sustainable consumption and production, and the sustainable use and conservation of land and marine resources.

In Northern Ireland, the tourism sector has seen an unprecedented tourism growth in the last decades; thanks to concerted efforts in the promotion of screen, golf, cruise and events tourism. Growth in tourism can be beneficial by generating income and creating employment opportunities. It also provides a means and an incentive for regeneration and investment within the region. However, if tourism is not properly managed, it can harm the natural and built environment and alienate host communities. Cases of ‘overtourism’ and environmental damage through tourism – such as the dumping of cruise ship waste in the oceans – have recently made global headlines.

The continual focus on growth acceleration, particularly high-volume/low-yield tourism, may well result in unsustainable tourism development.

In recent years Northern Ireland has experienced significant growth in tourism. 5 million overnight trips took place in 2018, seeing an increase of 23% since 2013. Similarly, the accommodation sector also reported an increase from 1.8 million rooms sold in 2013 to 2.21 million rooms in 2018. Most notably, the cruise sector has grown from 62 ships in 2013 to 128 ships docked at Belfast Harbour in 2018.

While growth can be welcomed, the question remains as to how growth is managed in order to avoid its negative side effects.

Recommendations

- ❖ The creation of a sustainable tourism charter for Northern Ireland
- ❖ This charter should be supported by a sustainable tourism strategy; this should be delivered collaboratively between government, the tourism industry and local communities. This strategy should be informed by a coordinated approach to tourism related data and knowledge
- ❖ Data and shared knowledge are essential to managing tourism. There should be a coordinated approach to collecting, evaluating and sharing economic, social and environmental data relating to tourism in Northern Ireland
- ❖ Policy that ensures the special places that people come to visit are managed and protected for future generations of visitors and residents alike
- ❖ Developing a different metric for measuring success in the tourism industry – replacing the volume based economic model with a sustainability value model that seeks to balance economic, social and environmental considerations
- ❖ Commit 'Destination Northern Ireland' to the Global Reporting Initiative for Sustainable Development

Suggested targets/indicators

The following sustainability indicators have been identified as most crucial for delivering sustainable tourism

- ❖ Amount of materials used and green supply chain management
- ❖ Carrying capacity assessment and visitor management
- ❖ Climate change risk assessments
- ❖ Energy use and conservation
- ❖ Environmental assessments and impact mitigation efforts
- ❖ Greenhouse gas emissions and emissions reduction efforts
- ❖ Habitat protection and restoration
- ❖ Sustainable transport alternatives management
- ❖ Waste management and reduction efforts

Education and Awareness



Context

Environmental education is a life-long learning process by which we understand the world around us; the variety of life, how decisions and actions affect nature, and ways we can take action to live sustainably. Environmental education is a key tool to create healthier and more civically-engaged individuals and communities.

Worldwide, young people have been moved and mobilised to demand a lifestyle rethink considering the climate crisis. Education and empowerment for all are vital.

For twenty-five years the Education for Sustainable Development Forum has acted as a network and voice for all providers of Environment Education for Sustainable Development (EESD) in Northern Ireland, such as Forest Schools, Eco-schools and RSPB. However, this sector is severely under-resourced.

EESD must be life-long and life-changing. Public support for environmental action in the UK, continues to grow. Time donated by volunteers increased by 46% from 2000 (estimated value £20.5 million per annum). (The State of Nature 2019)

Recommendations

- ❖ Every child receives a set period of outdoor learning in nature every week
- ❖ All educators receive training to develop skills to use nature as a vehicle for learning
- ❖ The ESDF is supported as an independent body for the management of the EESD sector
- ❖ A youth forum on the Environment and EESD is created
- ❖ Funding is increased to support organisations engaged in EESD

Suggested targets/indicators

- ❖ 5% of schools will offer outdoor learning opportunities for all their students each week as part of the curriculum by 2025
- ❖ Teacher training colleges include EESD as part of their curriculum by 2025
- ❖ The ESDF is supported to action a new strategy for the EESD sector by 2022
- ❖ A group of 30 young environmental leaders be established as a forum by 2022
- ❖ Government funding is made available to organisations engaged in EESD

Providing Clean Energy



Context

Energy supply is responsible for around 15% of Northern Ireland’s greenhouse gas emissions, and residential properties, heating, cooking, and appliances, contribute a further 14%. Energy is also a significant component of the industrial, public, and agricultural sectors. In total, energy is one of the single biggest contributors to Northern Ireland’s greenhouse gas emissions. If Northern Ireland is to reduce its emissions, and it must if it is to pay its fair share in tackling climate change, then we must shift to energy efficiency and low-carbon technologies.

The Committee on Climate Change released its Net Zero report in May 2019. The report recommended that 100% of energy production should be low-carbon by 2050. The science on climate change is clear: we must make drastic cuts to our greenhouse gas emissions in the next few years. Energy efficiency and energy production are areas that have well established technologies and techniques. It’s in these areas that we can make significant emissions reductions for minimal investment.

According to the Department for Business, Energy and Industrial Strategy (BEIS), onshore wind and large-scale solar PV are cost competitive with Combined Cycle Gas Turbines, and cheaper than all other fossil fuel generators. Offshore wind is projected to become cheaper than all forms of fossil fuel generators by 2025.

The Green New Deal initiative from 2009 mapped out a plan to implement a programme of public works to improve the energy efficiency of homes and public buildings. Such a programme would have the triple benefit of cutting emissions, lowering energy costs, and creating thousands of jobs. Cost is no longer an excuse for inaction.

