



Ireland's Environment

An Integrated Assessment 2020

Key Messages Booklet



Environmental Protection Agency

The EPA is responsible for protecting and improving the environment as a valuable asset for the people of Ireland. We are committed to protecting people and the environment from the harmful effects of radiation and pollution.

The work of the EPA can be divided into three main areas:

- **Regulation:** Implementing regulation and environmental compliance systems to deliver good environmental outcomes and target those who don't comply.
- **Knowledge:** Providing high quality, targeted and timely environmental data, information and assessment to inform decision making.
- **Advocacy:** Working with others to advocate for a clean, productive and well protected environment and for sustainable environmental practices.

MANAGEMENT AND STRUCTURE OF THE EPA

The EPA is managed by a full time Board, consisting of a Director General and five Directors.

The work is carried out across five Offices:

- Office of Environmental Sustainability
- Office of Environmental Enforcement
- Office of Evidence and Assessment
- Office of Radiation Protection and Environmental Monitoring
- Office of Communications and Corporate Services

The EPA is assisted by advisory committees who meet regularly to discuss issues of concern and provide advice to the Board.

Introduction

Ireland's Environment – An Integrated Assessment 2020 outlines the current state of Ireland's environment at a strategic and national level.

The latest in the EPA's state of the environment series, the report provides information about the quality of Ireland's environment and the environmental challenges we are facing, both nationally and globally. The purpose of the series is to provide ongoing, timely information and knowledge to the general public, policymakers and key economic sectors so as to support action to protect and manage the environment. **Ireland's Environment**, the EPA's companion online resource, is regularly refreshed to provide up to date information about the state of the Irish environment using a selection of key indicators.

This summary booklet presents the following information from the report: Key Messages, Chapter Highlights, Current Assessment and Outlook, Actions for a Cleaner Greener Environment.



Key Messages

We Need Vision and Implementation to Protect Ireland's Environment and our Health and Wellbeing



SOE 1: Environmental Policy Position

A national policy position for Ireland's environment.

ACTIONS – WHAT IS NEEDED?

There are many interlinkages and dependencies between environmental policies and legislation. These links could be better connected and reinforced through an integrated national policy position on protecting Ireland's environment.



SOE 2: Full Implementation

Full implementation of existing environmental legislation and a review of the governance around the coordination on environmental protection across public bodies.

ACTIONS – WHAT IS NEEDED?

Full implementation of, and compliance with, existing environmental directives and legislation is a must to protect the environment. A review of environmental governance is needed to develop structures to achieve full implementation. This review should also develop recommendations for governance structures that help with improving coordination and linking up environmental protection work across different departments, organisations and regulatory bodies.



SOE 3: Health and Wellbeing

Protecting the environment is an investment in our health and wellbeing.

ACTIONS – WHAT IS NEEDED?

Managing the environmental and radiological risks to health from chemicals and other pollutants is still a major part of environmental protection. Green and blue spaces as well as quiet areas also need to be protected as they provide social spaces for communities and enable a connection to nature, with evidence showing that spending time in such spaces is good for health.

Step Up to Protect the Environment Around Us as it is Under Increasing Threat



SOE 4: Climate

Systemic change is required for Ireland to become the climate-neutral and climate-resilient society and economy that it aspires to be.

ACTIONS – WHAT IS NEEDED?

More urgency is needed to deliver actions on climate mitigation and adaptation and to ensure that Ireland meets its international obligations to reduce greenhouse gas (GHG) emissions. While Ireland's GHG emissions, with full implementation of the Climate Action Plan, are projected to decrease by an annual average reduction of 3 per cent between 2021 and 2030, further measures are required to meet national and EU ambitions to keep the global temperature increase to 1.5°C.



SOE 5: Air Quality

Adoption of measures to meet the World Health Organization air quality guideline values should be the target to aim for in the Clean Air Strategy.

ACTIONS – WHAT IS NEEDED?

The publication and implementation of the planned National Clean Air Strategy is needed to protect Ireland's air quality. The adoption of the World Health Organization guideline values as national air quality standards within the strategy would provide for a higher level of public health protection. Integrating air pollution controls, noise mitigation measures and climate action, for example in transport management, can bring multiple benefits.



SOE 6: Nature

Safeguard nature and wild places as a national priority and to leave a legacy for future generations.

ACTIONS – WHAT IS NEEDED?

Nature and wild places are at risk in Ireland and need to be better safeguarded, both locally and in protected areas. The next Biodiversity Action Plan needs to be more ambitious and identify the pathway to transformative change for nature protection in Ireland. It needs to develop and further strengthen the protection of our national network of protected areas for future generations and to reverse wider current trends in biodiversity and habitat loss.



SOE 7: Water Quality

Improve the water environment and tackle water pollution locally at a water catchment level.

ACTIONS – WHAT IS NEEDED?

