

**Table 15.3** Current assessment and outlook for Ireland across five key environmental policy areas (Source: EPA, based on evidence and assessments presented in the *Ireland's Environment – An Integrated Assessment 2020* report, published in November 2020. Table appeared on p. 408.)

	POLICY AREA	CURRENT ASSESSMENT	OUTLOOK	NOTES
 <b>CLIMATE</b>	<b>Climate</b>			
	Greenhouse gas (GHG) emissions			Greenhouse gas (GHG) emissions have not been sufficiently decoupled from economic activity. Ireland had the third highest per capita GHG emissions in the EU in 2017 (EEA, 2019a), resulting in a current assessment of very poor. Our 2020 target will not be met without relying on purchasing credits or allowances (EPA, 2020b). Decarbonisation of energy will need to be accelerated rapidly to achieve our 2030 target and enable achievement of the current or emerging 2050 transition objective. Steps to reduce other GHG emissions are urgently needed.
	Renewable energy share			Despite considerable expansion in recent years, Ireland's renewable energy share (at 10.7%) remains well below the EU average (17.5%), with fossil energy making up 90% of Ireland's energy needs. Ireland looks set to fall short of reaching binding EU renewable energy targets for 2020. National targets for 2030 imply significant further expansion in this period which will then need to continue.
	Climate adaptation			There have been good advances on the planning and governance side, with the establishment of the Climate Action Regional Offices, and all sectors and Local Authorities now have climate adaptation strategies and plans in place. However, there is little evidence of the implementation of these strategies or plans to date.
	<b>Overall climate assessment</b>			While there has been some progress on renewable energy and ambitious climate action and adaptation plans, Ireland's failure to significantly reduce GHG emissions results in a 'very poor' current assessment. Meeting 2030 targets and our 2050 transition objective will require the full implementation of current policies and measures and significant national investments.

POLICY AREA	CURRENT ASSESSMENT	OUTLOOK	NOTES
<b>Air quality</b>			
Particulate matter (PM <sub>2.5</sub> and/or PM <sub>10</sub> )			Compliant in 2019 with EU limits but a number of exceedances of WHO guideline values in urban areas (EPA, 2020c). Increased monitoring is highlighting high levels in many Irish cities, towns and villages. Particulate matter from the burning of solid fuel is estimated to cause 1300 premature deaths per year. Low-smoke zones and climate action measures will have benefits for air quality and health.
Nitrogen oxides (nitrogen oxide and nitrogen dioxide)			Concentrations are moderate but increasing due to growth in traffic numbers. EU air quality limit values for nitrogen dioxide were exceeded during 2019 at one site in Dublin (EPA, 2020c); indications are that there will be exceedances at further monitoring stations in the future. Climate action measures will have co-benefits for air quality and health.
Ozone (ground level)			Compliant in 2019 with EU limits but some exceedances of WHO guideline values in the past and exceedances at two sites in 2019 (EPA, 2020c). Measures to reduce nitrogen oxides will impact the potential for formation of ozone in sunny weather conditions. There is a risk from impact of transboundary ozone (from outside Ireland).
Polycyclic aromatic hydrocarbons (PAH)			Polycyclic aromatic hydrocarbons (PAH) are emitted residentially from the combustion of solid fuels, such as peat, wood and coal. PAH are known carcinogens. Compliant in 2019 with EU limits but exceedances of EEA reference values at four sites indicate that PAH in ambient air are due to the burning of solid fuels is a large problem in Ireland's cities and towns (EPA, 2020c). Low-smoke zones and climate action measures will have benefits for air quality and health.