According to the NI Greenhouse Gas Statistics 1990-2018 report, electricity and heating are responsible for 29% of Northern Ireland's greenhouse gas emissions

Recommendations

- ❖ There must be a presumption against all new fossil fuel infrastructure. There is no room in our carbon budget for more fossil fuels
- ❖ Remove the statutory duty to promote natural gas from the Energy (Northern Ireland) Order 2003, and the Strategic Energy Framework 2010
- ❖ There should be an immediate ban on all commercial fossil fuel extraction. No new licences for fossil fuel exploration should be issued, and all extant licences should be revoked
- ❖ There should be investment in a Green New Deal programme of public works to improve the energy efficiency of the housing stock and the public sector estate
- ❖ Building Regulations should be amended to require the highest level of energy efficiency in all new builds
- ❖ All public sector pension schemes should divest from fossil fuels

Suggested targets/indicators

- ❖ The energy sector needs ambitious greenhouse gas emissions reduction targets based on the most up-to-date science. The sector should have a target of 100% low-carbon by 2050, with an aspiration to reach the target sooner
- ❖ The Public sector estate should achieve the highest possible energy efficiency standards for the building type by 2030

Promoting Sustainable Food



Context

Current farming policies have often made it difficult for food and farming to strike harmony with environmental sustainability. This can be witnessed through declines in wildlife, poor water quality and degraded soils.

To begin addressing these problems we need to move towards a sustainable food and farming system. We need to support and promote sustainable farming methods, re-localise supply chains and increase consumption of fresh, seasonal, local produce.

We need to ensure that farmers and producers receive a fair price for their product, and that people can easily access food that benefits their health and wellbeing. In doing this, we will realise countless benefits whilst safeguarding domestic food production and building resilience for the long term.

By working better with the environment, we can create a more prosperous, resilient farming sector, which better sustains rural communities, protects our soils and produces top-quality food.

Any discussion of food, farming and the countryside in Northern Ireland needs to take account of a number of ways in which we are substantially different from elsewhere in the UK. The first is the way we farm: three-quarters of our farms are classified as very small compared to around a third in England; nearly half of farmers are part-time; 95% of farmland provides grass and rough grazing for beef, sheep and dairy leaving only 5% for crops compared with 46 percent in England; and 69% of the land qualifies as a Less Favoured Area. Our land tenure is also very different, with all farms owner-occupied, while about 30% of farmed land is let.

Agricultural processes generate methane (from livestock) and N₂O (from fertilisers). Fossil fuels are also used to power farm vehicles and heat buildings. According to the NI Greenhouse Gas Statistics 1990-2018 report, agriculture accounted for 27% of NI's greenhouse emissions in 2018

Recommendations, targets and indicators

- ❖ Devise a cross-departmental Food Strategy for NI, based on part of DAERA's vision; "A transformed food system that protects natural resources for future generations, is economically and environmentally sustainable, and provides safe, nourishing, accessible food to people"

Indicator – Cross-departmental NI Food Strategy adopted and progress reported annually

- ❖ Ensure the NI Food Strategy includes a sustainable food security plan, based on improving horticultural diversity

Indicator – Increase in number and volume of vegetable crops grown to strengthen horticultural diversity (currently 95% meat/dairy 5% crops)

- ❖ Actively support, promote and subsidise sustainable agroecology farming practices in all relevant sectors

Indicator – Number of participants attending training courses provided to farming, community and landowners

- ❖ Establish agroecology as the underlying principle of farming in NI, and set out a programme to embed it in practice

Indicator – Reduction in greenhouse gas emissions from agricultural sector

- ❖ Increase soil health by reducing chemical usage and maximising natural relationships through diverse mixed farming methods

Indicator - Reduction of nutrient load on farmland, river and marine environments

- ❖ Implement world-leading public procurement, ensuring that all food procured by public sector bodies is Food for Life accredited. This robust accreditation links sustainability and food in a pioneering and meaningful way, proves a commitment to ethical consumerism, helps reduce the environmental impact of the food served, champions local food producers and contributes to the local economy whilst providing a social return on investment of over £3 for every £1 spent, mostly in the form of increased jobs and opportunities for local food producers

Indicator – Increase in volume of food procured under Bronze Catering Mark

- ❖ Invest in rural infrastructure to underpin the rural economy, based on a diverse, sustainable agricultural sector

Indicator – Increase in investment in rural infrastructure

- ❖ Commit to increase the NI supply of fruit, vegetables, nuts and pulses and products from sustainable agriculture, and use them in everyday foods

Indicator – Increase in % of locally grown fruit, veg and legumes

- ❖ Restructure farm payments to reward sustainable farming methods, recognising environmentally related public benefits which can be produced by farming, including, but not limited to: improved soil health, water quality improvement, increased native tree planting and biodiversity management

Indicator – increase in % of farm payments that reward sustainable farming practices

- ❖ Avoidance of bioenergy crops to avoid problems in food production and diversity

Indicator – % of land used for food production

NI should be developing indicators that are as least as strong as those found across Great Britain, and recognise the value of the SDGs. The UK government has already developed an indicator framework for the 25 Year Environment Plan, which should be adopted and applied in NI.

