Chapter 16: Environmental Policy Implementation and Performance



Environmental Policy Implementation and Performance

1. Introduction

Ireland has an extensive and expanding suite of legislation and policies to safeguard the natural environment and protect human health. This includes laws, policies, plans and guidelines covering air and water quality, climate change adaptation and mitigation, protection of biodiversity, circular economy and waste management, noise pollution and land use planning. In a review of Ireland's environmental performance in 2021, the Organisation for Economic Co-operation and Development (OECD) noted that climate, circular economy and biodiversity policies have gained renewed impetus in Ireland, with various ambitious and welldesigned policy initiatives and large public investment plans now in place. However, it also noted that these policies need to be swiftly implemented to alleviate the growing pressures from intensification of agricultural practices, population growth, urban sprawl and road traffic (OECD, 2021a). Ireland's strong population and economic growth in recent years is placing increased pressure on critical infrastructure, including water, energy, waste and transport services as well as the housing supply. The latest population projections undertaken by the Economic and Social Research Institute (ESRI), which are being used to inform the first statutory revision of the National Planning Framework, indicate that Ireland's population will reach 5.7 million by 2030, a decade sooner than was anticipated when the National Planning Framework was developed in 2018, and will reach 6.1 million by 2040 (Bergin and Egan, 2024).

This chapter presents a high-level overview of Ireland's performance in implementing global, European Union (EU) and national environmental policy and legislation. It highlights a number of key implementation gaps and shortcomings where Ireland has failed to adequately implement environmental policy and legislation, drawing on the findings of the European Commission's latest Environmental Implementation Review (EIR) for Ireland (EC, 2022) and the OECD's Environmental Performance Review of Ireland (OECD, 2021a). These implementation shortfalls, and the priority actions recommended to address them, are discussed in this chapter. Lastly, some enabling factors that support successful implementation are outlined.

Ireland's environmental legislation and policy landscape

Much of Ireland's environmental legislation stems from European directives and regulations. As a result of implementing EU and national legislation and policies over the last 30 years, Ireland has made significant strides in environmental protection. Since the 1990s, the Integrated Pollution Control and Industrial Emissions licensing systems have placed controls on emissions to air, water and land from specified industrial and agricultural activities. Bans on smoky coal have resulted in improved air quality in cities and towns. The progressive increase in the landfill tax has contributed to the diversion of waste from landfill, while the introduction of segregated waste collection has facilitated recycling and composting waste.

With increased recognition of the interlinked nature of many environmental problems, the policy focus in recent years has moved towards more integrated policy frameworks with a long-term societal transition perspective. The European Green Deal, published at the end of 2019, represents the EU's far-reaching policy response to the triple planetary crisis facing Europe climate change, biodiversity loss and pollution - and sets out a roadmap for achieving a climate-neutral continent by 2050 (EC, 2019). In turn, Ireland's environmental policy landscape has evolved in response to EU and international policy developments. Figure 16.1 lists some of the current key legislation, policies and plans in place in Ireland that address water and air quality, waste and the circular economy, nature protection, and climate change mitigation and adaptation. The remainder of this chapter assesses how well Ireland is performing in implementing these and the outlook for it achieving its policy objectives and targets.

Figure 16.1 Summary of some key environmental legislation, policies and plans in Ireland across selected thematic areas

Climate Action

OBJECTIVES

 Reduce greenhouse gas emissions, improve energy efficiency and renewable energy, assess and manage adaptation to climate change

GLOBAL

- UN Framework Convention on Climate Change
- Paris Agreement
- Kyoto Protocol

EUROPEAN DIRECTIVES & POLICIES

- 2020 Climate & Energy Package
- 2030 Climate & Energy Framework
- Emissions Trading Directive
- Effort Sharing Regulation
- Floods Directive
- EU Strategy on Adaptation to Climate Change.
- LULUCF Regulation (EU 2018/841)
- Fit for 55
- Regulation on the Governance of the Energy Union
- European Climate Law

NATIONAL POLICIES/PLANS

- Climate Action Plan (2024)
- National Adaptation Framework (2024)
- Climate Action and Low Carbon Development Act (2015, as amended)
- Sectoral adaptation and mitigation plans (various)
- National Energy and Climate Plan (2021-2030)

LOCAL/REGIONAL PLANS

- Local Authority Climate Adaptation Plans & Low Carbon Roadmaps
- Flood Risk Management Plans
- Local Authority climate action plans



OBJECTIVES

 Reduce emissions of specified air pollutants (NO_x, SO_x, NMVOC, NH₃, and PM₁₀/ PM_{2.5})

GLOBAL

 Convention on Long Range Transboundary Air Pollutants

EUROPEAN DIRECTIVES & POLICIES

- EU Green Deal
- Clean Air Package
- CAFE Directive
- National Emissions Ceiling Directive
- 8th Environmental Action
 Programme to 2030
- EU Zero Pollution Plan
- Climate Action Regulations

NATIONAL POLICIES/PLANS

- Clean Air Strategy for Ireland 2023National Air Pollution Control
- Programme
- Solid Fuel Regulations
- National Sustainable Mobility Policy
 Air Pollution Act 1987 (Solid Fuels) Regulations 2022

LOCAL/REGIONAL PLANS

• Local Authority noise action plans

Nature

OBJECTIVES

 Protect and conserve Ireland's natural heritage and biodiversity, including designated species and habitats

GLOBAL

- Convention on Biological Diversity and associated Strategic Plan for Biodiversity 2011-2020
- Bonn Convention
- Ramsar Convention
- Convention on International Trade in Endangered Species of Wild Fauna and Flora
- Kunming Montreal Global Biodiversity Framework
- Inclusive Conservation Initiative
- COP15
- Agreement (UNCLOS) for the conservation and sustainable use of marine biological diversity

EUROPEAN DIRECTIVES & POLICIES

- Birds & Habitats Directives
- EU Biodiversity Strategy for 2030
- EU Soil Strategy for 2030
- Commission Decision on Good Environmental Status 2017
- 8th Environmental Action Programme to 2030
- Nature Restoration Law

NATIONAL POLICIES/PLANS

- National Peatlands Strategy 2015
- National Raised-Bog SAC Management Plan 2017
- All Ireland Pollinator Plan 2021-2025
- Marine Protected Areas Bill 2022
- 4th National Biodiversity Action Plan 2023-2027

LOCAL/REGIONAL PLANS

 Local Authority Biodiversity Action Plans and Local Authority Green Infrastructure Strategies



Water Quality

• To improve and maintain good water quality including groundwater, rivers, lakes, estuaries, coastal waters and bathing waters

- OSPAR Convention
- MARPOL Convention

EUROPEAN DIRECTIVES & POLICIES

- Water Framework Directive
- Marine Strategy Framework Directive
- Bathing Water Directive
- Groundwater Directive
- Nitrates Directive
- Urban Waste Water Treatment Directive
- EU Biodiversity Strategy for 2030
- EC decision 2017/848 criteria / standards for Good Environmental Status for marine waters

NATIONAL POLICIES/PLANS

- Water Action Plan 2024 A River Basin Management Plan for Ireland
- Ireland's Marine Strategy Part 3 Programme of Measures
- National Marine Planning Framework
- Fifth Nitrates Action Programme 2022-2025
- Maritime Area Planning Act 2021
- National Plan for Sustainable Aquaculture 2021-2030

Draft/In prep:

- Water Services Strategic Plan
- Water and Planning Guidelines
- National Water Resources
- Management Plan

LOCAL/REGIONAL PLANS

• Priority action areas (in River Basin MP)

Draft/In prep:

• Designated maritime area plans

catchment management plans

Waste & Circular Economy

OBJECTIVES

• Reduce waste generation, improve waste management and promote more efficient resource use

GLOBAL

- Basel Convention
- Global Alliance on Circular Economy and Resource Efficiency

EUROPEAN DIRECTIVES & POLICIES

- EU Green Deal and Circular **Economy Action Plans**
- Waste Framework Directive
- Individual producer responsibility directives on Packaging, WEEE, End-of-Life Vehicles, Batteries & Accumulators etc.
- Landfill Directive
- WEEE

Directive

- Single-use Plastics Directive
- Packaging and Packaging Waste

NATIONAL POLICIES/PLANS

- Climate Action Plan (2024)
- Circular Economy Programme 2021-• 2027
- National Hazardous Waste Management Plan (2021-2027)
- Waste Action Plan for a Circular • Economy 2024-2030
- National Waste Management Plan for a circular economy 2024-2030
- National Waste Prevention Programme Annual Reports

LOCAL/REGIONAL PLANS

Litter management plans

Cross-cutting and Integrated Environmental Assessment



OBJECTIVES

• To improve environmental protection and promote sustainable development

GLOBAL

- UN Sustainable Development Agenda 2030
- Aarhus Convention

EUROPEAN DIRECTIVES & POLICIES

- EU Green Deal
- Industrial Emissions Directive
- Strategic Environmental Assessment Directive
- Environmental Impact Assessment Directive
- Environmental Liabilities Directive
- 8th Environmental Action Programme to 2030
- European Landscape convention

NATIONAL POLICIES/PLANS

- National Implementation Plan for the SDGs (2022-2024)
- Circular Economy Programme 2021-2027
- National Planning Framework / Project Ireland 2040



Key sectoral policies in Ireland

An enduring challenge is ensuring that sectoral policies and decision-making take account of, and are aligned with, Ireland's various environmental commitments, as discussed above. Some of Ireland's current key sectoral plans are listed in Figure 16.2 and include the National Planning Framework, which sets the vision and strategy for the development of Ireland to 2040, along with the National Development Plan 2021-2030, which provides the enabling investment to implement the National Planning Framework. Ensuring that the socio-economic ambitions in Ireland's various sectoral plans in areas such as agriculture, transport and forestry support rather than conflict with Ireland's environmental commitments can be challenging. The OECD identifies a number of challenges in the consideration of environmental and climate aspects in Ireland's long-term strategic planning and public investment decision-making, which increase the risk that a lack of coherence and consistency across sectoral policies will emerge (OECD, 2023a). The OECD also identifies a number of opportunities for strengthening the consideration of environmental issues in Ireland's long-term planning, which are touched on later in this chapter.