The water quality in Ireland's rivers, lakes and estuaries needs to be better protected through evidence-based measures, integrated water catchment-based projects and initiatives and by reducing the amount of nutrients ending up in water courses.



SOE 8: Marine

Reduce the human-induced pressures on the marine environment.

ACTIONS – WHAT IS NEEDED?

As an island nation with an extensive marine area, Ireland needs to ensure that robust governance and legal frameworks are in place to protect the marine environment.

System Change – Delivery on Sectoral and Societal Outcomes Needs to be Accelerated



SOE 9: Clean Energy

Ireland needs to move rapidly away from the extensive use of fossil fuels to the use of clean energy systems.

ACTIONS – WHAT IS NEEDED?

The emissions from the combustion of mainly imported fossil fuels are damaging for our health and our environment and drive climate change. The transition from reliance on fossil energy to a clean energy future for heating, electricity and transport is essential for the protection of human health, the climate and the environment and has multiple benefits for sustainable development and energy security.



SOE 10: Environmentally-sustainable Agriculture

An agriculture and food sector that demonstrates validated performance around producing food with a low environmental footprint.

ACTIONS – WHAT IS NEEDED?

A more holistic farm management and water catchment-level management approach, encompassing all environmental pressures, will be fundamental to progress towards a more environmentally-sustainable and carbon-neutral food production system.



SOE 11: Water Services

Drinking water and wastewater infrastructure must meet the needs of our society.

ACTIONS – WHAT IS NEEDED?

Action is needed nationally to address the underlying causes for the delays in delivering improvements in drinking water and urban wastewater infrastructure. Addressing the legacy of under-investment and fixing the shortcomings highlighted in successive EPA reports on drinking water and urban wastewater need to be prioritised. The resilience of water-related infrastructure must also improve to guard against the impacts of weather events and climate extremes on water services and the water environment.



SOE 12: Circular Economy

Move to a less wasteful and circular economy where the priority is waste prevention, reuse, repair and recycling.

ACTIONS – WHAT IS NEEDED?

Changing our behaviours on resource consumption, waste management and recycling are actions that everybody, from business to individuals, can take to protect the environment.



SOE 13: Land Use

Promote integrated land-mapping approaches to support decision-making on sustainable land use.

ACTIONS – WHAT IS NEEDED?

The development of an integrated national approach to land mapping could support better decision-making on land use and management practices. It could contribute significantly to mapping land use change and managing competing pressures on the environment, such as agriculture, urbanisation, tourism and recreation, energy projects, carbon sinks, ecosystem services and space for nature.



Chapter Highlights from Ireland's Environment: An Integrated Assessment 2020

Chapter Highlights for Introduction



The absence of an overarching national environmental policy position is negatively affecting integration and progress across multiple environmentally related strategies, plans and programmes: the sum of the parts do not make up a coherent whole.



As Ireland emerges from the COVID-19 pandemic crisis and looks to stimulate economic recovery, it needs to apply a 'green investment' approach and avoid lock-in, or a return, to carbon-intensive consumption and unsustainable production behaviours, services and technologies. A clean environment provides the opportunity to deliver on health and economic dividends that will assist resilience and support recovery.



Protection of our waters, air, soil, ecosystems and biodiversity should not just be an ambition driven by altruism, as these systems and species provide essential supporting services for our wellbeing and our economy. The delivery of trusted and actionable knowledge about our environment is essential to allow Ireland to plan with any degree of certainty for a better future.

Chapter Highlights for Climate Change



Ireland's climate is changing. Mitigation and adaptation action that is planned, coordinated and prioritised is required to build the resilience of society and the economy in the face of current and projected climate change impacts.



The next decade needs to be one of major developments and advances in relation to Ireland's response to climate change. We need to start implementing ambitious policies now. Full and early implementation of ambitious policies and measures can deliver Ireland's current and future commitments to a climate-neutral economy and climate-resilient society by 2050.



The scale and pace of greenhouse gas emissions reductions must accelerate. Reducing emissions requires far-reaching transformative change across the whole economy, including in agriculture, energy, transport, waste, land use, food, buildings and industry. Ireland's greenhouse gas emissions profile – with over one-third of emissions coming from agriculture and a high dependency on fossil fuels – is particularly challenging. Ireland must also maximise the use of land as carbon stores, for example through grasslands, wetlands and forestry, to meet targets.

Chapter Highlights for Air Quality



Monitoring and research show that Ireland has air quality issues that need to be resolved. Poor air quality has implications for public health. Identified solutions need to be implemented for the causes of poor air quality, which mainly relate to the residential use of solid fuels for home heating, emissions from transport, especially from diesel and petrol engine passenger cars, and ammonia-related emissions from livestock farming.



Using home heating choices that reduce air emissions, along with improved standards for the quality of solid fuel available, will help to minimise local air quality impacts. Reducing our reliance on diesel- and petrol-fuelled passenger cars and the adoption of best practices to reduce agricultural ammonia emissions on farms will have co-benefits for air quality, the climate, human health and biodiversity. In addition, the implementation of the commitments in the government's Climate Action Plan will have co-benefits for air quality.