Freshwater



Context

Our freshwater environment is made up of a network of rivers, lakes and groundwater (water stored in rocks below the ground) that together support life, health and well-being, our economy, wildlife and leisure activities. Our rivers and lakes provide society with numerous benefits and 'ecosystem services' including drinking water; water for bathing/sanitation; water for food production; hydroelectric power generation; water purification and waste removal; nutrient cycling; recreation; flood control and climate regulation. Northern Ireland is also home to a number of freshwater dependant species and habitats from Atlantic salmon, otter and freshwater pearl mussel to wetlands, peat bogs and marl loughs; some of which are locally threatened and globally endangered. The health of our freshwater environment is critical to the future survival of these threatened species and habitats. However, we are currently failing to manage our freshwater environment in a way that reflects the importance of this critical resource and its true value to society.

Northern Ireland's rivers, lakes, wetlands and coasts are some of the best-loved parts of our country, and water bodies often sit at the heart of the local community. Yet most recent reports show that water quality is getting worse. In 2015, only 32.7% of our 450 river water bodies were classified as 'high' or 'good' quality and by 2018 this had fallen to 31.3% (Water Quality Statistics Report, 2018).

Soluble reactive phosphorus (SRP) has been identified as the major contributing factor to poor water quality in Northern Ireland. Since 2012, there has been a sustained upward trend in SRP levels from an average concentration of 0.047 mg/litre in 2012 to 0.068 mg/litre of water in 2018. Addressing this issue requires a much more robust approach to nutrient management planning and much tighter controls on the application of fertilisers, manure and digestate rich in phosphorous to the land, as well as better management of our domestic septic tanks.

In 2015, only 32.7% of our 450 river water bodies were classified as 'high' or 'good' quality and by 2018 this had fallen to 31.3% (Water Quality Statistics Report, 2018)

Recommendations

- ❖ Maintain and strengthen European Water Policy standards in a new UK Environmental Protection Framework: Ensure existing protection standards for freshwater and dependent species and habitats are not diluted in 'post-Brexit' domestic policy and legislation and that adequate funding and suitable government structures are in place to effectively manage our water resources
- ❖ Keep our rivers flowing and wetlands wet: Ensure that water abstraction does not damage rivers, lakes and wetlands
- ❖ Restore our water dependent protected areas: Implement sustainable catchment plans to ensure protection and restoration of our protected habitats
- ❖ Slow, manage and clean up drainage from roads and buildings: Introduce modern drainage systems that prevent pollution entering rivers from buildings and roads
- ❖ Stop pollutants contaminating our water: Increase monitoring of water bodies for pollution and make polluters pay in full
- ❖ Keep sewage out of homes and rivers and off beaches: Upgrade our sewage systems to reduce damaging discharges into our natural and built environment
- ❖ Retain water on floodplains and wetlands: Adopt a new sustainable approach to flood management that works with nature rather than against it
- ❖ Help farmers deliver a healthy freshwater environment: Enable farmers to prevent pollution and restore rivers and wetlands through advice, training and payments
- ❖ Waste less water: Support greater water efficiency in homes, buildings and business.
- ❖ Working together for good water quality: Enable all sections of society to actively contribute to the protection of our freshwater environment

Suggested targets

- ❖ The Water Framework Directive targets are fully transposed and achieved so that all NI waters achieve Good Ecological Status (GES) by 2027 at the latest
- ❖ The number of water pollution incidents is reduced year on year (to below 100 by 2030)
- ❖ SRP levels in rivers fall to the PfG baseline level of 0.059 mg/l reported in 2015 by 2022 and year on year to below 0.030 mg/l by 2030
- ❖ All weirs and/or fish passes that reduce or inhibit the passage of fish in NI rivers are amended or removed to ensure the regeneration of fish populations, especially Atlantic salmon
- ❖ Specific measures are taken to ensure the survival of the freshwater pearl mussel in NI
- ❖ Sewage infrastructure is upgraded to ensure overflow and runoff is reduced to as low a level as possible and in all rivers
- ❖ Sustainable flood management practices based on the use of ecosystem services become more widely used where possible for water management so that the target of in the 'Sustainable Water: A Long-Term Water Strategy for Northern Ireland (2015-2040) to "Manage flood risk and drainage in a sustainable manner" will be met
- ❖ NI Water and/or any body that assumes some or all of its responsibilities is fully funded to enable it to meet all WFD and water quality targets

Indicators

- ❖ The number of water bodies achieving GES in NI
- ❖ The Atlantic salmon population in NI and in specific rivers designated for the conservation of the species
- ❖ The Freshwater pearl mussel population in NI and in specific rivers designated for the conservation of the species
- ❖ SRP levels falling year on year
- ❖ The number of rivers with weirs and/or fish passes and the number of individual weirs that prevent the movement of fish upstream is reduced year on year to an absolute minimum

Historic Environment



Context

The historic environment is all around us, and it tells our story. It tells us who we have been, and therefore is a central element in who we are and who we can be. It binds us all in this small space and shapes our identity. Northern Ireland has a wide and varied heritage which ranges from archaeological remains to small cottages to large castles to extended landscapes. They are all a product of a rich and complex history that has made our towns, cities and rural areas unique and special. The features they contain are not just relics of the past, but assets that can deliver important benefits to our economy, society and the environment. But this resource is finite. We need to understand what we have, the opportunities it presents, and the need to protect it.

What do we know about our historic environment?