Rural

NATIONAL

Development

Guidelines (DHLGH)

Policy 2021-2025 (DCRD)

Rural Development Programme Action

Plan for Rural development (DRCD)

• Our rural future: Rural Development

Sustainable Rural Housing Development

Figure 16.2 Overview of some key national sectoral policies, plans and programmes

Circular Economy

NATIONAL

- National Hazardous Waste Management Plan 2021-2027 (EPA)
- Whole of Government Circular Economy Strategy 2022-2023 -Living More, Using Less (DECC)
- A Waste Action Plan for a Circular Economy 2020-2025 (DECC)
- National Waste Management Plan for a Circular Economy 2024-2030 (DECC)

Built Environment

NATIONAL

- National Planning Framework / Project Ireland 2040 (DHLGH)
- Sustainable and Compact Settlements Guidelines for Planning Authorities – January 2024 (DHLGH)
- Ireland's National Waste Policy (DECC)

Draft/in prep:

 Project Ireland 2040 - Revision to the National Planning Framework – July 2024 (DHLGH)

REGIONAL

• Regional spatial & economic strategies (regional assemblies)

COUNTY

• County / City development plans

LOCAL

 LA area and development plans and SDZ planning schemes

National Forestry Programme 2023-

Annual Forestry Licensing Plans (DAFM)

Coillte Forest Estate Land Use Plan

Forestry and Freshwater Pearl Mussel

2027 Forests & Water (DAFM)

Forest Strategy to 2030 (DAFM)

Forest Strategy 2023-2027

2023-2050 (Coillte)

Individual forestry plans

Forestry Management plans

Draft/in prep:

LOCAL

Plan (DAFM)

Implementation Plan (DAFM)

- Local Authority climate action plan
- LA biodiversity action plans

Agriculture

NATIONAL

- Food Vision 2030 Strategy A world leader in sustainable food systems (DAFM)
- Good Agricultural Practice Regs (DHLGH)
 Code of Good Agricultural Practice for Reducing Ammonia Emissions from Agriculture (DAFM)
- CAP Strategic Plan 2023-2027 (DAFM)
- Ag-Climatise a roadmap towards climate neutrality (2020) (DAFM)
- National Policy Statement on the bioeconomy (DoTaoiseach)
- Bioeconomy Action Plan 2023-2025 (DAFM)
- National Strategy for Horticulture 2023-2027 (DAFM)
- Fifth Nitrates Action Programme 2022-2025 (DAFM and DHLGH)

Forestry

NATIONAL

Fisheries

NATIONAL

- Harnessing Our Ocean Wealth An Integrated Marine Plan for Ireland (2012) DAFM
- Operational Programme (2014-2020) (DAFM)
- National Marine Planning Framework (DECC)
- National Plan for Sustainable Aquaculture 2021-2030 (DAFM)
- Seafood Development Programme 2021-2027 (DAFM)



Biodiversity

NATIONAL

- National Peatlands Strategy (2015) (NPWS-DHLGH)
- Climate Action Plan 2024 (DECC)
- 4th Biodiversity Action Plan 2023-2027 (NPWS-DHLGH)
- National Raised Bog SAC Management Plan (2017-22) (NPWS-DHLGH)
- Hen Harrier Threat Response Plan 2023-2027 (NPWS-DHLGH)

COUNTY

· Local Authority Biodiversity Plans and Heritage plans/strategies

Energy

NATIONAL

- National Energy and Climate Plan (2021-2030) (DECC)
- National Biomethane Strategy 2024 (DAFM)
- National Hydrogen Strategy (DECC) Offshore Renewable Energy •
- Development Plan (DECC)
- Policy Statement on Geothermal Energy for a Circular Economy (DECC)

Draft/in prep:

Grid 25 Implementation Plan 2023-2028 (Eirgrid)

REGIONAL

In Prep: South Coast Designated Maritime Area Plan (DECC)

COUNTY

 Local Authority renewable energy strategies

Transport



NATIONAL

- National Sustainable Mobility Policy (DoT) Planning Framework for Alternative Fuel
- Infrastructure in Transport (DECC) National Investment Framework for
- Transport in Ireland (DoT)
- National Cycle Network Plan (DoT)
- BusConnects (NTA)
- All Island Strategic Rail Review 2024 (DoT)
- National eV Charging infrastructure Strategy (DoT)

Draft/in prep:

- Moving Together A Strategic approach to the improved efficiency of the transport system in Ireland (DoT)
- Review of National Ports Policy (DoT)

COUNTY/LOCAL

- Greater Dublin Area Transport Strategy 2022-2042 (NTA)
- Metropolitan area transport strategies (NTA)
- Metropolitan area strategic plans (Regional Assemblies)
- Port / Harbour Masterplans

Water Services

NATIONAL

- Water Action Plan 2022-2027 – A river basin management plan for Ireland (DHLGH)
- Water Services Strategic Plan (2019-2024) (Uisce Éireann)
- National Water Resources Framework Plan (Uisce Éireann)
- 5th Nitrates Action Programme 2022-2025 (DAFM)

Draft/in prep:

- Arterial Drainage Maintenance Activities 2022-2027 (OPW)
- Water Services Policy Statement 2024-2030 (DHLGH)
- Water Services Strategic Plan 2050 (Uisce Éireann)

REGIONAL

Regional water resource plans (Uisce Éireann)

NATIONAL

National Marine Planning Framework (DHLGH)

Draft/in prep:

Marine

- Offshore Marine Planning Guidelines (DECC)
- Designated Maritime Area Plan Guidelines (DECC)
- Marine Planning Policy Statement (DECC)

NATIONAL

Tourism

- People, Plan and Policy -Growing Tourism to 2025 (DTCAGSM)
- National Greenway Strategy (DoT)
- 10- Year Tourism Strategy (Failte Ireland)

Draft/in prep:

National tourism policy (DTCAGSM)

REGIONAL

Regional tourism strategies (Failte Ireland).

COUNTY

 Local Authority tourism strategies

LOCAL

Visitor experience and destination plans (Failte Ireland)

NATIONAL

- Healthy Ireland (DoH)
- One Health, One Welfare - Ireland's Second One Health National Action Plan on Antimicrobial Resistance 2021-2025 (DAFM/DoH)
- National Radon Control Strategy (DECC)
- Understanding life in Ireland - National Well-Being Framework 2023

Strategic Environmental Assessment is needed for certain plans and programmes^a Appropriate Assessment is needed for plans, programmes and projects likely to impact on Natura sitesb

Environmental Impact Assessment is need for certain projects^c

- a Guidance on Strategic Environmental Assessment (SEA) is available from the EPA at: www.epa.ie/monitoringassessment/ assessment/sea/
- b Guidance on Appropriate Assessment is available from the NPWS at: www.npws.ie/protected-sites/guidance-appropriateassessment-planning-authorities
- Guidance on Environmental Impact Assessment (EIA) is available from DHPLG and EPA at: www.epa.ie/pubs/advice/ea/ С & www.housing.gov.ie/planning/environmental-assessment/environmental-impact-assessment-eia/eia-portal



2. Assessment of Ireland's environmental performance

Environmental Implementation Review 2022

The European Commission undertakes a periodic Environmental Implementation Review (EIR), designed to improve the implementation of European environmental laws and policies in Member States. The EIR process provides an opportunity to identify implementation issues and seek solutions before issues reach the infringement stage. The latest EIR for Ireland, published in 2022 (EC, 2022), identifies the following key findings for Ireland.

Nature

- Ireland has made progress in designating nature sites within its terrestrial Natura 2000 network, and the terrestrial designations are now considered to be complete.
- There are significant knowledge and designation gaps in Ireland's marine Natura 2000 network, especially under the Birds Directive (2009/147/EC).
- The situation for forested areas protected under the nature directives is concerning, as half of the assessments show a bad conservation status.
- There are still concerns about the conservation of raised and blanket bogs designated as special areas of conservation (SACs), which remains the subject of an infringement procedure.
- Restoration work has still to be completed on many raised bog SACs and started on most blanket bog SACs.
- Moreover, illegal turf cutting still takes place on raised bog SACs, and Ireland has not made any progress in ensuring that turf cutting carried out on blanket bog SACs is managed in a way that is compatible with the conservation of this habitat.

Water

- Water treatment continues to be a concern. The rate of compliance with the Urban Waste Water Treatment Directive (91/271/EEC) is low because of the large number of non-compliant agglomerations.
- Ireland has not yet resolved problems with the quality of its drinking water.
- The quality of Ireland's bathing waters is below average.
- The country's new water pricing system requires monitoring to ensure that it works in practice.

 The powers to regulate water abstraction and hydromorphological controls are still not in place, as the proper legal framework is still absent.

Access to justice

 Access to justice in environmental matters remains an issue, and no progress has been achieved since the last EIR in 2019. The Commission is concerned about the cost of bringing an environmental legal action in Ireland.

Waste

- Ireland's waste generation continues to rise and remains significantly above the EU average.
- Landfilling and recycling rates for municipal waste and packaging waste, respectively, have declined since 2014, with more waste being sent for energy recovery.
- Although Ireland is well above the EU average in terms of resource productivity, its circular use of material is the second lowest in the EU.

Air

- On air quality, Ireland has made some progress in reducing emissions.
- However, emissions of ammonia have been increasing since 2011; ammonia emissions from agriculture in particular pose a significant problem.

Financing

- EU financing continues to help Ireland substantially in tackling its environmental implementation gap.
- Ireland's overall environmental financing of investments is estimated to have been 0.3% of gross domestic product (GDP) in 2014-2020, mostly from national sources. The country's environmental investment needs in 2021-2027 amount to at least 0.48% of GDP, suggesting a financing gap of over 0.18% if baseline financing levels continue.
- Since 2019, Ireland has had to pay fines of over €13 million imposed by the Court of Justice of the European Union (CJEU) for non-conformity with environmental impact assessment (EIA) legislation.
- The EIR also sets out the priority actions across different thematic areas required for Ireland to address the implementation issues identified in the review. These priority actions are highlighted in a series of topic boxes throughout this chapter.

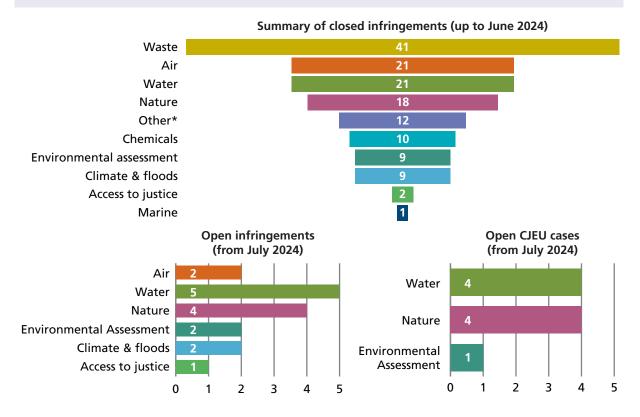


Infringement procedures for breaches of EU environmental law

The European Commission has the power to bring legal action - an infringement procedure - against Member States for failing to properly implement EU law. Infringement procedures can arise from the Commission's own investigations or following complaints from citizens, businesses or other stakeholders. The procedures follow a number of formal steps that require engagement between the Commission and the Member State. If the Member State fails to remedy the breach of EU law, the Commission may refer the matter to the CJEU, which, in certain cases, can impose financial penalties. Most cases are resolved before being referred to the CJEU. Unresolved infringements point to ongoing structural, administrative and legislative deficiencies in the implementation of environmental legislation and can be damaging to a country's international reputation. The number of open infringements fluctuates over time as existing infringement procedures are closed and new ones are opened.1

As shown in Figure 16.3, as of 21 June 2024, there were nine CJEU cases and 16 infringements open against Ireland for failures in implementing EU environmental legislation. The cases comprised four relating to water (poor application of the Urban Waste Water Treatment Directive, exceedances of trihalomethanes in drinking water and issues relating to incorrect transposition of the Water Framework Directive (2000/60/EC)), four relating to nature (failures to designate special protection areas (SPAs) and SACs and failures to fulfil obligations under the Invasive Alien Species Regulation ((EU) 1143/2014)) and one relating to impact assessment (not properly carrying out an EIA). The active infringements consist of five relating to water, four relating to nature, two each relating to air, climate and impact assessment, and one relating to access to justice. As illustrated in Figure 16.3, the majority of environmental infringement procedures pursued by the Commission against Ireland over the last 22 years have related to shortcomings in implementing waste, air, water and nature legislation.