The need for a National Clean Air Strategy supported by WHO standards is more pressing than ever. The publication and roll-out of actions as part of the National Clean Air Strategy will be a necessity. The adoption of the WHO guideline values as national air quality standards would provide for a higher level of public health protection.

Chapter Highlights for Environmental Noise



National noise planning guidance for local authorities is needed. This will support and promote the proactive management of noise where it is likely to have significant adverse impacts on health and quality of life. The guidance will also help to implement the noise objective in Project Ireland – National Planning Framework 2040 and should also consider the 2018 WHO noise and health guidelines.



Noise pollution complaints from the public have been increasing and current measures do not always allow for them to be adequately addressed. Local authorities need to take a much stronger leadership role in dealing with noise issues, particularly in more urban areas.



Integrating air pollution and noise mitigation measures (and climate actions), particularly in transport management, can bring many benefits. Such integration of options could be explored under the plans for a clean air strategy for Ireland. Local authorities should also designate quiet areas in their cities for health and wellbeing value.

Chapter Highlights for Land and Soil



Our soils and land need to become net sinks for capturing and storing carbon dioxide. The facilitation of further carbon storage will require widespread rehabilitation and protection of peatlands, increased levels of forestry and woodland, and changes to land management practices. Where land management is providing a store for carbon, this should be maintained or enhanced. Where land management is resulting in emissions of carbon dioxide, this source should be reduced or eliminated, and where land is degraded or has lost its ability to absorb or store carbon dioxide it should be restored. Nationally, there needs to be a concerted effort to fully implement the commitments of the strategies and plans to protect and restore peatlands.



A progressive approach to land cover, land use and land management is required to promote land practices that are sustainable and right for our environment and our people. Implementing such an approach will help coordinate, prioritise and measure Ireland's response to significant environmental issues such as climate change and the decline in nature across multiple sectors. An integrated national approach to land mapping will be needed to support this work.



We need to continue to improve our knowledge of soils and the functions and services they provide. Careful management of soil enrichment and land management activities will avoid or minimise greenhouse gas emissions into the air, as well as nutrient and sediment losses into water catchments. This needs to happen from the national policy level to the local management scale, covering cross-sectoral activities on farms, forest plantations and peatlands and within both urban and rural areas.

Chapter Highlights for Nature



Ireland needs to prioritise actions to protect nature. The challenges facing vital pollinators such as bumblebees, and the extensive loss of the curlew as a breeding bird species, should be the alarm calls needed nationally to focus on the transformative changes required in how we value and protect nature. More engagement on nature protection across stakeholder groups is needed, together with a review of governance, with solutions fast-tracked at policy and regulatory levels to protect habitats and halt biodiversity loss.



The challenges involved in protecting Ireland's habitats and species are now more serious than ever and need urgent action. But nature can bounce back under the right conditions. Implementing national biodiversity policies, such as the National Biodiversity Action Plan, requires an increased level of collaboration and coordination across multiple sectors and the whole of society. This can also give rise to indirect co-benefits for other sectors and environmental issues such as climate change and water quality.



Education, monitoring and citizen science initiatives are vital steps in protecting biodiversity. To promote more proactive and widespread engagement we need to continue to systematically survey habitats and species, track threats from invasive species and develop collaborative projects between scientists, farming sectors and the public. Regulatory aspects also need to be in place, with conservation plans for the management of Natura 2000 areas.

Chapter Highlights for Water Quality



Ireland has seen a continuing decline in high status water bodies and an increase in the number of water bodies in poor ecological health. Even more stark is the dramatic reduction in the number of our most pristine rivers, which have fallen in 30 years from over 500 sites in 1990 to only 20 sites in 2020. Rapid action is needed to protect our remaining pristine sites before they are lost. More urgent focus also needs to be given to protecting our estuaries, as these water bodies have the worst status overall and specific measures for their improvement and protection should be identified and implemented.



The decline in river water quality is being driven primarily by nutrient pollution coming from agriculture and wastewater systems. Fertiliser spreading, slurry spreading and other nutrient losses that are causing pollution need to be covered by tighter measures in the next River Basin Management Plan and Nitrates Action Programme. Irish Water must ensure that the necessary wastewater infrastructure is in place and is not causing pollution, as legally required in EPA authorisations.



Overall, water quality has declined in Ireland, despite the actions taken to date to reverse this trend. Continued targeted action at local water catchment level that is based on science is key to improving water quality. The Local Authority Waters Programme and Agricultural Sustainability Support and Advisory Programme have key roles in implementing this targeted action and providing guidance at water catchment and farm levels to improve water quality. There also needs to be a national focus on measures to deliver solutions that protect and restore all water bodies.