- ❖ 51,783 recorded heritage assets
- ❖ 24% of these protected by formal designation
- ❖ 16,875 of these are historic monuments and sites
- ❖ 16,601 of these are industrial heritage sites
- ❖ 663 of these are historic parks and gardens
- ❖ 832 of these are maritime heritage
- ❖ 10.5 million visitors to heritage attractions in 2018
- ❖ We know that visitors to heritage sites feel a significant positive life satisfaction difference
- ❖ Titanic Belfast generated £160 million additional spend in the first five years of its operation
- ❖ It provides £532 million per year gross value added
- ❖ Sustains 10,000 full time equivalent jobs
- ❖ Returns £1.60 extra economic activity over 10 years for each pound invested

Since 2016 the Historic Environment sector in Northern Ireland has been working more strategically together. We have created new working structures and new partnerships. We have an advocacy document *'Treasure the Past: Enrich the Future'*, which sets out why the historic environment is important and should be valued. The sector has also developed a new shared website, www.niheritagedelivers.com.

The sector has come together in this way because we recognise that there are some significant issues. For example, we know that preserving the historic environment is seen by some as an impediment to economic wellbeing. There are increasing numbers of properties on the heritage at risk register; people continue to wilfully destroy heritage assets, and some owners are too afraid to retain and reuse them. Often, short term, private economic gain is seen as more important than longer-term, public benefit.

Key Statistic

Protecting and developing our historic environment will bring massive dividends to everyone in Northern Ireland. A great example can be found in Derry-Londonderry. In 2013, Derry was named as the first UK City of Culture (CoC) This was very much based around the community involvement in heritage in the city. The CoC resulted in a range of social and economic benefits:

- ❖ 83% of people living in the most deprived areas attended a cultural event
- ❖ 84% of schoolchildren were prouder to be from the City as a result of CoC 2013
- ❖ An extra 300-400 jobs were created in the city during 2013, with more than 600 jobs being created as a result in the following 2 years
- ❖ Altogether £160m was spent on physical regeneration in the city in the period leading up to, during and after the City of Culture

Recommendations

- ❖ Resourcing for the delivery of the new Strategy for Archaeology
- ❖ Resourcing for the provision of a sectoral communications facility
- ❖ To reduce the construction industry's production of greenhouse gases and help revitalise local economies, the Executive should prioritise the reuse of heritage assets to repurpose our city and town centres through the development of a suite of fiscal incentives that support this prioritisation within development and planning
- ❖ To support and champion the work to develop a Culture, Arts and Heritage Strategy for Northern Ireland, which includes our tangible cultural heritage asset thus providing an evidence-based set of priorities for these sectors – all vital to our sense of place, our communities and our economy, and which have suffered very significantly during the pandemic – to recover, renew and thrive
- ❖ To work with the Historic Environment sector to champion the relevance of the historic environment, in its role in improving the health and wellbeing of communities

Creating and protecting woodland



Context

Northern Ireland is one of the least wooded countries in EU with only 8% of woodland cover compared to 10% cover in the Republic of Ireland (RoI), 14% cover for the UK and an average of 37% cover in Europe. More than 60% of the woodland cover in NI is in the form of recent conifer plantations. Ancient woodland (woodland that has existed since 1600) accounts for only about 0.04% of land area in Northern Ireland. Ancient woodland is the UK's richest habitat for wildlife.

Planting native trees provides many other public benefits (ecosystem services), such as improving: physical and mental health; air quality; water quality; water management (reducing flooding); soil retention; agricultural productivity; shading; cooling (through evapotranspiration); oxygen production; as well as the more obvious benefits of improving biodiversity and carbon sequestration.

The Government has committed to act on the CCC recommendations and legislate for net zero emissions by 2050. The CCC report called for a rapid increase in the rate of woodland creation in the UK, as a key mechanism to lock up carbon in trees and soils, and to stem the declines in biodiversity, proposing UK woodland cover reach 17% by 2050. This would require a planting rate of 30,000 hectares a year until 2050.

In 2006, the Northern Ireland Executive made a commitment to double the area of forest from 6% to 12% by 2050, mainly funded through the Forest Expansion Scheme. Unfortunately, uptake of the scheme was low. To achieve the 12% target the planting of approx. 1,700 hectares each year for the following 30 years would have been required, as opposed to an average of c. 300 hectares in the proposed plan period.

In March 2020, the Environment Minister launched the Forests For Our Future programme, pledging to plant 18 million trees by 2030 and create 9,000 hectares of new woodland to help our environment and economy. The Minister has stated that the programme will best be achieved through a coherent policy framework within which agricultural, environmental and afforestation policies clearly complement one another and is embraced within the development of the Executive’s strategy for Green Growth – which aims to transform our society towards the UK government net-zero carbon target.

However, whilst this is an improvement on previous commitments, the proposed planting rate of c. 900ha/year will still fall drastically short of what is required to achieve substantially higher levels of woodland cover. Considerable progress will need to be made if we are to reach 12% woodland cover by 2050 and this is still a markedly low target against the European average of 37%.

A greater commitment to native woodland creation and a full review of the funding mechanisms and incentives to plant woodland is needed if Northern Ireland is going to meet the interlinked challenges of the climate change and biodiversity emergencies.

Recommendations

- ❖ Ancient woodland in NI should enjoy the same levels of protection as England

While ancient woodland is listed as a material consideration in the Strategic Planning Policy Statement for NI, this does not reflect the “wholly exceptional” protection give to ancient woodlands in the National Planning Policy Framework (NPPF) for England. The level of protection in NI should at least match that in England

- ❖ Strategy and Incentives for Woodland Creation

Woodland creation is primarily delivered through the Forest Strategy and Agri-Environment schemes and policy. In order to deliver the change needed these strategies need to be reviewed.