Figure 16.3 Closed infringement procedures against Ireland since 1 January 2002 for failures in implementing EU environmental legislation



*The 'other' infringements related to the Seveso Directive, Noise Directive, Environmental Liability Directive, Integrated Pollution Prevention and Control Directive and the Nagoya Protocol on Access to Genetic Resources.

¹ The latest information on infringements is available on the European Commission website (ec.europa.eu/info/law/infringements_en) accessed 1 August 2024.

Resolving the current infringement procedures, and avoiding future ones, will require proactive action and prioritised legislation and implementation by government and public authorities in Ireland.

Environmental enforcement performance of local authorities

Local authorities play a central role in the implementation of environmental legislation and policy on the ground in Ireland. They managed almost 70,000 environmental complaints and carried out 197,300 environmental inspections in 2022. Waste and litter accounted for the vast majority (about 90%) of complaints and almost 70% of inspections undertaken by local authorities in 2022 (EPA, 2023a). Some 93% of the environmental prosecutions undertaken by local authorities in 2022 were in the waste sector (excluding litter). The Environmental Protection Agency (EPA) has a supervisory role in relation to local authorities' performance of their statutory environmental protection duties. To help target environmental enforcement activity, enforcement priorities are agreed nationally, with a focus on water guality, air guality, noise and waste management. The EPA's latest report on local authority performance (EPA, 2023a) found that most local authorities performed well in some areas, but none performed well across all the national enforcement priorities. Reasons for underperformance included differences in local authority management priorities, resource variability and the guality of information reported. The report calls on local authorities to prioritise and resource environmental functions to ensure that national enforcement priorities are delivered (EPA, 2023a).

Enforcement of EPA-licensed industrial and waste facilities

The EPA undertakes enforcement activities at EPAlicensed industrial and waste sites nationally. A total of 889 industrial and waste licences were enforced by the EPA's Office of Environmental Enforcement in 2023, with 1202 inspections carried out at 535 individual licensed sites (EPA, 2024a). The number of complaints received by the EPA decreased by 29% in 2023 to 960. Odour and noise complaints continued to dominate, accounting for 90% of all complaints received in 2023. Twentytwo cases were heard in District and Circuit Courts in 2023 with fines of €137,750 imposed and total costs of €245,047 awarded to the EPA. The National Priority Sites List is used by the EPA to target its enforcement efforts at licensed operators with the poorest environmental performance. A total of 50 facilities have appeared on the list since it was first published in 2017, with the majority in the food and drink sector (in particular dairy processing sites) and in the waste sector. Issues at these sites include discharges to water, odour and noise, and poor waste management. Chapter 13 discusses these issues in more detail and points to the need for continued investment and improvements to ensure that industrial sites comply with tighter environmental standards.

Enforcement efforts targeting illegal, industrial-scale commercial peat activities remain a key priority for the EPA. The Agency has deployed significant resources in taking action against this sector, resulting in successful legal proceedings in the High Court and District Courts. The EPA will continue to target its efforts against these unregulated operators.

The EPA also has concerns about the absence of regulation of the commercial peat extraction sector by local authorities and is exercising its powers under Section 63 of the Environmental Protection Agency Act 1992 to ensure that seven local authorities take the appropriate regulatory and enforcement action.

Ireland's performance on climate

Chapter 4 provides a detailed look at climate change in Ireland, including pressures and policy responses. It outlines that, despite our climate action ambitions, significantly faster progress is needed to decarbonise all sectors of Ireland's economy and to implement adaptation actions to deliver a climate-resilient future.

The European Climate Law (Regulation (EU) 2021/1119) writes into law the European Green Deal's goal of Europe's economy and society becoming climate neutral by 2050. Nationally, the Climate Action and Low Carbon Development (Amendment) Act 2021 sets out Ireland's objective of achieving a climate-resilient and climate-neutral economy by the end of 2050. It establishes 5-year carbon budgets for the economy and for specific sectors, provides for annual reviews of the Climate Action Plan and makes government departments responsible for achieving their carbon budgets and mitigation targets.



As detailed in Chapter 4, Ireland's greenhouse gas emissions per capita are among the highest in the EU. The EPA's latest provisional greenhouse gas emissions report for 2023, published in July 2024, presents some more positive news, noting that Ireland's greenhouse gas emissions decreased by 6.8% (4.0 Mt CO₂ eq (megatonnes of carbon dioxide equivalent)) in 2023, with reductions in almost all sectors (EPA, 2024b). This represents the lowest level of greenhouse gas emissions in three decades and is below the 1990 baseline. The sectors showing the largest single-year reductions were the energy and agriculture sectors, while residential emissions in 2023 were at their lowest since 1990 and transport emissions were below pre-COVID-19 levels. In terms of target compliance, Ireland complied with its EU Effort Sharing Regulation ((EU) 2023/857) commitments for 2021-2023 with the use of permitted flexibilities; however, Ireland's greenhouse gas emissions in 2023 were still only 10.1% below 2005 levels, well short of Ireland's EU Effort Sharing Regulation reduction commitment of 42% by 2030.

Chapter 4 also identifies that the implementation of climate adaptation measures is currently too slow and fragmented. It notes that more cross-sectoral and integrated adaptation actions can deliver multiple benefits and achieve just and equitable resilience.

Land use, land use change and forestry. Emissions from the land use, land use change and forestry (LULUCF) sector in 2023 were 12.0% above those in 1990. The contribution of Ireland's forest land sector to the removal of CO₂ from the atmosphere has reduced because of a long-term decline in the area of land afforested annually, an increase in the amount harvested and increased emissions from forestry on organic soils. Overall, Ireland's LULUCF sector currently releases more greenhouse gases than it stores, and Ireland is not on track to meet its 2030 target for net carbon removals through LULUCF. The European Commission notes that efforts need to be accelerated to expand Ireland's relatively small forested area, improve soil management and enhance peatland rehabilitation in order to improve the LULUCF sector's contribution to carbon sequestration (EC, 2024).

Transport. Decarbonising the transport sector will be critical to Ireland meeting its obligations to reduce greenhouse gas emissions. However, progress to date has been slow. In parallel to a rapid reduction in travel demand and a shift to more sustainable modes of transport, the Commission notes that Ireland needs to accelerate the deployment of electric vehicles and the recharging infrastructure (Ireland has about one publicly accessible charging point for every 23 electric vehicles, far fewer than the EU average of one for every ten vehicles) (EC, 2024).

Energy. While Ireland's renewable energy share has increased from 10.7% in 2018 (reported in the last State of the Environment Report) to 13.1% in 2022, this is the lowest level in the EU (well below the EU average of 23.0%), and Ireland is not on track to meet the EU-wide binding target of 42.5% renewable energy share by 2030. Reaching the target of 80% renewable electricity by 2030, while ensuring a stable energy supply, will require new capacity, a more flexible grid and increased interconnectivity (EC, 2024). Energy efficiency is also a key component of achieving climate objectives; however, improvements in Ireland are lagging. Despite comprehensive energy saving programmes, primary energy consumption increased by 4.5% between 2012 and 2021 and by 3.7% year-on-year from 2021 to 2022 (EC, 2024). Ireland's efforts are therefore not on track to achieve the EU-wide target of reducing final energy consumption by 11.7% by 2030.

The priority actions for Ireland to address climate change, identified in the Commission's EIR 2022, are listed in Topic Box 16.1.

Topic Box 16.1 Priority actions for Ireland on climate (EC, 2022)



- Increase the uptake of renewables.
- Decarbonise transport.
- Improve energy efficiency in existing residential and commercial buildings.
- Upgrade the current power infrastructure and strengthen its ability to cope with high shares of variable renewable generation.
- Reduce non-CO₂ emissions in agriculture while enabling the agri-food industry to transition to sustainable modes of production.
- Exercise continuous vigilance over the sustainable use of biomass and its actual impacts on carbon sinks and biodiversity due to the increasing share of biomass in the energy sector.

Ireland's performance on air

Chapter 2 provides a detailed look at air quality in Ireland, including pressures and policy responses. It notes that air pollution is the largest environmental health risk in Europe, causing cardiovascular and respiratory diseases that can lead to preventable deaths. Under the Zero Pollution Action Plan adopted in 2021, the European Commission has set a 2030 goal of reducing the number of premature deaths caused by fine particulate matter (PM_{2.5}) by at least 55% compared with 2005 levels. The zero-pollution vision for 2050 is for air, water and soil pollution to be reduced to levels no longer considered harmful to health and natural ecosystems, thereby creating a non-toxic environment.

In Ireland, the main policies addressing air quality are the National Air Pollution Control Programme and the Clean Air Strategy. The National Air Pollution Control Programme outlines the pathway Ireland will follow to achieve compliance with its commitments under the Emission reduction Commitments Directive (NECD) ((Directive 2016/2284), while the Clean Air Strategy promotes the integration of measures across government departments to reduce air pollution and achieve better air quality.

Overall, air quality in Ireland continues to be good when compared with other EU Member States. However, the latest EPA report notes that there are concerning localised issues relating to fine particulate matter from solid fuel combustion and nitrogen dioxide from vehicle emissions. While all EU air quality standards in 2022 were met, Ireland fell short of meeting the more stringent health-based World Health Organization (WHO) guidelines (EPA, 2023b).

Ireland's emissions of most air pollutants have fallen in recent years, with the exception of ammonia. Ammonia emissions are largely driven by the cattle population and nitrogen fertiliser use. While ammonia emission in 2022 were 1% below 2021 levels, Ireland exceeded its 2020 emission reduction commitment for a third year in a row (EPA, 2024c). Compliance with 2030 reduction commitments will be achieved only through comprehensive implementation of abatement measures such as low-emission slurry spreading and the use of inhibited urea fertiliser on farms.