Chapter Highlights for Marine Environment



Ireland's marine waters are clean and reasonably healthy but not as biologically diverse and productive as they could be. They are affected by several human-induced pressures including fishing, climate change and marine litter such as plastics.



The area covered by Marine Protected Areas needs to be expanded significantly to meet the international requirement to conserve 10 per cent of all coastal and marine areas, rising to 30 per cent in future targets under the EU Biodiversity Strategy 2030. The expansion will promote the remediation of environmental damage and the protection of marine ecosystems and biodiversity.



As an island nation with an extensive marine area, Ireland needs to ensure that robust governance and legal frameworks are in place to protect marine ecosystems and the services they provide to society. There needs to be governance systems in place that coordinate and integrate the implementation of directives where there are crossovers, such as those covering marine strategy, marine spatial planning, water quality, waste, biodiversity and protecting fish stocks.

Chapter Highlights for Waste



Ireland needs to do more to prevent waste at all stages of a product's life cycle, incentivise reuse and repair, increase recycling and extract the maximum resources from waste that cannot be recycled. Implementing the policy initiatives under the *Waste Action Plan for a Circular Economy* will be central to delivering the systemic changes needed.



Strong, consistent, multi-agency enforcement and campaigns to change public behaviour are needed to effectively target littering in urban and rural areas, to prevent waste crime and to ensure that those who break the law are held accountable.



How we manage and recycle our waste needs to be reviewed. Municipal and packaging waste recycling rates have stagnated or declined but improved segregation of kerbside bins could bring about significant improvement in rates. Landfill and waste-to-energy treatment in Ireland is at capacity and the country is highly dependent on export markets to treat residual, recyclable and hazardous wastes. We need to build in resilience to Ireland's waste management capacity in the event of emergencies.

Chapter Highlights for Environment and Industry



Pollutant emissions to air from industry represent a significant proportion of Ireland's total air emissions. However, releases of air pollutants by industry have significantly decreased (by over 70%) during the past decade. Overall, environmental regulation and improved pollutant abatement technology, among other factors, have delivered significant reductions in pollution and will continue to do so under new tighter standards up to 2030.



The food and drink sector continues to face many challenges in maintaining environmental compliance as the industry adapts to increased agricultural production and intensification. This sector has featured strongly on the EPA priority sites list. Investment is needed to ensure that facilities in the food and drink sector meet their environmental obligations set out in EPA licences covering areas such as odour controls, noise limits and the operation of wastewater treatment systems.



Environmental regulation provides a requirement that industry modernises and meets best practice in relation to controls on waste and emissions, as these actions taken to reduce emissions contributes a large dividend in terms of environmental and human health improvements. Industry can gain competitive advantages and more local support from being sustainable and having a good environmental compliance history.

Chapter Highlights for Environment and Transport



The transport sector has a significant impact on the environment, including being responsible for 20 per cent of Ireland's greenhouse gas emissions. A sustainable mobility transformation is required, with the next decade crucial, whereby necessary journeys are made by sustainable modes such as walking, cycling and public transport, followed by using electric vehicles where unavoidable. For this transformation to happen we need to start fast-tracking the measures in the Climate Action Plan and other necessary measures.



Long-term, integrated spatial and transport planning can achieve compact development and move trips to rail, bus, cycling and walking. Shifting to these modes is an essential part of a sustainable and climate-neutral transition for the transport sector.



While challenging, the long-term changes required in transport can deliver multiple benefits in reducing greenhouse gases, tackling growing traffic congestion, reducing air pollution and noise emissions, and enhancing our wellbeing and the economy.

Chapter Highlights for Environment and Energy



Almost 90 per cent of Ireland's total energy use is provided by combustion of, mostly imported, fossil fuels. This is not sustainable. The resultant emissions are damaging for our health and our environment and continue to drive climate change. To transform this situation, we need to start fast-tracking the measures in the Climate Action Plan and other necessary solutions. Strategic planning is required to transform this situation by 2050, including accelerated actions to 2030.



Transitioning to a clean energy future is essential for the protection of human health, climate and the environment, while having many benefits for sustainable development. The investment and implementation of currently available solutions to enhance efficiency and utilise Ireland's renewable energy potential needs to be urgently rolled out.



Current fossil carbon lock-ins in electricity generation, but particularly in buildings and transport, need to be assessed, quantified and managed as part of the rapid transition away from these energy sources. Such a transition will require effective frameworks for investment. The redirection of fossil fuel subsidies can contribute to this process.

Chapter Highlights for Environment and Agriculture



Agricultural practices are identified in EPA reports as being one of the main pressures responsible for the decline in water quality nationally. Moreover, the agriculture sector is responsible for approximately one-third of national greenhouse gas emissions and over 99 per cent of national ammonia emissions. Biodiversity is also under pressure from land use changes and intensive farming. Ireland's reputation as a food producer with a low environmental footprint is at risk of being irreversibly damaged. Outcome-focused and activity metrics are required to allow for tracking of the sector's performance and accountability in improving sustainability and protecting the environment.