The afforestation forum, established under Forests For Our Futures, must ensure central and local government work together to deliver substantial amounts of land converted to woodland.

The focus must be on higher levels of native woodland cover.

Much greater budgetary commitment to afforestation, (than the current £4m small woodland grant scheme), must be made.

- ❖ Agriculture and land use

Low-carbon farming practices, afforestation and agroforestry all have a crucial role to play in reducing emissions by 2050, as well as the other environmental and public benefits generated by trees and woodland. The NI administration should ensure that effective policy is in place to support afforestation and agroforestry on both private and public land, including the policy framework to follow the Common Agricultural Policy.

Suggested targets/indicators

- ❖ Northern Ireland's woodland cover target of 12% is met by 2050
- ❖ Ancient and long-established woodland is given "wholly exceptional" protection no later than the end of 2021
- ❖ All designated ancient and long-established woodland is under favourable management by 2030
- ❖ All ancient and long-established woodland outside designated areas is assessed/surveyed by 2030
- ❖ Northern Ireland Woodland Base Map
- ❖ Forestry and Agri-environment grant uptake (woodland creation, restoration, hedgerow planting)
- ❖ New planting figures from multiple sources (Forest Service, Woodland Trust etc.)
- ❖ Designated site(s) condition reports
- ❖ Felling license applications and approvals
- ❖ Increased tree cover in urban areas (i-Tree etc.)

Effective Environmental Governance



Context

Environmental protection in Northern Ireland has been persistently weak for over three decades and this has caused problems for the health of our people, wildlife and economy. This is in large part due to the fact that NI remains the only administration in the UK without an independent Environmental Protection Agency (EPA). Biodiversity is declining and the clean-up costs from illegal dumping could reach £440 million. It has been estimated that illegal fuel laundering alone between 2009 and 2014 resulted in a loss of revenue of around £400 million while for illegal dumping the figure is estimated to be between £100 and £135 million. Air pollution is linked to over 500 premature deaths a year – *‘Residential Solid Fuel and Air Pollution Study’ (2015), North South Ministerial Council*

The EU was responsible for monitoring the implementation and enforcement of environmental law and could investigate complaints from citizens and take action, including issuing fines, where environmental legislation was not upheld. It has often only been the threat of fines from Europe that has ensured environmental law is properly enforced in NI and we risk losing that oversight and enforcement role – especially as there is no other independent body to regulate and enforce environmental legislation and policy in NI. The UK Government has proposed the creation of a new Office for Environmental Protection (OEP), which will be responsible for monitoring the implementation of environmental law by public authorities including the 25 Year Plan for the Environment (25 YEP). However, this means that the OEP cannot challenge a business, NGO or individual that breaks an environmental law, greatly reducing its influence and relevance. Also the proposed structure of the OEP means it is not truly independent and cannot issue fines for non-compliance, a significant and important power available to the EC.

NI is the only UK administration that does not have an independent Environmental Protection Agency

Recommendations

- ❖ Establish an independent Environmental Protection Agency to oversee and enforce all relevant environmental legislation. This body must be given appropriate powers of oversight and enforcement and must coordinate with corresponding bodies across the UK and the Republic of Ireland
- ❖ The new governance body should be required to report to the NI Assembly

Suggested targets/indicators

- ❖ There should be new legislation to create an independent EPA as committed to in the 'New Decade, New Approach' document, by January 2021 as committed to in the Assembly Motion of 3rd February 2020 to "establish an independent environmental protection agency based on models of best practice, that will be appointed within 12 months"
- ❖ Milestones should be put in place for the establishment of a mechanism e.g. a committee, to oversee and advise on the establishment of an independent EPA including for example, how and when such a body will be set up, finance and HR arrangements and the powers and role of the body, its own governance arrangements and so on

Restoring Nature



Context

Restoring nature and mitigating the climate and ecological crises is essential for human prosperity, health and equity. Maintaining a healthy planet for future generations is a crucial challenge for the coming decade. We need to remain continually aware of the fact that the economy and society is embedded within the natural environment and is not external to it. Meeting demand cannot be by the continued diminution of nature (Dasgupta Review, 2021).

Whether it is providing pollination services, maintaining soil quality, pest management or even eco-tourism, biodiversity is essential for our economy. There's also increasing evidence showing the link between nature and people's health and well-being – for example, studies have found that people who regularly use woods, forests or other natural spaces for physical activity had around half the risk of suffering poor mental health compared to those who did not use green spaces.

The 2019 IPBES report on biodiversity highlighted the scale of the global loss of wildlife. Nature is declining everywhere at a speed never previously seen, endangering our economy, livelihoods, food security and quality of life. The IPBES 2020 Pandemics Report advises that “human ecological disruption and unsustainable consumption drive pandemic risk”. Thus, we need to focus on nature conservation and restoration, climate change adaptation and ecosystem services as a human health priority as well as an environmental priority.

According to the 2019 State of Nature report, Northern Ireland has lost more wildlife than any other part of the UK: 11% of NI species are at risk of extinction, with 12 species added to the Red List since the previous review in 2007.

Furthermore, RSPB/Natural History Museum recently carried out a global assessment using the Biodiversity Intactness Index (BII), which illustrates how local ecological communities have been affected by human impacts.