As at 4 July 2024, there were two air-related infringement cases open against Ireland, relating to:

- failure to ensure correct implementation of the National Emission Reduction Commitments Directive ((EU) 2016/2284)
- non-conforming transposition of the Integrated Pollution Prevention and Control Directive (2010/75/ EU) on industrial emissions.

The priority actions for Ireland to address air quality, as identified in the Commission's EIR 2022, are listed in Topic Box 16.2.

Topic Box 16.2 Priority actions for Ireland on air (EC, 2022)



- As part of the National Air Pollution Control Programme, take actions towards reducing emissions from the main sources of air pollution.
- Ensure full compliance with EU air quality standards and maintain downwards emissions trends for air pollutants to reduce adverse air pollution impacts on health and the economy, with a view to reaching WHO guideline values in the future.
- Accelerate the ratification of the amended Gothenburg Protocol under the United Nations Economic Commission for Europe Air Convention.

Ireland's performance on nature

Chapter 7 examines the status of nature in Ireland and discusses the serious threats posed by biodiversity loss and habitat deterioration. Globally, the Kunming-Montreal Global Biodiversity Framework sets out a pathway to reach a vision of a world living in harmony with nature by 2050. At the EU level, the Biodiversity Strategy for 2030 seeks to put biodiversity on a pathway to recovery and sets targets to help achieve resilient and healthy ecosystems. The EU Biodiversity Strategy works alongside the Farm to Fork Strategy, the revised Common Agricultural Policy (CAP) and the Soil Strategy for 2030 to support the transition to more sustainable agriculture. Together, they set four important targets for 2030: reducing the use of chemical pesticides by 50%, reducing nutrient losses from fertiliser by 50% while ensuring there is no deterioration in soil fertility, restoring a minimum of 10% of agricultural land with highbiodiversity landscape features, and increasing the area of land farmed organically to at least 25% (EC, 2022).

The EU Biodiversity Strategy is supported by the newly adopted EU Nature Restoration Law, which sets restoration targets for marine and terrestrial habitats. Under the Nature Restoration Law, ecosystems with the greatest potential for removing and storing carbon and preventing or reducing the impacts of natural disasters (such as floods) will be prioritised. Member States are required to submit national restoration plans to the Commission within 2 years of the law coming into force showing how they will achieve the restoration targets.



At national level, Ireland's 4th National Biodiversity Action Plan 2023-2030 sets out objectives, targets and actions to protect and restore biodiversity. Peatland rehabilitation will be crucial in meeting Ireland's biodiversity targets, as well as in improving the LULUCF sector's contribution to carbon sequestration. Plans such as the National Raised Bog Special Area of Conservation Management Plan are helping set out a roadmap for the long-term management, restoration and conservation of protected raised bogs nationally. Nature protection measures are also being implemented within various other sectoral plans, such as the National Planning Framework and Ireland's CAP Strategic Plan 2023-2027 for implementing the EU Common Agricultural Policy.

The EIR 2022 noted that Ireland legally protects 14% of its terrestrial area, which is low compared with the EU average of 26% (EC, 2022). Therefore, Ireland is not currently on track to meet the EU-wide target of legally protecting a minimum of 30% of the EU's land area by 2030, as set out in the EU Biodiversity Strategy. In 2022/2023 Ireland significantly increased the protection of its marine area from 2.3% to 9.2%. However, this remains far short of the EU target of legally protecting a minimum of 30% of the EU's sea area by 2030. Moreover, promised legislation on marine protected areas has been delayed; this legislation is essential to ensure that marine biodiversity is properly protected in the planning of future developments in the maritime area, including offshore renewable energy projects.

As discussed in Chapter 7, only 15% of Ireland's protected habitats and 56% of its protected species were in good conservation status, according to the latest report (NPWS, 2019). Ireland also faces significant challenges to protect birds in SPAs and in the wider countryside, with many species in serious decline and some at serious risk of extinction. A European Commission report in 2023 found that out of ten countries assessed, Ireland scored lowest across planning, implementation, site management, monitoring and conservation outcomes in SPAs (EC, 2023a).

The declines in species and habitats are due to changes in agricultural practices, including intensification, pollution, the spread of invasive species and the changing climate (discussed further in Chapter 7).

Ireland's rate of adoption of organic farming practices remains low. Only 2.2% of Ireland's utilised agricultural area was under organic farming in 2022, far below the EU average of 10.5%. Under the CAP Strategic Plan, Ireland aims to more than triple the area of agricultural land farmed organically to 7.5% by 2027 and to this end has increased the financial support available, while Ireland's Climate Action Plan 2024 sets a target of 10% of the agricultural land area to be organically farmed by 2030.

As at 4 July 2024, there were four nature-related CJEU cases open against Ireland, relating to:

- failing to protect peat bogs
- failing to adopt and to notify the penalties applicable to breaches of the Invasive Alien Species Regulation
- failing to classify SPAs
- failing to complete the designation of SACs under the Habitats Directive (92/43/EEC) and the establishment of the necessary conservation measures based on clearly defined conservation objectives.

The Commission also has concerns about Ireland's conservation of blanket and raised bog SACs, which are the subject of an infringement procedure. It notes that while Ireland has made progress on peatlands by publishing the National Peatlands Strategy in 2015 and a National Raised Bog Special Area of Conservation Management Plan 2017-2022, implementation gaps remain. The priority actions for Ireland to address nature and biodiversity, identified by the Commission, are listed in Topic Box 16.3.

Topic Box 16.3 Priority actions for Ireland on nature and biodiversity (EC, 2022)



- Address serious delays and deficiencies in Ireland's marine Natura 2000 network through the identification, selection and designation of sites under the Birds and Habitats Directives.
- Complete the designation of terrestrial SACs and put in place the necessary conservation measures based on clearly defined conservation objectives, so that Ireland may meet its objective of maintaining or restoring species and habitats of community interest to a favourable conservation status across their natural range.
- Take action to end illegal turf cutting on raised bog SACs and to ensure that any turf cutting on blanket bog SACs is fully compatible with their protection in Natura 2000 sites.
- Take practical steps to address the serious decline of wader populations and further develop the conservation programme for the curlew, both in Natura 2000 sites and in the wider countryside.
- Step up action on implementing the recommendations set out in Ireland's CAP Strategic Plan.

Marine ecosystems

- Implement the recommendations made by the Commission² in the staff working document accompanying the Commission communication³ on recommendations for each Member State and region on the 2018 updated reports for Articles 8, 9 and 10 of the Marine Strategy Framework Directive (2008/56/EC).
- Ensure regional cooperation with Member States sharing the same marine (sub)region to address predominant pressures.

Ecosystem assessment and accounting

- Continue supporting the mapping and assessment of ecosystems and their services, and the development of ecosystem accounting, through appropriate indicators for integrating ecosystem extent, condition and services (including some monetary values) into national accounts.
- Continue supporting the development of national business and biodiversity platforms, including natural capital accounting systems to monitor and value the impact of business on biodiversity.

Ireland's performance on water

Chapters 8 and 9 discuss the status of Ireland's inland and marine waters and the pressures facing them. EU water policy is set by the Water Framework Directive and associated supporting national legislation. The Water Framework Directive establishes the objective of achieving at least 'good status' for all water bodies by 2015 (extended to 2027), implemented through river basin management plans that set out the measures needed to protect and restore water quality. Ireland has only recently delivered its third national River Basin Management Plan for 2022-2027, and in 2024 the Commission referred Ireland to the CJEU for being late in finalising the plan.

Another key water policy instrument is the Nitrates Action Programme, given effect by the Good Agricultural Practice for Protection of Waters Regulations (S.I. No. 113/2022), which seeks to prevent pollution of surface water and groundwater from agricultural sources.

In its latest semester report for Ireland, the Commission identifies the need for the country to improve its waste water treatment and drinking water infrastructure, noting that public water service infrastructure in Ireland is older than the EU average, with high leakage rates, drinking water supplies still breaching the law in parts of the country and about half of Ireland's urban waste water still not collected or treated in compliance with the Urban Waste Water Treatment Directive (EC, 2024). Only half of the urban waste water in Ireland is being treated according to all the requirements of the Urban Waste Water Treatment Directive based on the latest data for 2022 (EPA, 2023e), which was well below the EU average of 76% in 2021.⁴

In 2022 a new system for controlling surface water and groundwater abstractions was introduced in Ireland through the Water Environment (Abstractions and Associated Impoundments) Act 2022, requiring registration of abstractions of over 25 m³/day. The level of risk due to water abstraction is deemed to be relatively low in Ireland compared with other water management pressures (EC, 2022). Ireland has yet to deliver a regime for regulating hydromorphological changes to water bodies (EC, 2024).

² ec.europa.eu/transparency/documents-register/detail?ref=SWD(2022)55&lang=en; accessed 1 August 2024.

³ eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52022XC0314(01); accessed 1 August 2024.

⁴ water.europa.eu/freshwater/countries/uwwt/ireland (accessed 5 July 2024)



As at 4 July 2024, there was one water-related CJEU case open against Ireland, relating to:

• failure to ensure correct implementation of the Urban Waste Water Treatment Directive.

There was also one open infringement procedure against Ireland, relating to:

 failure to comply with the parametric limit for trihalomethanes in some drinking water supplies.

In terms of marine waters, the Marine Strategy Framework Directive requires Member States to achieve or maintain 'good environmental status' in the marine environment by 2020, while the Maritime Spatial Plan Directive is responsible for establishing a framework for maritime spatial planning. The Marine Strategy Framework Directive Programme of Measures sets out 25 binding environmental targets and associated methodological standards for achieving good environmental status. At a national level, the government published Ireland's first National Marine Planning Framework in June 2021 (DHLGH, 2021). In addition, a new marine regulatory structure has been put in place in Ireland with the establishment of the Maritime Area Regulatory Authority (MARA) in July 2023. MARA's remit includes granting marine consents for the maritime area, licensing of specific maritime activities and the administration of existing foreshore consents.

The priority actions for Ireland on water, identified in the Commission's EIR 2022, are listed in Topic Box 16.4.

Topic Box 16.4 Priority actions for Ireland on water (EC, 2022)



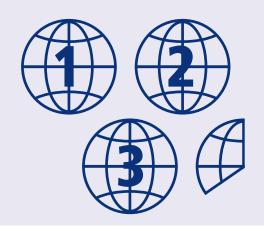
- Assess new physical modifications of water bodies in line with Article 4(7) of the Water Framework Directive. In these assessments alternative options and adequate mitigation measures have to be considered.
- Maintain efforts to reduce diffuse nutrient pollution and to address hydromorphological pressures.
- Maintain efforts to improve monitoring, in particular of hydromorphological conditions, priority substances and groundwater quantity.
- Urgently ensure appropriate controls over water abstraction and hydromorphological changes in compliance with the Water Framework Directive.
- Improve the coordination of the implementation of water, marine and nature policies.
- Review the action programme regarding the high nutrients phosphorous surplus and continue to follow up on the monitoring of hotspot areas that show increasing nitrate concentrations.
- Complete implementation of the Urban Waste Water Treatment Directive for all agglomerations, by building up the necessary infrastructure.