Economic growth in the agri-food sector in recent years is happening at the expense of the environment, as evidenced by trends in water quality, emissions and biodiversity all going in the wrong direction. Business-as-usual scenarios will not reverse these trends. New measures must go beyond improving efficiencies and focus on reducing total emissions by breaking the link between animal numbers, fertiliser use and deteriorating water quality. Measures are also needed to address new EU strategies including the Farm to Fork Strategy, which sets ambitious but sustainable targets to 'transform the EU's food system'.



The adoption of a more holistic farm and catchment-level approach, encompassing all environmental pressures, will be fundamental to progress towards more environmentally sustainable and carbon-neutral food production.

Chapter Highlights for Environment, Health and Wellbeing



A good-quality, well-protected environment has significant health and wellbeing benefits; research has shown that access to clean green and blue spaces in our environment is good for us. The provision of health-promoting environments in urban planning is central to Ireland's transition to more compact and urban living.



Greater individual action needs to be taken to proactively tackle avoidable health consequences linked to the environment. Actions include radon testing, testing private wells, maintaining septic tanks, eliminating use of smoky fuels, reducing wasteful consumption, preventing littering and making sustainable commuting decisions.



There are risks to our environment and our health from climate disruption, chemical exposure, and underinvestment in drinking water and wastewater treatment infrastructure. These risks must be addressed through state investment in targeted research, in monitoring and enforcement actions, and through investment by Irish Water in the necessary water services infrastructure.

Chapter Highlights for Environmental Performance, Policy and Implementation



Many of Ireland's agreed environmental targets will not be met in the short term or will be delivered late. Despite progress in some areas, the scale and speed of improvements being made are insufficient to meet long-term EU and national objectives such as those covering water quality, air quality, nature protection, reducing emissions to air and the ambition for a climate-neutral economy and climate neutrality by 2050. To improve implementation, sustained improvements are needed in how the performance of environmental and sectoral plans, policies and strategies are coordinated and tracked, their effectiveness is measured and the outputs of such measurements are fed back into reviews and future updates.



The successes in environmental policy implementation to date, for example around industrial emissions and waste management, were hard won. These successes are being offset by increased levels of population growth, unsustainable patterns of production/consumption and climate change, resulting in a net decline in the state of Ireland's environment. To reverse these trends, Ireland needs to improve the implementation and enforcement of existing environmental legislation and policy at all scales, from national to local levels. This can be supported through more effective governance structures, greater focus on monitoring and performance evaluation, enhanced oversight and enforcement, and higher levels of investment.



Tackling the complex and interlinked challenges facing the environment will require the development of more integrated, coherent and ambitious environmental policy frameworks and a clear national policy position for Ireland's environment.

Current assessment and outlook for Ireland across five key environmental policy areas*

POLICY AREA	CURRENT ASSESSMENT	OUT LOOK	NOTES
Climate			
Greenhouse gas (GHG) emissions			Greenhouse gas (GHG) emissions have not been sufficiently decoupled from economic activity. Ireland had the third highest per capita GHG emissions in the EU in 2017, resulting in a current assessment of very poor. Our 2020 target will not be met without relying on purchasing credits or allowances. Decarbonisation of energy will need to be accelerated rapidly to achieve our 2030 target and enable achievement of the current or emerging 2050 transition objective. Steps to reduce other GHG emissions are urgently needed.
Renewable energy share			Despite considerable expansion in recent years, Ireland's renewable energy share (at 10.7%) remains well below the EU average (17.5%), with fossil energy making up 90% of Ireland's energy needs. Ireland looks set to fall short of reaching binding EU renewable energy targets for 2020. National targets for 2030 imply significant further expansion in this period which will then need to continue.
Climate adaptation			There have been good advances on the planning and governance side, with the establishment of the Climate Action Regional Offices, and all sectors and Local Authorities now have climate adaptation strategies and plans in place. However, there is little evidence of the implementation of these strategies or plans to date.
Overall climate assessment			While there has been some progress on renewable energy and ambitious climate action and adaptation plans, Ireland's failure to significantly reduce GHG emissions results in a 'very poor' current assessment. Meeting 2030 targets and our 2050 transition objective will require the full implementation of current policies and measures and significant national investments.

*See Chapter 15 of the report for further information, including references.