NI ranked as the 12th-worst performing country for biodiversity loss out of 240 countries, (RSPB, (2021), 'NI one of world's worst for nature', Nature's Voice).

At 8%, Northern Ireland has among the lowest woodland cover in Europe, where average cover is 37%. Bee species have declined by half since 1980 and even once common birds like the starling and house sparrow are in decline. According to DAERA's Environmental Statistics report 2020, only 55% of ASSI biological features are in favourable condition. Just 4.5% of marine protected areas and only 13.7% of terrestrial sites were under favourable management in 2019/20. In 2019, 74% of ASSIs had not been monitored in the last six years, (RSPB, 2020). With only 9.8% of land protected for nature, (JNCC, 2020), Northern Ireland is far below the global 30x30 goal to protect 30% of land by 2030, (currently supported in England and Scotland).

The 2020 review by the RSPB has revealed that the NI Executive has failed to meet 83% of the commitments within the 2015-2020 Biodiversity Strategy and so urgent action is needed. NIEL recommends the adoption of the NDNA commitment to create an independent Environmental Protection Agency at the earliest opportunity, to review the failings of the Biodiversity Strategy and provide recommendations on how to reverse this downward trend. Furthermore, there needs to be direct, measurable actions taken to halt the pressures and drivers of nature loss and delivery of commitments to the Aichi Targets, as stated in the NI Biodiversity Strategy.

Recommendations

- ❖ Effective protection and management of at least 30% of land and seas for nature and people by 2030
- ❖ Implementing species action plans for all threatened species
- ❖ Restoring and reconnecting defined areas of lost and fragmented habitats to favourable/recovering condition and increased funding for monitoring of protected sites
- ❖ Implementation of the Lawton principles – better, bigger, more and joined-up habitats through the creation of a 'Nature Recovery Network'
- ❖ Implementation of the recommendations of the 2016 SPA Review
- ❖ Phasing out harmful subsidies and introducing systems for payments for environmental public benefits by a fixed date, ensuring that agriculture and fisheries work with and not against nature
- ❖ Taking action to control harmful invasive, non-native species, implementing international best-practice to reduce their spread, working jointly with the Republic of Ireland
- ❖ Taking action to tackle pollution, such as reduction and phase out goals for harmful pesticides
- ❖ Ensuring that nature-based solutions for climate also deliver for nature by agreeing core standards for the certification and measurement of nature-based solutions
- ❖ Introduce mandatory biodiversity net gain into the planning system, including no loss of irreplaceable habitats

Suggested targets/indicators

- ❖ By 2030: effective protection and management of at least 30% of land and sea for nature and people
- ❖ By 2030: Halt the systemic loss of biodiversity and put it on the path to recovery
- ❖ By 2040: Species populations and habitats improving – so that nature decline is halted, site protection is enhanced, and recovery is well underway
- ❖ By 2050: Recovery of species and habitats against a baseline of circa 1970
- ❖ Species Abundance – success will mean keeping common species common and recovering depleted species populations
- ❖ Species Distribution – success will mean recovering and/or maintaining species range, avoiding contraction and fragmentation
- ❖ Species Extinction Risk – success will mean ensuring that extinctions and the threat of extinctions as a result of human activity have ceased
- ❖ Habitat Quality and Extent – success will mean recovery and/or maintenance of the size and good ecological status of natural and semi-natural habitats (which are both particularly wildlife rich and carbon rich)
- ❖ The introduction of invasive, non-native species is stopped and existing species are effectively managed by 2030
- ❖ Bird index
- ❖ Butterfly index
- ❖ Wildlife index
- ❖ Mammal index
- ❖ Pollinator index
- ❖ Priority species index
- ❖ Red List status
- ❖ Soil health index
- ❖ Biotic Integrity/Biodiversity Intactness index
- ❖ Landscape connectivity
- ❖ Woodland extent and quality
- ❖ Water quality
- ❖ Control of invasive alien species
- ❖ Control of plant and animal diseases

Promoting Sustainable Land-Use



Context

With the departure of the UK from the EU there will be an opportunity to transform agricultural policy in NI, to create a sustainable farming sector which supports farmers and land managers to work with nature to provide high quality, nutritious food from a vibrant, healthy countryside. Policies previously delivered through the EU Common Agriculture Policy (CAP) have failed to achieve this goal, providing little in the way of benefits to farmers, wider society or the natural environment. Instead, we have seen volatility in farm gate prices, public health crises, poor diets, food poverty, food waste, climate change and environmental degradation.

Farming in NI is heavily reliant on EU subsidies to survive, with 87% of farm income being derived from this source. Without this financial support most farming in NI is economically not viable. These issues cannot be solved purely through the reform of any one policy, but instead rely on coherence across different areas, including health, environment, public procurement, agriculture, welfare and education.

NI has 12% of the UK's ammonia emissions despite having 6% of the land area and 3% of the population.