Ireland's performance on waste and the circular economy

Chapter 15 provides a detailed look at Ireland's progress in managing waste and transitioning to a circular economy. It highlights that, despite ambitious new policies in place, to date there has been little tangible progress on transitioning to a circular economy. Significant recent policy initiatives include the Waste Action Plan for a Circular Economy adopted in 2020, the Whole-of-Government Circular Economy Strategy adopted in 2021 and put on a statutory footing via the Circular Economy Act 2022, and the National Waste Management Plan for a Circular Economy 2024-2030, which together provide the policy framework for moving Ireland from a linear to a circular economy. Recent measures to promote recycling include the recovery levy introduced in 2023, the Deposit Return Scheme for plastic drinks bottles and aluminium cans that came into operation in 2024 and the expansion of brown bins to all households being rolled out in 2024. In its latest semester report for Ireland, the Commission notes that Ireland's recycling, composting and anaerobic digestion levels are still insufficient and that Ireland's circular material use rate - at 1.8% in 2022 - remains significantly lower than the EU average (11.5%) (EC, 2024). While there are known limitations of using the circular material use rate in an Irish context due to methodological challenges around measuring the consumption and trade of waste for recycling (McCarthy et al., 2024), Ireland's Circular Economy Strategy commits to significantly increasing the material use rate both in absolute terms and in comparison with other EU Member States, with the ambition of exceeding the EU average by 2030. Significant improvements in recycling and reductions in consumption will be needed to reach this objective. Topic Box 16.5 shows that if everybody in the world consumed resources at the rate people in Ireland do, the global population would require the equivalent of 3.3 Earths to satisfy its needs.

Topic Box 16.5 Ireland's global footprint – how many Earths?

The Global Footprint Network produces information on how many Earths would be needed if everyone on the planet lived like the residents of a particular country. They estimate that, if everybody in the world consumed resources at the rate people in Ireland do, the global population would require the equivalent of 3.3 Earths to satisfy its needs (Global Footprint Network, 2022).



Municipal waste generation in Ireland remains high, growing by 14.8% between 2016 and 2021. Over the same period, the quantity of materials recycled has increased at a similar level (15.8%), meaning that Ireland's recycling rate for municipal waste has essentially stagnated. With just 41% of Ireland's municipal waste recycled in 2021, urgent action is needed to significantly drive up recycling and reduce waste generation if Ireland is to meet the EU targets of 55% by 2025, 60% by 2030 and 65% by 2035 (EPA, 2023c). While Ireland has made significant progress in reducing disposal to landfill, 16% of municipal waste was disposed to landfill in 2021, meaning that further improvements are needed to meet the EU limit of 10% by 2035. Ireland also remains overly reliant on unpredictable export markets with almost 382,000 tonnes of residual waste sent for incineration abroad in 2022 (EPA, 2023c), which is neither environmentally nor economically sustainable. The government has committed to reducing food waste by 50% by 2030. The latest EPA data estimate that Ireland generated 750,000 tonnes of food waste in 2022, equating to 146 kg per person, which is higher than the EU average of 130 kg per person. There was relatively no change in the total amount of food waste generated in Ireland in 2022 compared with 2021, signalling the need for increased interventions to tackle food waste.



As noted earlier in this chapter, compliance issues are prevalent in the waste sector, with both the EPA and local authorities dealing with a high number of complaints and enforcement actions at waste sites. Ireland also has a poor track record of effectively implementing EU waste legislation, as evidenced by the high number of closed infringements shown in Table 16.1. In its report The Circular Economy in Ireland, the OECD identifies three main governance challenges for Ireland in transitioning towards a circular economy: (1) Ireland currently has a narrow view of the circular economy that is mainly based on waste, rather than a broader view of resource management; (2) Ireland's current approach tends to focus on recycling and recovery rather than preventing, repairing and reusing; and (3) there is a lack of placebased considerations that account for local specificities, such as differences in economic activities, income, population density and access to services (OECD, 2022a). The priority actions for Ireland to address waste and the circular economy, identified by the Commission in its EIR 2022, are listed in Topic Box 16.6.

In its recent semester report for Ireland (EC, 2024) the Commission identifies an investment gap in relation to the circular economy in Ireland, noting that more investment is required in areas such as eco-design, repair, reuse and remanufacturing and in infrastructure for separating waste collection and treatment and recycling facilities. It concludes that Ireland would benefit from making the waste management system more efficient, reducing waste production, increasing reused and recycled content, improving waste separation and achieving lower incineration rates (EC, 2024).

Topic Box 16.6 Priority actions for Ireland on waste and the circular economy (EC, 2022)



- Adopt the national Circular Economy Strategy.
- Adopt measures to improve the circular material use rate.
- Introduce new policy instruments, including economic instruments, to promote prevention and make reusing and recycling more economically attractive.
- Shift reuseable and recyclable waste away from incineration and landfilling.
- Increase recycling rates by making the separate collection obligation more effective.
- Carry out a review of recent reforms to the waste collection market.
- Ensure that a waste management plan in line with the revised Waste Framework Directive (2008/98/ EC) is in place.

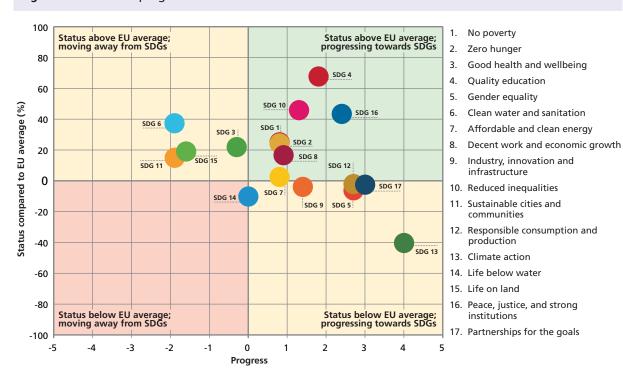


Figure 16.4 Ireland's progress with the SDGs

Ireland's performance on the United Nations Sustainable Development Goals

In 2015, all 193 United Nations Member States adopted the 2030 Agenda for Sustainable Development. At its core are 17 Sustainable Development Goals (SDGs) that cover the three dimensions of sustainable development: integrating economic growth, social well-being and environmental protection. Ireland's second National Implementation Plan for the SDGs for the period 2022-2024 was published in 2022 (DECC, 2022a).

Eurostat's most recent progress report on the SDGs (Eurostat, 2024), illustrated in Figure 16.4, shows that Ireland is performing well on the SDGs associated with macroeconomic stability (SDGs 8 and 16) and fairness (SDGs 1, 4, 5, 7, 8, 10) but, concerningly, is moving away from a number of SDGs related to environmental sustainability, including SDG 15 Life on land, SDG 11 Sustainable cities and communities and SDG 6 Clean water and sanitation.⁵ While progress is being made on SDG 13 Climate action, Ireland ranks well below the EU average due to its high net greenhouse gas emissions per capita, particularly in the LULUCF sector. On SDG 12 Responsible consumption and production, Ireland's circular material use rate has increased marginally, from 1.7% in 2017 to 1.8% in 2022, but remains significantly lower than the EU average (11.5% in 2022). Overall, Ireland's underperformance across many of the environmental SDGs is a serious cause for concern.

Comparing Ireland's performance with that of other EU Member States

Building on the European Green Deal, the EU's Eighth Environment Action Programme (8th EAP) sets out 28 headline indicators to measure progress on achieving the EU's environment and climate goals. The first stocktake undertaken by the European Environment Agency (EEA) in 2023 found that, for most indicators, the prospect of the EU achieving the relevant 2030 targets is either uncertain or very unlikely (Figure 16.5). The indicators for 'Enabling conditions' were the best performing, indicating that progress is being made on putting in place the supporting conditions to meet the priority objectives of the 8th EAP. With the exception of fossil fuel subsidies, all other 'Enabling conditions' indicators (environmental taxes, environmental protection expenditure, green bonds, an eco-innovation index) are moving towards meeting the 2030 targets. The EEA notes that the European Green Deal is a key driver of these positive developments but that, nevertheless, these do not seem to be enough at present to produce the desired results in environmental protection and climate change.

Overall, the EEA concluded that strengthening the implementation of existing legislation, bringing forward additional policies and measures when necessary, and mainstreaming environment and climate change-related policies into other policy areas is urgently needed. The report concludes that there may also be a need for a deeper reflection on the dynamics at play and why, despite existing legislation, the EU still faces challenges in meeting many of its environmental and climate changerelated objectives.

The outer circle in Figure 16.5 presents a comparison of how well Ireland is performing on the various 8th EAP indicators relative to other EU Member States. While it is acknowledged that directly comparing individual indicators for countries can be problematic due to differences in how the underlying data are collected and reported, looking across the suite of indicators provides an overall sense of where Ireland is performing well (and less well) relative to other EU countries.

⁵ The move away from SDG 15, Life on land, reflects the decrease in Ireland's forested area, from 22.4% in 2015 to 19.0% in 2018, which is significantly below the EU average of 43.5%. The move away from SDG 11, Sustainable cities and communities, reflects an increase in the severe housing deprivation rate and a higher percentage of the population reporting crime, violence or vandalism. The move away from SDG 6, Clean water and sanitation, reflects Ireland's relatively low percentage of the population connected to at least secondary waste water treatment (62.3% compared with an EU average of 80.9% in 2021).