POLICY AREA	CURRENT ASSESSMENT	OUTLOOK	NOTES
<b>Emissions to air</b>			
Nitrogen oxides			Ireland's national emissions limit for nitrogen oxides has been exceeded since 2010, although emissions decreased slightly in 2018. Lower EU limits will come into effect in 2030. Based on the latest EPA projections (EPA, 2020d) nitrogen oxide emissions are projected to reduce and to be compliant, provided planned measures, particularly in relation to the Climate Action Plan, are implemented; however, further measures may be required to ensure compliance in 2030.
Sulphur dioxide			Emissions have decreased by 93.3% since 1990, owing to fuel switching and reduced sulphur content of fuels. On track to meet 2030 targets (EPA, 2020d).
Non-methane volatile organic compounds (NMVOCs) emissions			Emissions of non-methane volatile organic compounds (NMVOCs) are increasing, arising from the food and beverage industry and the storage and handling of animal manures and synthetic fertilisers. Emissions of NMVOCs decreased slightly in 2018. Currently slightly off track to meet 2030 emissions target (EPA, 2020d), indicating further measures are required.
Ammonia emissions			Ammonia emissions are increasing, linked with agriculture. Emissions breached national ceiling under the National Emission Ceilings Directive in 2018 for the third successive year (EPA, 2020d). Currently not on track to meet 2030 emissions target. The underlying drivers are the use of animal manure and nitrogen fertilisers, which can be reduced through widespread adoption of on-farm measures.
Particulate matter (PM <sub>2.5</sub> and/or PM <sub>10</sub> ) emissions			Emissions of particulate matter (PM <sub>2.5</sub> ) have decreased by 62.8% since 1990, mainly due to fuel switching in the residential and commercial sectors, and improvements in vehicle engine technology. There was a small increase in emissions of particulate matter in 2018, mainly due to increased heating requirements in homes and buildings. Projected to meet 2030 EU emissions target subject to agreed national actions being implemented (EPA, 2020d).
<b>Overall air assessment</b>			While overall air quality in Ireland is good, there are localised issues with some pollutants (such as particulates) that have serious potential health impacts, resulting in an overall current assessment of 'moderate'. Ireland is generally meeting EU air quality limits but not some WHO guideline values in places, and nitrogen oxides exceedance in 2019 is a warning about not being complacent in tackling air pollution. Not on track to meet National Emission Ceilings Directive targets for ammonia due to emissions from agriculture. Mixed progress in reducing overall emissions from transport and energy. Overall, Ireland's prospect of meeting targets and policy objectives is heavily dependent on agreed national measures being implemented.

NATURE

POLICY AREA	CURRENT ASSESSMENT	OUTLOOK	NOTES
<b>Nature</b>			
Conservation status of EU protected habitats			Based on the latest assessments (NPWS, 2019), 15% of EU protected habitats have a favourable conservation status, while 85% have an inadequate or a bad status. In terms of the trends in EU protected habitats, 53% are stable, 46% are declining, and only 2% are improving.
Conservation status of EU protected species			Based on the latest assessments (NPWS, 2019), 57% of EU protected species have a favourable conservation status; 30% have an inadequate or a bad status. In terms of the trends in EU protected species, 55% are stable, 17% are improving, 15% are declining, and 13% are unknown.
Status and trends of bird populations			Almost 20% of Ireland's breeding bird species are in long-term decline. Approximately 30% of breeding species populations are stable or have increased over the long term. This includes some relatively recent colonists. Some of our breeding farmland songbirds are under increasing pressures from the modernisation and intensification of agricultural practices. Breeding waders such as the curlew and lapwing have seen a 93% decline in breeding populations over the long term. The populations of over half of wintering birds are declining over the short term, this includes waders and duck species. Ireland's wintering waterbirds may be responding to climate change as many species are showing a north-easterly shift in their range across Europe.
Butterflies			Butterfly populations are sensitive to changes in climate and land use. The Irish Butterfly Monitoring Scheme, coordinated by the National Biodiversity Data Centre (NBDC), shows that the current long-term trend is of moderate decline. Across 15 common and widespread species, the highest butterfly populations observed since the monitoring scheme began in 2008 were recorded in 2010 and the lowest in 2016. Five species have experienced serious or moderate population declines since 2008, three species have increasing populations, four have stable populations and three are too variable to assign a statistically rigorous trend (NBDC, 2019; Judge and Lysaght, 2020).
<b>Overall nature assessment</b>			Overall current assessment is 'very poor'. Deteriorating trends dominate, especially for protected habitats. In the absence of far-reaching measures, the outlook is largely not on track to meeting policy objectives.