Recommendations

- ❖ Funding to support farmers and land managers to provide environmental public goods needs to be allocated on the scale needed to meet specific environmental outcomes. It is important that existing levels of funding associated with the CAP (>£300 million) are maintained and repurposed in order to meet environmental outcomes and provide public goods and services
- ❖ Any future payments related to farming and land management must be based on the recipient meeting ambitious regulatory standards. This not only applies to proposed payments for resilience, but for all public goods payments moving forward
- ❖ DAERA must continue to engage with stakeholders to ensure farmers and land managers have a clear picture of changes to agriculture policy resulting from Brexit. Science innovation and research based upon maximising productivity must seek to identify opportunities for sustainable land use and other win-win scenarios
- ❖ Economically marginal systems should be recognised for their high potential to offer significant public benefits
- ❖ The rural landscape is an important and distinctive element of Northern Ireland, and regard should be given to the importance of protecting the rural historic environment and distinctive landscape features

Suggested targets/indicators

- ❖ Improving the recovery curve of farmland wildlife
- ❖ Improving compliance to deliver improved water quality targets
- ❖ Contributions towards lessening the impact of Climate Breakdown e.g. mitigation (reducing emissions), adaptation (sequestering emissions) – Sector Specific measures for arable, beef, dairy, sheep, horticulture, poultry, pigs
- ❖ Pilot win/wins for the environment and productivity e.g. herbal lays (National Trust), farm resilience (Woodland Trust), EFS Group Options (RSPB), magnificent meadows (Ulster Wildlife)

The Sustainable Development Goals (SDG) provide a useful high-level framework for improving the sustainability of agriculture. SDG indicator 2.4.18 – Agricultural Sustainability recommends that indicators must capture the three dimensions of sustainable production: the environmental, economic and social. Measurements, through farm surveys, should give countries the flexibility to identify priorities and challenges within the three dimensions of sustainability. This will help meet SDG target 2.4;

‘By 2030, ensure sustainable food production systems and implement resilient agriculture practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters that progressively improve land and soil quality’.

Promoting Sustainable Transport



Context

According to the Department for Infrastructure's 2018 Travel Survey just 5% of all journeys in NI are by public transport. More than 70% of all journeys in NI are by car and many of these are single occupant journeys. In the rush hour, as much as one fifth of all journeys are parents doing the school run, despite the fact that most primary school children live within one mile of their school. Transport spending in NI is disproportionately higher for roads than all other forms of travel and this has enabled the car to dominate our transport. We need to focus on moving people, not cars around our towns, cities and rural places.

We need to promote public transport and walking and cycling, or active travel, especially for short everyday journeys. Just 32% of the population reported walking for 20 minutes at least once a week. This can contribute to obesity, diabetes and poor mental health. By contrast, cycling commuters can reduce their incidence of many serious illnesses by over 40%.

Local planning authorities should better integrate their goals for housing growth, sustainable transport, climate change, urban regeneration and public health to ensure mutual objectives can be realised. Concentrating housing development in urban areas (including in brownfield sites) and building at appropriate but higher densities is key to reducing the need for car travel and the distances travelled. We need to connect new developments to employment, education, retail and other local services directly through high quality public transport and safe protected cycling and walking routes and networks so that walking and cycling is a convenient and attractive option. This will need investment. Belfast residents, whether they cycled or not, called for £25 per head to be spent on cycling (Belfast Bike Life report 2015).

Just 5% of all journeys in Northern Ireland are by public transport. Up to 68% of the population walk less than 20 minutes each week in NI.

Recommendations

- ❖ Develop and expand the Active School Travel Programme by including on-road cycle training for all P6 pupils, on-site cycle parking and provision of safe routes to school through an infrastructure improvement programme
- ❖ Improve cycling safety by investing in joined-up urban cycling networks, protected cycle lanes and secure cycle parking provision
- ❖ Support rural regeneration by the development of the National Cycle Network and development of traffic-free Greenways
- ❖ Introduce an Active Travel Bill into the statutory planning process, this would incorporate active travel provision in land-use planning and new developments
- ❖ Increase investment in public transport and promote multi-modal journeys by providing safe walking and cycling routes and quality bike parking at rail stations, Park & Ride facilities, key bus stops and on public transport
- ❖ Develop Active Travel Hubs within the redevelopment plans for Great Victoria Street and Derry/Londonderry railway stations, as well as at key urban/community locations
- ❖ Deliver Belfast Rapid Transit/Glider Phase 2 to connect north and south Belfast
- ❖ Introduce 20mph as the default city-wide speed limit (with main arterial routes remaining at 30mph)

Suggested targets/indicators

- ❖ Double the number of journeys by public transport to 10% by the end of 2025
- ❖ Allocate a separate annual budget for cycling of £12.5 million, with £10m for urban areas and £2.5m for rural. This budget should be split 70/30 between capital for infrastructure and revenue for behavioural change programmes
- ❖ Apply the milestones in Northern Ireland's Bicycle Strategy relating to 2040 ambitions
- ❖ Increase the number of people walking 20 minutes at least once a week to 60% by 2030
- ❖ Halve the number of car park spaces in city centres by 2030

Restoring and Protecting Peatland



Image Credit: Connor McLean

Context

There is 165,000 ha of peatland habitats (raised bogs, blanket bogs, fens and wetlands) covering an estimated 15% of NI's land area. Our peatlands are important, rare and ancient habitats that can provide a suite of ecosystem services, principally water and flood management and carbon storage and are a sanctuary for rare and threatened species including insectivorous plants like sundew. Peatlands cover just 3% of the earth's surface but store twice as much carbon as all the forests combined. Peatlands also have a cultural, paleo-ecological and archaeological importance.