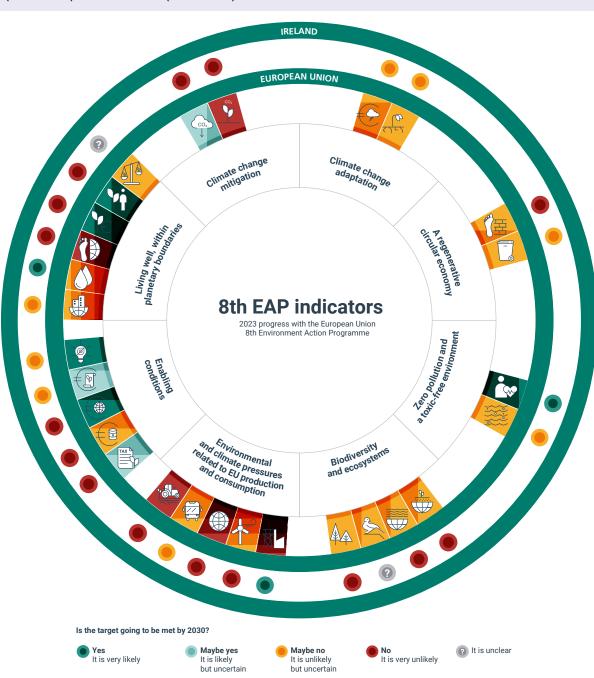


Figure 16.5 Eighth Environment Action Programme monitoring results for 2023 for the EU as a whole (inner circle) and for Ireland (outer circle)

Note. The outer circle gives an overall sense of where Ireland is performing well (and less well) relative to other EU countries. Detailed information on individual indicators is available at www.eea.europa.eu/publications/european-union-8th-environment-action-programme

Source: Adapted from EEA, 2023

Overall, Ireland performs poorly relative to other Member States on 15 out of the 26 indicators for which countryspecific information is available. This notably includes all of the 'Biodiversity and ecosystems' and 'Climate change mitigation' indicators, as well as many of the indicators for 'Enabling conditions', 'Living well, within the planetary boundaries' and 'Environmental and climate pressures related to EU production and consumption'. Ireland performs relatively well compared with other Member States on just three of the 26 indicators, namely 'Premature deaths due to exposure to air pollution', 'Energy consumption change' and 'Water exploitation index plus' (indicating that water scarcity is not prevalent in Ireland).

Overall, this high-level benchmarking exercise indicates that Ireland is lagging behind many other Member States on making progress with the 8th EAP objectives. It is particularly notable that Ireland performs poorly relative to other Member States on all of the 'Enabling conditions' indicators (environmental taxes, environmental protection expenditure, fossil fuel subsidies, green bonds and an eco-innovation index), suggesting that Ireland needs accelerated action to put in place the supporting conditions, including financial, to move towards the 2030 objectives in the 8th EAP and European Green Deal.

Summary assessment of Ireland's performance

Taking account of the findings and trends outlined in the previous sections, Table 16.1 presents a summary assessment of Ireland's performance on the five key policy areas of climate, air, nature, water, and circular economy and waste. Relevant indicators are used to illustrate the current status or level of compliance and the outlook for or prospect of Ireland meeting the relevant policy objectives/targets.

For some of the selected indicators shown in Table 16.1, the outlook is positive, with Ireland considered likely to achieve the relevant policy objectives or targets - this includes bathing water quality, groundwater quality, several air pollutants and landfilling of biodegradable municipal waste. However, for a considerable number of the indicators listed, the outlook is negative, with Ireland considered not on track to reach targets or policy objectives - this includes greenhouse gas emissions, urban waste water treatment, circular material use rate and all of the nature indicators. For the remaining indicators listed in Table 16.1, the outlook is considered uncertain. Overall, the outlook for the climate and nature policy areas is regarded as negative, while the outlook for the air, water and circular economy policy areas is uncertain.

 Table 16.1
 Current assessment and outlook for Ireland across key environmental policy areas

	INDICATOR	CURRENT ASSESSMENT	OUTLOOK	NOTES
CLIMATE	Greenhouse gas emissions	•	V	Ireland was the third biggest net greenhouse gas emitter per capita in the EU in 2022. The latest greenhouse gas emissions projections indicate that Ireland is projected to achieve a 29% reduction in total greenhouse gas emissions by 2030, and is therefore not on track to meet the national 51% emissions reduction target (EPA, 2024d). While progress is being made in all sectors, the pace of emissions reductions is far too slow to meet national and international climate goals.
CLIN	Renewable energy share	•		Although Ireland increased its renewable energy share (RES) to 13.1% in 2022 (up from 10.7% in 2018), this is the lowest level in the EU and well below the EU average of 23% (SEAI, 2023). Significant progress has been made in increasing the share of renewables in electricity generation, whereas there remains a marked distance to RES targets for both transport and heating. Ireland is not on track to meet the binding EU-wide target for overall RES of 42.5% by 2030.



	INDICATOR	CURRENT ASSESSMENT	OUTLOOK	NOTES
CLIMATE	Climate adaptation	•	•	A new National Adaptation Framework is in place and updated Sectoral Adaptation Plans are due to be produced by 2025. Local Authority Climate Action Plans have also been adopted by all local authorities. While adaptation governance structures, climate services and risk assessment capacity have been strengthened, there remains a need for a technical resilience target to support the national climate objective, and the new plans must contain clearly defined actions to achieve climate resilience accompanied by comprehensive outcome indicators.
	Overall climate assessment	•	V	While there has been progress in terms of beginning to reduce greenhouse gas emissions and in strengthening adaptation governance structures and support services, overall current assessment for climate is 'poor' (a slight improvement from 'very poor' in 2020). Full implementation of actions set out in the Climate Action Plan and additional actions are needed if Ireland is to meet its 2030 and 2050 climate targets.

	POLICY AREA	CURRENT ASSESSMENT	OUTLOOK	NOTES
AIR	Air quality			
	PM _{2.5} (fine particulate matter)	•	•	Compliant in 2023 with EU limits for $PM_{2.5}$, but most monitoring stations are above the WHO guideline levels. Increased monitoring and modelling has highlighted high levels of $PM_{2.5}$ in many Irish cities, towns and villages. Particulate matter is estimated to cause 1600 premature deaths per year: the dominant source is the burning of solid fuel. Achieving Ireland's ambition to move towards the WHO guideline levels for $PM_{2.5}$, while challenging, will have a significant and positive impact on health.
	Nitrogen oxides		•	EU air quality limit values for nitrogen dioxide were exceeded at one station in Dublin in 2019 (EPA, 2020) and have not been exceeded since. Complying with the limit values outlined in the Clean Air Strategy and the proposed EU Air Quality Directive will be challenging. Climate action measures will have co-benefits for air quality and health.
	Ozone (ground level)	٠	•	Ireland complied with EU legal values in 2026; however, ozone levels at 18 of 23 stations monitored were above WHO air quality guideline levels, pointing to future challenges in meeting tighter limit values.
	Polycyclic aromatic hydrocarbons	•	•	In 2023, no exceedances were recorded, and all stations monitored complied with EU legal values. However, three of four stations were above the EEA reference levels. Burning less and cleaner solid fuels will have benefits for air quality and health.

	POLICY AREA	CURRENT ASSESSMENT	OUTLOOK	NOTES
	Emissions to ai	r		
AIR	Nitrogen oxides (NO _x)	•	•	NO_x emissions have reduced by 46.4% since 1990. Agriculture is the largest source (36.4%) of NO_x emissions, followed by transport (34.8%). Ireland is compliant with the 2020 emission reduction commitment for NO_x and is projected to comply with the 2030 commitment provided that planned measures are implemented.
	Sulphur dioxide	•	٥	Emissions decreased by 94.9% between 1990 and 2022 (EPA, 2024c), driven mainly by a reduction in the combustion of fossil fuels at power stations and for residential and commercial heating. Ireland is compliant with its 2020 emission reduction commitment for sulphur dioxide and is projected to comply with future emission reduction commitments.
	Non-methane Volatile Organic Compounds		•	Emissions have reduced by 7.9% in the period 2005-2022, compared with the 25% reduction required under the NECD, indicating that Ireland is non-compliant. However, Ireland is allowed to utilise the prescribed flexibility mechanism under Directive 2016/2284 to account for improved national emission inventory methods; when the adjustment is considered, Ireland is compliant with the emission reduction commitment for NMVOCs for 2020, 2021 and 2022. Emissions are 28.7% lower than 1990. Agriculture is the largest source (39.1%). Production of food and beverages (beer and spirits) accounts for 28.2% (EPA, 2024c).
	Ammonia emissions	•	•	Although ammonia emissions in 2022 were 1% below 2021 levels, Ireland has exceeded its 2020 emission reduction commitment for a third year in succession (EPA, 2024c). National emissions are largely determined by cattle population and nitrogen fertiliser use. Compliance with 2030 reduction commitments will be achieved only through comprehensive implementation of abatement measures such as low-emission slurry spreading and the use of inhibited urea fertiliser on farms.
	PM _{2.5} (fine particulate matter)	•	•	Emissions of $PM_{2.5}$ decreased by 32.7% in the period 2005-2021, driven mainly by fuel switching away from coal and peat. Ireland is compliant with its 2020 emission reduction commitment for $PM_{2.5}$ and is projected to comply with the 2030 target provided that planned measures are implemented.



	POLICY AREA	CURRENT ASSESSMENT	OUTLOOK	NOTES
AIR	Overall air assessment		-	The over (the sam air qualit Ireland is multiple compliar and will ambition the limit from 202 significar

The overall current assessment for air is 'moderate' (the same as in 2020). Ireland is compliant with current air quality standards for many air pollutants. However, reland is not meeting the guidelines set by WHO for multiple pollutants, including PM_{2.5}, and Ireland is noncompliant with the EU reduction target for ammonia and will remain so in the short term. Achieving the ambitions of the Clean Air Strategy and complying with the limit values of the proposed EU Air Quality Directive from 2030 onwards will be challenging, but will have a significant and positive impact on health.

	POLICY AREA	CURRENT ASSESSMENT	OUTLOOK	NOTES
NATURE	Nature			
	Protected habitats	•		Ireland has protected almost 14% of its land area as Natura 2000 sites (SACs and SPAs). The latest Article 17 report (NPWS, 2019) found that 85% of Ireland's protected habitats have inadequate or bad status, with only 15% having favourable conservation status. In terms of trends, 46% of habitats demonstrate ongoing declining trends, while only 2% are improving (NPWS, 2019). Of ten countries assessed by the Commission, Ireland scored lowest across planning, implementation, site management, monitoring and conservation outcomes at SPAs (EC, 2023a).
	Protected species	•	0	The latest Article 17 report found that 57% of protected species have favourable status and 30% have inadequate or bad status. In terms of trends, 55% of species are stable, 17% are improving and 15% are declining (NPWS, 2019).
	Bird populations	•	•	Populations of 54 (26%) of Ireland's regularly occurring bird species are in severe decline while a further 79 (37%) are showing moderate declines (Gilbert <i>et al.</i> , 2021). In all, 63% of Ireland's bird species are in serious trouble.
	Marine protected areas	•	•	Ireland significantly increased the area covered by marine protected areas, from 2.3% to 9.2%, in 2022- 2023. However, the legislation to protect these areas is still not in place. Significant further progress will be needed to reach the target of 30% of Ireland's maritime area protected by 2030, as well as to implement and enforce their protection.
	Overall nature assessment	•		The overall current assessment for nature is 'very poor' (the same as in 2020). Deteriorating trends dominate, especially for protected habitats and bird populations, and Ireland is not on track to achieve policy objectives for nature. While the recent expansion of marine protected areas is welcome, additional far-reaching measures are needed to address the declines in nature and biodiversity.