	POLICY AREA	CURRENT ASSESSMENT	OUT LOOK	NOTES
AIR	Air quality			
	Particulate matter (PM _{2.5} and/or PM ₁₀)			Compliant in 2019 with EU limits but a number of exceedances of WHO guideline values in urban areas. Increased monitoring is highlighting high levels in many Irish cities, towns and villages. Particulate matter from the burning of solid fuel is estimated to cause 1300 premature deaths per year. Low-smoke zones and climate action measures will have benefits for air quality and health.
	Nitrogen oxides (nitrogen oxide and nitrogen dioxide)			Concentrations are moderate but increasing due to growth in traffic numbers. EU air quality limit values for nitrogen dioxide were exceeded during 2019 at one site in Dublin; indications are that there will be exceedances at further monitoring stations in the future. Climate action measures will have co-benefits for air quality and health.
	Ozone (ground level)			Compliant in 2019 with EU limits but some exceedances of WHO guideline values in the past and exceedances at two sites in 2019. Measures to reduce nitrogen oxides will impact the potential for formation of ozone in sunny weather conditions. There is a risk from impact of transboundary ozone (from outside Ireland).
	Polycyclic aromatic hydrocarbons (PAH)			Polycyclic aromatic hydrocarbons (PAH) are emitted residentially from the combustion of solid fuels, such as peat, wood and coal. PAH are known carcinogens. Compliant in 2019 with EU limits but exceedances of EEA reference values at four sites indicate that PAH in ambient air are due to the burning of solid fuels is a large problem in Ireland's cities and towns. Low-smoke zones and climate action measures will have benefits for air quality and health.
	Emissions to air			
	Nitrogen oxides			Ireland's national emissions limit for nitrogen oxides has been exceeded since 2010, although emissions decreased slightly in 2018. Lower EU limits will come into effect in 2030. Based on the latest EPA projections nitrogen oxide emissions are projected to reduce and to be compliant, provided planned measures, particularly in relation to the Climate Action Plan, are implemented, however, further measures may be required to ensure compliance in 2030.

POLICY AREA	CURRENT ASSESSMENT	OUT LOOK	NOTES
Sulphur dioxide			Emissions have decreased by 93.3% since 1990, owing to fuel switching and reduced sulphur content of fuels. On track to meet 2030 targets.
Non-methane volatile organic compounds (NMVOCs) emissions			Emissions of non-methane volatile organic compounds (NMVOCs) are increasing, arising from the food and beverage industry and the storage and handling of animal manures and synthetic fertilisers. Emissions of NMVOCs decreased slightly in 2018. Currently slightly off track to meet 2030 emissions target, indicating further measures are required.
Ammonia emissions			Ammonia emissions are increasing, linked with agriculture. Emissions breached national ceiling under the National Emission Ceilings Directive in 2018 for the third successive year. Currently not on track to meet 2030 emissions target. The underlying drivers are the use of animal manure and nitrogen fertilisers, which can be reduced through widespread adoption of on-farm measures.
Particulate matter (PM _{2.5} and/or PM ₁₀) emissions			Emissions of particulate matter (PM _{2.5}) have decreased by 62.8% since 1990, mainly due to fuel switching in the residential and commercial sectors, and improvements in vehicle engine technology. There was a small increase in emissions of particulate matter in 2018, mainly due to increased heating requirements in homes and buildings. Projected to meet 2030 EU emissions target subject to agreed national actions being implemented.
Overall air assessment			While overall air quality in Ireland is good, there are localised issues with some pollutants (such as particulates) that have serious potential health impacts, resulting in an overall current assessment of 'moderate'. Ireland is generally meeting EU air quality limits but not some WHO guideline values in places, and nitrogen oxides exceedance in 2019 is a warning about not being complacent in tackling air pollution. Not on track to meet National Emission Ceilings Directive targets for ammonia due to emissions from agriculture. Mixed progress in reducing overall emissions from transport and energy. Overall, Ireland's prospect of meeting targets and policy objectives is heavily dependent on agreed national measures being implemented.

POLICY AREA	CURRENT ASSESSMENT	OUT LOOK	NOTES
Nature			
Conservation status of EU protected habitats			Based on the latest NPWS assessments, 15% of EU protected habitats have a favourable conservation status, while 85% have an inadequate or a bad status. In terms of the trends in EU protected habitats, 53% are stable, 46% are declining, and only 2% are improving.
Conservation status of EU protected species			Based on the latest NPWS assessments, 57% of EU protected species have a favourable conservation status; 30% have an inadequate or a bad status. In terms of the trends in EU protected species, 55% are stable, 17% are improving, 15% are declining, and 13% are unknown.
Status and trends of bird populations			Almost 20% of Ireland's breeding bird species are in long-term decline. Approximately 30% of breeding species populations are stable or have increased over the long term. This includes some relatively recent colonists. Some of our breeding farmland songbirds are under increasing pressures from the modernisation and intensification of agricultural practices. Breeding waders such as the curlew and lapwing have seen a 93% decline in breeding populations over the long term. The populations of over half of wintering birds are declining over the short term, this includes waders and duck species. Ireland's wintering waterbirds may be responding to climate change as many species are showing a north-easterly shift in their range across Europe.
Butterflies			Butterfly populations are sensitive to changes in climate and land use. The Irish Butterfly Monitoring Scheme, coordinated by the National Biodiversity Data Centre (NBDC), shows that the current long-term trend is of moderate decline. Across 15 common and widespread species, the highest butterfly populations observed since the monitoring scheme began in 2008 were recorded in 2010 and the lowest in 2016. Five species have experienced serious or moderate population declines since 2008, three species have increasing populations, four have stable populations and three are too variable to assign a statistically rigorous trend.
Overall nature assessment			Overall current assessment is 'very poor'. Deteriorating trends dominate, especially for protected habitats. In the absence of far-reaching measures, the outlook is largely not on track to meeting policy objectives.