However, much of NI's peatlands are no longer storing carbon due to decades of unsustainable management practices, with 88% of peatlands in NI showing signs of degradation, primarily cutting and draining and so have instead become a significant net source of greenhouse gases. The Centre for Ecology and Hydrology (CEH) estimated that NI's degraded peatlands are emitting 170,500 tonnes of Carbon Dioxide (CO₂) each year, and 223,200 tonnes of GHGs (in CO₂ equivalent) in total. Until now, all these emissions were not accounted for in the UK GHG Inventory, and will have a substantial, negative impact on NI GHG emissions in the next inventory assessment. The more degraded a site, the longer it will take to restore and the higher the cost of restoration, therefore protection and early intervention is essential. However, when the ecosystems services like water filtration, flood mitigation and biodiversity are considered, the co-benefits will far exceed the restoration costs.

NI's degraded peatlands are emitting 170,500 tonnes of CO₂ each year, and 223,200 tonnes of GHGs (in CO₂ equivalent) in total.

Recommendations

Any NI Environment Strategy or bill or Act should aim to halt the further degradation and prioritise conservation, early intervention and restoration of peatlands and protect and enhance the wide range of ecosystem services they offer.

- ❖ Develop a NI Peatland Strategy that recognises to the wide range of services these important habitats deliver for society and prioritises peatland protection and restoration with a specific target for 95% of the habitat area to be under positive management by 2025 and the remainder by 2035
- ❖ Provide sustainable long-term funding for peatland conservation and restoration e.g. through agri-environment schemes
- ❖ Implement a long-term monitoring framework for peatlands
- ❖ Increase awareness of the value of peatlands to land managers and the general public and the need for sustainable land management of peatland habitats
- ❖ End the use of peat-based horticulture products no later than 2022; support the industry to implement responsible sourcing of sustainable peat replacements and develop new market opportunities

Suggested targets/indicators

- ❖ 100% of NI's peatland resource is under positive, sustainable management and restored to a functioning state by 2040
- ❖ Peatlands are managed to rebuild biodiversity and contribute to international global commitments

Waste Prevention and the Circular Economy



Context

Improving the efficiency of resource use and ensuring that waste is valued as a resource can contribute to reduced dependency on importing raw materials and help the transition to more sustainable material management and to a circular economy model. EU and UK legislation and policy is undergoing transformation to help create modern waste management systems. The revised EU waste legislation which entered into force in July 2018 set out new ambitious recycling rates to 2035 while clarifying the legal status of recycled materials and strengthening waste prevention and waste management measures (including for marine litter).

Any environment strategy or bill or Act must enable citizens and economic activity to prosper through a clear and action-led commitment to take all feasible actions towards this a circular economy. This includes following up on cross-departmental recommendations made for increasing circular economy activity within and by government, directly and through policies. There are several reports on the potential for developing a circular economy in Northern Ireland affirming this including, on job creation and key sectors, a Collaborative Circular Economy Network Scoping Study and Derry City and Strabane District Council's Zero Waste report.

It is estimated that up to one third of all food produced is lost or wasted.

According to WRAP's research and estimates compiled by the UN Food and Agriculture Organization (FAO), approximately one-third of all food produced in the world is lost or wasted. This was reaffirmed in August 2019 in the IPCC report on Climate Change and Land. This equates to:

- ❖ \$940 billion in economic losses globally per year, due to food loss and waste

- ❖ Over £19 billion worth of food waste in the UK annually
- ❖ An average UK household with children discarding approximately £700 of edible food each year

In the UK, food waste in primary production is estimated at 3.6 million tonnes a year, or 7.2% of all food harvested. This would have a market value of £1.2 billion at farm gate prices. In addition, £3 billion worth of food is thrown away at hospitality and food service outlets. The RPS/WRAP NI Kerbside Household Waste Composition study, carried out on behalf of DAERA in 2018, also showed that household residual bins in NI still contain 24.7% food waste, equating to 87,062 tonnes in 2017.

This evidence highlights the scale of the challenge, but also highlights for Northern Ireland the opportunity that effective policies and actions to reduce food loss and waste can deliver carbon reduction benefits, improve food security and aid citizens in saving money by preventing avoidable food waste. In turn additional economic benefits can be realised. According to WRAP, for companies, there is a 14:1 return on each pound invested in actions to prevent food loss and waste, while for the UK as a whole the return was a high as 250:1. By working collaboratively in Northern Ireland, to act on these issues, organisations in the sector along with government and citizens can help fulfil our responsibilities to the environment.

55% of materials in NI residual bins could be recycled

In addition to 24.7% of food waste, NI residual bins also contain paper and card (15.6%), plastics, glass and textiles, which are all readily recyclable. Thus, there is great potential to recover significant additional tonnes of readily recyclable material from household residual waste. Increasing the capture of this material through kerbside recycling services, to support meeting statutory recycling targets and to maximise the potential value of the materials collected is a key part of achieving resource efficiency in NI.

Recommendations

- ❖ Align NI policies to deliver the objective of the Circular Economy Package (CEP). Amongst other things this should address: waste prevention and overall resource efficiency; effective management of plastics; creation of economic opportunities along the supply chain; adequate provision to monitor and evaluate impact and benefits; improved citizen awareness and commitment through behavioural change interventions and effective communication and reduction of marine littering
- ❖ The development and implementation of policies that work across all government departments to promote the development of a circular economy and realise the economic benefits and opportunities this can provide

Suggested targets/indicators

- ❖ Meeting targets set out in the CEP Regulations/Environment Bill
- ❖ Waste sector carbon emissions
- ❖ NI municipal recycling rate
- ❖ Capture rates for target recycling streams
- ❖ Further Household waste composition studies to track progress
- ❖ Citizen engagement indices