POLICY AREA	CURRENT ASSESSMENT	OUTLOOK	NOTES
<b>Water</b>			
River water quality			Current assessment is 'poor'. Only 53% of river water bodies have a good or high status (EPA, 2019). Trend shows a mixed picture with some improvements, but notably there have been serious declines in the number of high status sites and an increase in poor status waters. Significant challenges remain to achieving full compliance.
Lake water quality			Current assessment is 'poor'. Only 50% of lake water bodies have a good or high status (EPA, 2019). Trend shows a mixed picture. Significant challenges remain to achieving full compliance.
Transitional water quality			Current assessment is 'very poor'. Only 38% of transitional water bodies have a good or high status (EPA, 2019). Trend shows a mixed picture. Significant challenges remain to achieving full compliance.
Coastal water quality			Current assessment is 'very good', with 80% of coastal water bodies having a good or high status (EPA, 2019). Trend is stable. Largely on track to achieving full compliance but some issues remain.
Marine environment			The Marine Strategy Framework Directive Article 17 report found that 6 of the 11 MSFD descriptors were compatible with good ecological status, indicating partial compliance (DHLGH, 2020). Trend information is not available. Challenges remain for achieving full compliance.
Groundwater quality			92% have a good or high status (EPA, 2019). Trend is improving, although there are elevated nitrate concentrations at some monitoring stations, particularly in the south and south-east region, and localised issues with pathogens linked to domestic wastewater treatment systems. The presence of hazardous substances in groundwater is not a widespread water quality issue. Largely on track to achieving full compliance.
Urban wastewater treatment			Over half (56%) of the wastewater load was not compliant with EU treatment standards in 2019 (EPA, 2020e). Improvements are needed at 113 priority urban areas to eliminate raw sewage, prevent water pollution, protect freshwater pearl mussels and bathing waters and meet EU standards. Trend is improving, but from a low base; progress is slow and significant challenges remain to achieving full compliance.
Bathing water quality			95% have a sufficient status, 89% have an excellent or a good status (EPA, 2020f). Trend is improving. Largely on track to achieving full compliance with 'sufficient' target, but still below EU average for 'excellent'.

	POLICY AREA	CURRENT ASSESSMENT	OUTLOOK	NOTES
	Drinking water quality			Private supplies have poorer compliance and substantially worse drinking water quality than public water supplies with challenges remaining. While compliance is over 99% in public supplies (EPA, 2020h), there is a concern about long-term boil water notices, detections of <i>Cryptosporidium</i> and elevated levels of disinfection by-products (THMs), lead and pesticides. As of July 2020, there are 52 public water supplies on the EPA's Remedial Action List. Irish Water's progress at implementing solutions for these supplies has been subject to delays and increasing uncertainty. Remaining issues need to be addressed through upgrade and replacement programmes.
	<b>Overall water assessment</b>			Overall, current assessment is 'poor'. Trends are mixed, with serious declines in pristine river sites. In terms of outlook, significant challenges remain to achieving full compliance and meeting policy objectives.
 <b>WASTE AND CIRCULAR ECONOMY</b>	<b>Waste and the circular economy</b>			
	Generation of municipal waste			Generation of municipal waste increased in 2018 to 600 kg/person (up from 577 kg/person in 2017) (EPA, 2020e). Mixed trend over past 20 years, correlating closely with variations in disposable income, indicating a failure to decouple waste generation from economic activity. Reducing waste generation will require the implementation of new waste prevention and consumption reduction measures.
	Recycling of municipal waste			Recycling rates have stagnated since 2010 and more recently shown a decline (EPA, 2020e). Waste characterisation studies show that a large share of recyclable waste (packaging, food) is put in the wrong bin and so is not being recycled. On track to meet 2020 target but the much more stringent targets for 2025 and 2030 will pose a challenge.
	Recycling of packaging waste			Meeting current targets but recycling rates for some packaging streams are stagnating or declining and much more stringent targets will apply from 2025 and 2030 (EPA, 2020e). Significant challenge to meet future targets for individual packaging streams, in particular plastic. Waste characterisation studies show that two-thirds of plastic packaging waste presented in kerbside bins is not currently recyclable in Ireland.
	Landfilling of municipal waste			Landfill rates have fallen steadily in Ireland, from 84% in 2001 to just 14% in 2018 (EPA, 2020e). However, meeting the 2030 limit of 10% municipal waste disposed to landfill will be challenging.
	Biodegradable waste diversion from landfill			Currently compliant with 2020 target by a large margin and trend is improving with brown bin roll-out and more widespread mechanical pre-treatment of residual waste prior to landfilling (EPA, 2020e).

POLICY AREA	CURRENT ASSESSMENT	OUTLOOK	NOTES
Collection and recovery of electrical and electronic waste			Compliant with current collection and recovery targets; however, significantly increased targets apply from 2019. Rates are gradually improving (EPA, 2020e); expected to achieve compliance with new targets by a close margin.
Circular (secondary) material use rate			Rates of circular (secondary) material use have remained consistently low in Ireland since 2010 at below 2% compared with an EU average of 11% in 2017 (EC, 2019b).
<b>Overall waste and circular economy assessment</b>			Overall current assessment is 'poor'; while Ireland is meeting current targets, recycling rates for municipal waste and packaging have levelled off and in some cases declined and waste generation remains high and linked to economic activity, while circular use of material remains very low. Publication of new national waste policy is welcome. Achieving future EU targets and circular economy goals will be dependent on rigorous implementation of waste legislation, policy initiatives and measures.

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

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

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

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