 NATURE

POLICY AREA	CURRENT ASSESSMENT	OUT LOOK	NOTES
Water			
River water quality			Current assessment is 'poor'. Only 53% of river water bodies have a good or high status. Trend shows a mixed picture with some improvements, but notably there have been serious declines in the number of high status sites and an increase in poor status waters. Significant challenges remain to achieving full compliance.
Lake water quality			Current assessment is 'poor'. Only 50% of lake water bodies have a good or high status. Trend shows a mixed picture. Significant challenges remain to achieving full compliance.
Transitional water quality			Current assessment is 'very poor'. Only 38% of transitional water bodies have a good or high status. Trend shows a mixed picture. Significant challenges remain to achieving full compliance.
Coastal water quality			Current assessment is 'very good', with 80% of coastal water bodies having a good or high status. Trend is stable. Largely on track to achieving full compliance but some issues remain.
Marine environment			The Marine Strategy Framework Directive Article 17 report found that 6 of the 11 MSFD descriptors were compatible with good ecological status, indicating partial compliance. Trend information is not available. Challenges remain for achieving full compliance.
Groundwater quality			92% have a good or high status. Trend is improving, although there are elevated nitrate concentrations at some monitoring stations, particularly in the south and south-east region, and localised issues with pathogens linked to domestic wastewater treatment systems. The presence of hazardous substances in groundwater is not a widespread water quality issue. Largely on track to achieving full compliance.

	POLICY AREA	CURRENT ASSESSMENT	OUT LOOK	NOTES
 WATER	Urban wastewater treatment			Over half (56%) of the wastewater load was not compliant with EU treatment standards in 2019. Improvements are needed at 113 priority urban areas to eliminate raw sewage, prevent water pollution, protect freshwater pearl mussels and bathing waters and meet EU standards. Trend is improving, but from a low base; progress is slow and significant challenges remain to achieving full compliance.
	Bathing water quality			95% have a sufficient status, 89% have an excellent or a good status. Trend is improving. Largely on track to achieving full compliance with 'sufficient' target, but still below EU average for 'excellent'.
	Drinking water quality			Private supplies have poorer compliance and substantially worse drinking water quality than public water supplies with challenges remaining. While compliance is over 99% in public supplies, there is a concern about long-term boil water notices, detections of <i>Cryptosporidium</i> and elevated levels of disinfection by-products (THMs), lead and pesticides. As of July 2020, there are 52 public water supplies on the EPA's Remedial Action List. Irish Water's progress at implementing solutions for these supplies has been subject to delays and increasing uncertainty. Remaining issues need to be addressed through upgrade and replacement programmes.
	Overall water assessment			Overall, current assessment is 'poor'. Trends are mixed, with serious declines in pristine river sites. In terms of outlook, significant challenges remain to achieving full compliance and meeting policy objectives.

POLICY AREA	CURRENT ASSESSMENT	OUT LOOK	NOTES
Waste and the circular economy			
Generation of municipal waste			Generation of municipal waste increased in 2018 to 600 kg/person (up from 577 kg/person in 2017). Mixed trend over past 20 years, correlating closely with variations in disposable income, indicating a failure to decouple waste generation from economic activity. Reducing waste generation will require the implementation of new waste prevention and consumption reduction measures.
Recycling of municipal waste			Recycling rates have stagnated since 2010 and more recently shown a decline. Waste characterisation studies show that a large share of recyclable waste (packaging, food) is put in the wrong bin and so is not being recycled. On track to meet 2020 target but the much more stringent targets for 2025 and 2030 will pose a challenge.
Recycling of packaging waste			Meeting current targets but recycling rates for some packaging streams are stagnating or declining and much more stringent targets will apply from 2025 and 2030. Significant challenge to meet future targets for individual packaging streams, in particular plastic. Waste characterisation studies show that two-thirds of plastic packaging waste presented in kerbside bins is not currently recyclable in Ireland.
Landfilling of municipal waste			Landfill rates have fallen steadily in Ireland, from 84% in 2001 to just 14% in 2018. However, meeting the 2030 limit of 10% municipal waste disposed to landfill will be challenging.
Biodegradable waste diversion from landfill			Currently compliant with 2020 target by a large margin and trend is improving with brown bin roll-out and more widespread mechanical pre-treatment of residual waste prior to landfilling.
Collection and recovery of electrical and electronic waste			Compliant with current collection and recovery targets; however, significantly increased targets apply from 2019. Rates are gradually improving; expected to achieve compliance with new targets by a close margin.