	POLICY AREA	CURRENT ASSESSMENT	OUTLOOK	NOTES
	Water			
	River water quality	•		Only half (50%) of Ireland's rivers are in satisfactory ecological condition (EPA 2022). There has been no net improvement in river biological quality in recent years (EPA, 2023d). Moreover, 42% of river sites, mostly in the south and south-east of the country, have unsatisfactory nitrate concentrations, while over a quarter of river sites (27%) have unsatisfactory phosphorous concentrations
	Lake water quality	•	C	Some 69% of Ireland's lakes are in satisfactory ecological condition (EPA, 2022). There has been a slight (2.7%) decrease in the proportion of lakes in satisfactory biological condition in recent years (EPA, 2023d), with over one-third (35%) of lakes having high phosphorous concentrations, particularly in the north- east of the country.
WATER	Transitional water quality	•	O	Only 36% of Ireland's transitional waters (estuaries) are in satisfactory ecological condition. In recent years there has been a sharp decline (15.7%) in the number of monitored estuaries in satisfactory condition (EPA, 2022). The transitional waters in less than good ecological status are located primarily in the south and southeast of the country.
	Coastal water quality	•	•	Most (81%) of Ireland's coastal waters are in satisfactory ecological condition. However, in recent years there has been a significant decline (9.5%) in the number of monitored coastal water bodies in satisfactory ecological condition (EPA, 2022).
	Marine environment	•	•	Five of the 11 Marine Strategy Framework Directive descriptors are compatible with good ecological status, indicating partial compliance. Three descriptors have partially achieved good ecological status but some information is still lacking, and one descriptor has insufficient information to assess its status. Challenges remain for achieving full compliance (DHPLG, 2024).
	Groundwater quality	•	٥	Some 468 (91%) of groundwater bodies are in good chemical and good quantitative status. In recent years there has been a very slight decline (0.8%; four water bodies) in the number of groundwater bodies assessed as having good status.



	POLICY AREA	CURRENT ASSESSMENT	OUTLOOK	NOTES
WATER	Urban waste water treatment			About 50% of Ireland's urban waste water is still not collected or treated in compliance with the Urban Waste Water Treatment Directive (compared with the EU average of 82%). Some 19 agglomerations had no treatment at the end of 2023 (down from 29 agglomerations the previous year); Uisce Éireann expects to have treatment in place for all these areas by 2030. While progress is being made, sustained investment in water services infrastructure is needed to achieve full compliance with the Urban Waste Water Treatment Directive and EPA waste water discharge authorisations (EPA, 2023e).
	Bathing water quality		٥	Nationally, bathing water quality has continued to improve, with 97% of beaches (144) meeting or exceeding the minimum required standard of 'sufficient' (EPA 2024d). However, Ireland's share of bathing waters at 'excellent' quality (77%) remains below the EU average (85%) (EEA, 2024a; EPA, 2024e). The number of beaches with poor bathing water quality increased to five in 2023, up from three in 2022. Discharges from waste water overflows and drain misconnections are the main issues at these beaches.
	Drinking water quality	•	•	The quality of drinking water from public supplies remains very high, with over 99.7% compliance with bacterial and chemical limits. However, the resilience of drinking water supplies must improve as concerns remain over long-term boil water notices, detections of cryptosporidium, elevated levels of trihalomethanes and lead. 50 public supplies are on the EPA's Remedial Action List (as at Sept 2024) and Uisce Éireann's progress in addressing issues has been slow and will require sustained investment.
				Private supplies have poorer drinking water quality than public water supplies with 1 in 20 failing to meet the <i>E.coli</i> standards. Of the small private supplies, the total number remains unknown and are not being monitored by the local authorities, creating a potential public health risk for consumers.
	Overall water assessment	•	•	Overall current assessment for water is 'poor' (the same as in 2020). Trends remain mixed, with no net improvement in river or lake water quality in recent years, a sharp decline in the number of monitored estuaries in satisfactory ecological condition and continued direct discharges of raw or inadequately treated sewage to water from 19 agglomerations. Significant challenges remain for achieving full compliance with relevant EU obligations and national policy objectives.

	POLICY AREA	CURRENT ASSESSMENT	OUTLOOK	NOTES		
CIRCULAR ECONOMY AND WASTE	Circular economy and waste					
	Generation of municipal waste	•	V	Municipal waste generation in Ireland continues to increase, growing by 14.8% between 2016 and 2021. Per capita municipal waste generation also increased over the same period by 9%, from 581 kg/person in 2016 to 633 kg/person in 2021. Reducing waste generation will require significant new waste prevention and consumption reduction measures.		
	Recycling of municipal waste	•	•	Ireland's recycling rate for municipal waste has plateaued at 41% (EPA, 2023c), presenting a considerable challenge to meeting the EU recycling targets of 55% by 2025 and 65% by 2035. Efforts to increase recycling are being outpaced by growing waste generation, highlighting that recent interventions to improve recycling need to be coupled with measures to reduce waste generation.		
	Recycling of plastic packaging waste	•	•	Ireland's recycling rate for plastic packaging waste was 28% in 2021, a considerable distance from the EU recycling target of 50% by 2025 (EPA, 2023c). Whether interventions such as the Deposit Return Scheme will be sufficient to meet the 2025 target remains to be seen.		
LAR ECO	Landfilling of municipal waste		٥	Ireland's landfill rate for municipal waste was 16% in 2021, unchanged from the previous 2 years (EPA, 2023c). Ireland must reduce the share of municipal waste landfilled to 10% or less by 2035.		
CIRCUL	Biodegradable municipal waste diversion from landfill	•	٥	After many years of a downwards trend, the amount of biodegradable municipal waste disposed to landfill in Ireland increased slightly in 2021 and 2022, mirroring a rise in the total amount of municipal waste landfilled. However, Ireland remains compliant (by a large margin) with the stricter limits introduced in 2020 (EPA, 2023g).		
	Collection and recovery of electrical and electronic waste	•	•	Ireland met the EU recovery, recycling and reuse targets for all categories of waste electronic and electrical equipment in 2022, and met most by a considerable margin (EPA, 2024f). However, Ireland has not succeeded in meeting the waste electronic and electrical equipment collection target of 65%, achieving a collection rate of 64% in 2021 (EPA, 2023c).		



	POLICY AREA	CURRENT ASSESSMENT	OUTLOOK	NOTES
ND WASTE	Circular material use rate			The circular material use rate (CMRU) measures the ratio between recycled materials and overall material use. Ireland's CMRU increased marginally from 1.7% in 2017 to 1.8% in 2022; however, this remains significantly lower than the EU average (11.5% in 2022). There are known methodological challenges and limitations to using the CMUR in an Irish context related to the structure of Ireland's economy. It is clear that significant improvements in recycling and reductions in the extraction and consumption of virgin materials are needed to improve Ireland's circularity rate.
CIRCULAR ECONOMY AND WASTE	Overall circular economy and waste assessment			The overall current assessment for the circular economy and waste is poor (the same as in 2020) but progress is being made in a number of areas to improve performance. Waste generation continues to grow, in absolute and per capita terms, and Ireland remains overly reliant on export markets for recycling and for treating municipal residual waste. Recycling rates for municipal and plastic packaging waste streams are at risk and need to increase urgently to achieve 2025 targets. Recent interventions, such as the Deposit Return Scheme, statutory roll-out of the organic waste collection service, recovery levy and national end-of waste and by-product decisions, are positive developments but the effects of these remain to be seen. The circular material use rates remains very low by comparison to the European average and Ireland needs to address specific sectoral challenges to accelerate moving from a linear to a circular economy.

SUMMARY 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 to address
- Good mainly achieving objectives
- Very good fully achieving objectives

OUTLOOK OF CURRENT PROSPECTS 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 and measures and plans being fully implemented and effective.
- $\mathbf{\bigcirc}$

Largely on track to achieving full compliance. Measures in place provide prospect of meeting policy objectives and targets.

3. Improving environmental performance and policy implementation in Ireland

From the preceding sections, it is clear that improvements are needed in how environmental policy is implemented in Ireland to address the gaps and shortcomings highlighted in this chapter. In this section, some enablers that can increase the likelihood of successful implementation are discussed. Many of these enablers align with the Institute of Public Administration's findings based on its review of water governance in Ireland, shown in Topic Box 16.7.

Topic Box 16.7 Lessons learnt from water governance

Research undertaken by the Institute of Public Administration on water governance in Ireland (O'Riordan *et al.*, 2022) identifies six important lessons to support better policy implementation and governance:

- 1. Clearly assign roles and take ownership of responsibilities.
- 2. Encourage experimentation, a willingness to engage with varying perspectives and responsiveness to local contexts.
- 3. Make data central: its generation, monitoring, reporting and review.
- 4. Focus on building capacity and sharing learning.
- 5. Take a targeted and diverse approach to regulation.
- 6. Carefully manage stakeholder engagement.

The Institute of Public Administration recognises, however, that structures and processes on their own are not sufficient to achieve better outcomes and that the capability and competence of public servants is at the heart of good public administration (Boyle, 2020). Therefore, better structures and processes need to be married with enhanced capacity among the public servants involved to ensure better governance, and to ultimately deliver better policy outcomes.

Policy coherence

Policy coherence – ensuring that sectoral policies are aligned with environmental goals – is an important prerequisite to effective implementation. Ireland's Second National Implementation Plan for the Sustainable Development Goals 2022-2024 includes a commitment to mainstream the SDGs across national policies. Recent years have seen a move towards more integrated, whole-of-government approaches for certain plans

and strategies that cut across multiple departments, such as the Circular Economy Strategy, Climate Action Plan, Biodiversity Action Plan, National Planning Framework and National Marine Planning Framework. For example, high-level integration is needed between land use planning and transport planning to support the move to more sustainable modes of transport. Environmental assessments (strategic environmental assessment, appropriate assessment, EIA) can help determine where conflicts, or synergies, might be arise between sectoral and environment goals. Achieving policy coherence is challenging, however, requiring effective and inclusive governance and institutional mechanisms to address policy interactions across sectors - including identifying and managing trade-offs - and aligning actions between different levels of government (OECD, 2023b). Many argue that the scale and urgency of the transformational change required to achieve a carbon-neutral, environmentally sustainable economy by 2050 demands a radically different approach to how public policies are designed and implemented. 'Systems thinking' has gained currency as one such paradigm shift (EEA, 2024b), focusing on interconnections and feedback between governance issues within and across systems (including energy, food and mobility systems) as a means of addressing global environmental and climate policy challenges in a more integrated, holistic and coherent way.

National policy position

In our last State of the Environment Report in 2020, we called on government to develop an integrated national policy position on protecting Ireland's environment (EPA, 2020). A national policy position would provide a shared, whole-of-government, long-term vision for protecting Ireland's environment to guide policy development and decision-making at all levels, from national to local. While progress has been made on developing a national policy position, it remains to be completed. Finalisation and publication of a national policy position should be prioritised by government to support policy coherence and greater coordination of environmental protection efforts among the many different departments and implementing agencies in Ireland.