**WASTE AND CIRCULAR ECONOMY**

POLICY AREA	CURRENT ASSESSMENT	OUT LOOK	NOTES
Circular (secondary) material use rate			Rates of circular (secondary) material use have remained consistently low in Ireland since 2010 at below 2% compared with an EU average of 11% in 2017.
Overall waste and circular economy assessment			Overall current assessment is 'poor'; while Ireland is meeting current targets, recycling rates for municipal waste and packaging have levelled off and in some cases declined and waste generation remains high and linked to economic activity, while circular use of material remains very low. Publication of new national waste policy is welcome. Achieving future EU targets and circular economy goals will be dependent on rigorous implementation of waste legislation, policy initiatives and measures.

CURRENT ASSESSMENT: Summary assessment of current environmental performance, policy and implementation in Ireland

-  Very poor/significant environmental and/or compliance challenges to address
-  Poor/environmental and/or compliance challenges to address
-  Moderate/on track generally/local or occasional challenges
-  Good/mainly achieving objectives
-  Very good/fully achieving objectives

OUTLOOK: Current prospect of meeting policy objectives and/or targets

-  Largely not on track to meet policy objectives and targets. Significant challenges remain to achieving full compliance. Systemic and transformative change needed.
-  Partially on track to achieving full compliance or measures in place or planned that will improve the situation. However, the outlook is dependent on existing and planned actions, measures and plans being fully implemented and effective.
-  Largely on track to achieving full compliance. Measures in place provide prospect of meeting policy objectives and targets.

Actions for a Cleaner Greener Environment



These are the challenges facing us over the next decade

- Halt any further deterioration in our natural environment while supporting our economy and accommodating our growing population.
- Accelerate action to decarbonise and green our economy and society, so achieving climate neutrality by 2050.
- Protect ourselves against the inevitable consequences of climate disruption.
- Start restoring the precious habitats and water bodies that we have lost.
- Leave space for nature as part of a new approach to biodiversity protection.

- Designate more of our marine area as protected areas.
- Protect air quality by switching to cleaner fuels and energy for transport and heating homes.
- Massively reduce our annual one million tonnes of food waste.
- Foster more sustainable agricultural production and land-use systems and management.
- Invest in essential water services infrastructure that protects drinking water supplies and eliminates discharges of raw sewage.
- Achieve greater efficiency in our production and consumption activities when using raw materials.
- Secure the improvements in our natural environment that we have made through regulation and investment.
- Integrate measures to protect against radon into our built environment.
- Leverage a growing public engagement with environmental issues.
- Act on the highlights identified in **Ireland's Environment An Integrated Assessment 2020**. Covering thematic, sectoral and integrated areas, these highlights outline the scale of the challenges to be tackled.

An Ghníomhaireacht Um Chaomhnú Comhshaoil

Tá an GCC freagrach as an gcomhshaol a chosaint agus a fheabhsú, mar shócmhainn luachmhar do mhuintir na hÉireann. Táimid tiomanta do dhaoine agus don chomhshaol a chosaint ar thionchar díobhálach na radaíochta agus an truaillithe.

Is féidir obair na Gníomhaireachta a roinnt ina trí phríomhréimse:

- **Rialáil:** Rialáil agus córais chomhlíonta comhshaoil éifeachtacha a chur i bhfeidhm, chun dea-thorthaí comhshaoil a bhaint amach agus díriú orthu siúd nach mbíonn ag cloí leo.
- **Eolas:** Sonraí, eolas agus measúnú ardchaighdeáin, spriocdhírthe agus tráthúil a chur ar fáil i leith an chomhshaoil chun bonn eolais a chur faoin gcinnteoireacht.
- **Abhcóideacht:** Ag obair le daoine eile ar son timpeallachta glaine, táirgiúla agus dea-chosanta agus ar son cleachtas inbhuanaithe i dtaobh an chomhshaoil.

BAINISTÍOCHT AGUS STRUCHTÚR NA GCC

Tá an GCC á bainistiú ag Bord lánaimseartha, ar a bhfuil Ard-Stiúrthóir agus cúigear Stiúrthóir. Déantar an obair ar fud cúig cinn d'Oifigí:

- An Oifig um Inbhuanaitheacht Comhshaoil
- An Oifig um Fhorfheidhmiú Comhshaoil
- An Oifig um Fhianaise agus Measúnú
- An Oifig um Chosaint ar Radaíocht agus Monatóireacht Comhshaoil
- An Oifig Cumarsáide agus Seirbhísí Corparáideacha

Tugann coistí comhairleacha cabhair don Ghníomhaireacht agus tagann siad le chéile go rialta le plé a dhéanamh ar ábhair inní agus le comhairle a chur ar an mBord.

The report is available on the EPA website at www.epa.ie/irelandsenvironment/stateoftheenvironmentreport/.
The associated EPA Ireland's Environment web resource is located at www.epa.ie/irelandsenvironment/.