Governance and implementation structures

Fragmented governance structures and processes inevitably lead to implementation challenges. As highlighted in this report, many different government



departments, state agencies, and regional and local authorities in Ireland are involved in implementing environmental policies and legislation. To avoid inefficiencies, confusion, duplication of effort and poor implementation, there is a strong need for clarity around roles and responsibilities and effective collaboration and engagement. As previously noted, much of the responsibility for the implementation and enforcement of environmental regulations at the local level in Ireland lies with the local authorities. The latest EPA report on local authority enforcement performance calls on local authorities to prioritise and resource environmental functions to deliver the enforcement priorities identified (EPA, 2023a).

Resourcing and capacity building

The capability and competence of public servants is at the heart of good public administration (Boyle, 2020). Given the rapidly expanding breadth of issues being addressed by implementing agencies, particularly in quickly evolving policy areas such as climate action, the circular economy and nature restoration, reviewing levels of resourcing as part of strategic workforce planning is vital. Specialist technical expertise is essential and needs to be supported by training and knowledge sharing. High levels of staff turnover in the Irish public sector contribute to a loss of skills and expertise, which can impact productivity and outcomes.

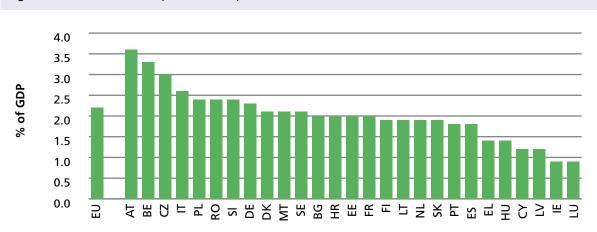
Regulation and enforcement

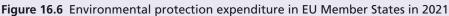
A robust regulatory framework that is appropriately enforced can support the implementation of environmental policy and legislation. Many of the chapters in this report identify the need for more rigorous enforcement of existing legislation to protect nature, water and air quality and to control industrial emissions, noise and waste management. Ensuring that regulatory regimes are fit for purpose and that 'regulation keeps up with innovation' can present challenges for new and evolving policy areas such as the circular economy and bioeconomy (O'Riordan, in press) and, reflecting this, the Bioeconomy Action Plan 2023-2025 includes a commitment to undertake a full regulatory analysis to assess the appropriateness and functionality of the current regulatory system. Smart regulation has become more common in recent years in the context of addressing 'wicked' environmental challenges, encompassing the use of a range of tailored regulatory instruments including self-regulation, co-regulation, economic instruments, and command and control regulation (O'Riordan et al., 2022).

Investment and infrastructure

Finance, both public and private, is an important enabler of transitions and transformations. Unprecedented levels of investment are needed to deliver the infrastructure required to achieve climate neutrality by 2050. The European Commission's latest semester report for Ireland (EC, 2024) notes that Ireland's recovery and resilience plan includes measures to contribute to the green transition with investments in retrofitting, peatland rehabilitation and waste water management systems and also improving permitting, planning and grid connection procedures to accelerate the roll-out of renewables. The report concludes that Ireland would benefit from investing more in sustainable water management, in pollution prevention and control, and in the circular economy and waste. It states that over the 2014-2020 period, the environmental investment gap was estimated at €2.2 billion a year, or 0.7% of GDP (below the EU average of 0.8%). The gap is estimated to be increasing over the 2021-2027 period at €3.4 billion per year. There remains an opportunity to increase funding, in particular for water management (€910 million per year), pollution prevention and control (€838 million per year) and circular economy and waste (€827 million per year). While the investment gap for biodiversity and ecosystems decreased, the Commission noted that Ireland would benefit from further investing in biodiversity and ecosystems. Separately, the report notes that Ireland has low levels of investment in research and development relative to other EU Member States, which holds back innovation, productivity and growth (EC, 2024).

Expenditure on environmental protection is an indicator used by the European Commission and includes expenditure related to the abatement of air, water, soil and noise pollution, the protection of biodiversity, the management of waste water and waste, and environmental research and development. The 8th EAP progress report (EC, 2023b) shows Ireland as ranking bottom among EU states in terms of expenditure on environmental protection as a percentage of GDP (Figure 16.6). Based on the latest 2021 data, average expenditure on environmental protection accounted for 2.2% of GDP among EU Member States in 2021, while in Ireland it accounted for only 0.9% of GDP (Figure 16.6). Notwithstanding difficulties in using GDP for comparing expenditure given the nature of Ireland's open economy, it is clear that increased investment in environmental protection is needed in Ireland to address the deficits discussed in this report. Ireland's progress is also being hampered by lengthy delays in the delivery of critical infrastructure in areas such as energy, water and housing, which is being exacerbated by labour and skills shortages (EC, 2024). In its EIR 2022 the Commission included two priority actions for Ireland relating to environmental financing, shown in Topic Box 16.8 (EC, 2022).





Source: Eurostat, 2024b

Topic Box 16.8 Priority actions for Ireland on finance (EC, 2022)



- To devise an environmental financing strategy to maximise opportunities for closing environmental implementation gaps, bringing together all relevant administrative levels.
- To ensure an increased level of financing, and further exploit opportunities in private financing, for the environment to cover the investment needs identified across the environmental objectives and to close investment gaps.

Ex post evaluation

The OECD notes that *ex post* evaluation mechanisms – designed to assess that environmental legislation, policies and plans are working as intended – are not systematically or routinely applied in Ireland (OECD, 2023c). The lack of *ex post* evaluation means that valuable insights from the relevant implementing agencies on the feasibility and impacts of implementation are not identified at an early stage. Expanding the use of *ex post* assessment of environmental legislation and policies would help support successful implementation (OECD, 2021a, 2022b, 2023c).

Data and evidence

Improvements are being made in Ireland's strategic policy infrastructure to ensure that data insights influence policy decisions. The Irish Government Economic and Evaluation Service and the Irish Government Statistical Service work to provide data and insights on priority policy issues. The planned establishment of strategic policy units in government departments will further strengthen capacity and capability to provide evidence-informed insights for the government. There is also significant focus nationally on enhancing connectivity and engagement between researchers and policy practitioners and improving access to publicly funded research outputs. As well as improving the supply of evidence, there is also a need to build absorptive capacity in the policy system and improve the demand for and use of evidence by policymakers through awareness raising and capacity building. Despite these improvements, the OECD notes that Ireland's public administration could benefit from stronger attention to data-based reform initiatives and that developing datasharing networks and strengthening data skills across the civil service would allow Ireland to harness the potential of evidence-based decision-making (OECD, 2023c).



Effective monitoring

Monitoring and reporting on the implementation of plans and programmes has been shown to support better implementation. Publishing monitoring reports improves public access to information and increases the accountability of implementing bodies. Welldesigned indicators can help to identify implementation shortcomings and signal where interventions or new approaches may be needed. Nationally, having a standardised set of environmental indicators aligned to key policy objectives would enable planners and policymakers to integrate these from the outset, supporting their delivery. Opportunities to share environmental indicator data would also help improve data quality and consistency and reduce the administrative and financial burden on public bodies.

Strategic foresight

Many 'drivers of change' that impact the environment are not of an environmental nature but have a significant impact on Ireland's and Europe's long-term environmental and sustainability outlook. As a result, there has been growing interest in anticipatory knowledge and strategic foresight, both in Ireland (OECD, 2021b) and internationally (OECD, 2023d) with a view to strengthening strategic policy discussions and designing more effective policies. Key drivers of change identified by the EEA include population growth; increasing urbanisation and global migration; accelerating technological change; global power shifts; climate change and environmental degradation; increasing scarcity of and global competition for resources; and diversifying values, lifestyles and governance approaches (EEA, 2020). Improved understanding of drivers of change and global megatrends should support better environmental policies and outcomes. The EEA recommends that reviews of existing European policies and plans are needed to make sure they are as resilient as possible and also dynamic enough to adapt to changes experienced.

Public engagement

The successful implementation of environmental policies and plans requires engagement, support and behavioural change from businesses, communities and citizens. Overcoming the barriers to individual and collective climate action, for example, necessitates understanding people's beliefs and attitudes and the challenges they face and providing positive support to incentivise change. Citizens can more effectively protect the environment if they can rely on the three 'pillars' of the Aarhus Convention: access to information, public participation in decision-making and access to justice in environmental matters (EC, 2022).

Ireland's Second National Implementation Plan for the Sustainable Development Goals 2022-2024 (DECC, 2022a) includes many actions around public engagement and partnerships to embed the principle of 'leaving no one behind'. The OECD, however, identifies the need for Ireland to develop more transparent and open stakeholder engagement mechanisms, noting that consultation practices do not yet operate on a systematic basis across government departments (OECD, 2022b).

On access to environmental information, the Commission reports that Ireland's implementation of the INSPIRE Directive (2007/2/EC) has been poor and that more efforts are needed to make spatial data more widely accessible, particularly high-value data sets (EC, 2022), while, on access to justice, the Commission identifies the very high costs of bringing legal action in Ireland as a very significant obstacle to accessing justice. It states that the Irish government needs to do more to address the prohibitively high costs of legal action, to better inform the public about their rights to access justice and to ensure that abusive strategic lawsuits against public participation, designed to deter legitimate access to environmental justice, are identified and prevented via the appropriate means (EC, 2022).

4. Conclusions

It is clear from this chapter, and the evidence presented elsewhere in this report, that a number of serious deficits remain in how Ireland has implemented EU environmental legislation and that we are not on track to achieve a considerable number of our environmental policy objectives and commitments.

While a growing number of ambitious policies are now in place, Ireland continues to face immense challenges in tackling water pollution, high greenhouse gas emissions, loss of nature and biodiversity, and unsustainably high levels of waste generation and, while progress has been made on air pollution, further reductions are needed in the years ahead to adequately protect human health.

Addressing these issues, particularly in the context of Ireland's strong population and economic growth, requires accelerated action and investment to implement existing environmental legislation in full and a move towards more holistic integration of environmental and climate considerations into policymaking.



Key chapter messages

1.

Serious deficits remain in Ireland's implementation of environmental legislation and related plans and programmes. To achieve full compliance with existing environmental standards, we need to scale up and speed up the implementation of measures and critical infrastructure required to safeguard air and water quality and protect nature and human health.

2.

Environmental policy responses to date have been insufficient to halt or reverse environmental decline. A national policy position on protecting Ireland's environment is urgently required to provide a shared wholeof-government vision for protecting our environment to guide decision-making, support policy coherence and improve the coordination of environmental protection efforts nationally.

3.

Looking ahead to 2050, more ambitious and transformative policy responses are needed that set out a roadmap for achieving the transitions required across our food, energy, mobility, and production and consumption systems. These policies need to be supported by clear governance structures and the necessary investment plans to implement them.



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