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COMMISSION STAFF WORKING DOCUMENT

Environmental Implementation Review
Country Report - IRELAND

Accompanying the document

Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions

Environmental Implementation Review 2022: *Turning the tide through environmental compliance*

{COM(2022) 438 final} - {SWD(2022) 252 final} - {SWD(2022) 253 final} - {SWD(2022) 254 final} - {SWD(2022) 255 final} - {SWD(2022) 256 final} - {SWD(2022) 257 final} - {SWD(2022) 258 final} - {SWD(2022) 259 final} - {SWD(2022) 261 final} - {SWD(2022) 262 final} - {SWD(2022) 263 final} - {SWD(2022) 264 final} - {SWD(2022) 265 final} - {SWD(2022) 266 final} - {SWD(2022) 267 final} - {SWD(2022) 268 final} - {SWD(2022) 269 final} - {SWD(2022) 270 final} - {SWD(2022) 271 final} - {SWD(2022) 272 final} - {SWD(2022) 273 final} - {SWD(2022) 274 final} - {SWD(2022) 275 final} - {SWD(2022) 276 final} - {SWD(2022) 277 final} - {SWD(2022) 278 final}

This report has been written by the staff of the Directorate-General for Environment, European Commission. Any comments are welcome to the following e-mail address: ENV-EIR@ec.europa.eu

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Executive summary

In previous environmental implementation reviews (EIRs), the Commission identified four main challenges for Ireland's implementation of EU environmental policy and law. These challenges were:

- completing the Natura 2000 designation process for terrestrial and marine sites;
- further protecting raised and blanket bogs;
- maintaining the significant investments required for water treatment, given the urgent need to invest in water infrastructure;
- Improving access to justice in environmental matters

Ireland has made progress in **designating nature sites** within its terrestrial Natura 2000 network under the Birds and Habitats Directives and the terrestrial designations are now considered to be complete. It has also made some progress in drawing up conservation objectives. However, there is still a lack of clarity over Ireland's conservation measures. There are significant knowledge and designation gaps in Ireland's marine Natura 2000 network, especially under the Birds Directive. Delays in finalising the list of sites of community importance (SCIs), and the designation of marine special protection areas (SPAs) under the Birds Directive are of particular concern given that many of these areas are likely to be under pressure for development. The situation for forested areas protected under the nature directives is concerning as over half of 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. In recent years, Ireland has made significant progress by drawing up a national peatlands strategy and national raised-bog SAC management plan. It has also improved the protection of raised-bot sites and blanket-bog sites and has begun to restore the former, in particular through several LIFE projects. However, restoration work has still to be completed on many raised-bogs 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 in blanket-bog SACs is managed in a way that is compatible with the conservation of this habitat.

Water treatment continues to be a concern. There is a low compliance rate with the Urban Wastewater Treatment Directive due to the large number of non-compliant agglomerations, in particular further efforts are needed to provide biological treatment to additional 50.5% p.e of urban waste water, as well as biological treatment to remove nitrogen and/or phosphorusfrom a further 75.1% p.e. of urban waste water. Ireland has not yet resolved problems with 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 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, which remains a very significant obstacle to access to justice, as well as other obstacles to legitimate access to justice for environmental reasons.

On **waste policy**, Ireland's waste generation continues to riseand remains significantly above the EU average. Ireland's landfilling and recycling rates for municipal waste and packaging waste have declined since 2014, with more waste being sent for energy recovery.. The recently adopted waste action plan for a circular economy aims to improve the country's performance, but the updated waste management pPlan in line with the new Waste Framework Directive has not been adopted yet. Although Ireland is well above EU average in terms of resource productivity, it's circular (secondary) use of material is the second lowest in the EU.

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

EU financing continues to help Ireland substantially in tackling its environmental implementation gap, and Ireland is due to have received over EUR 989 million from its recovery and resilience plan (RRP) (2021-2026) in grants and EUR 1.19 billion from cohesion policy (2021-2027). Ireland's overall environmental financing for investments is estimated to have been 0.3% of GDP in 2014-2020, mostly from national sources. The country's environmental investment needs in 2021-2027 amountto at least 0.48% of GDP, suggesting a potential environmental financing gap of over 0.18% of GDP, if baseline financing levels continue.

Since 2019, Ireland has had to pay fines of over EUR 13 million imposed by the Court of Justice of the European Union for non-conformity with environmental impact assessment (EIA) legislation.

Part I: Thematic areas

1. Circular economy and waste management

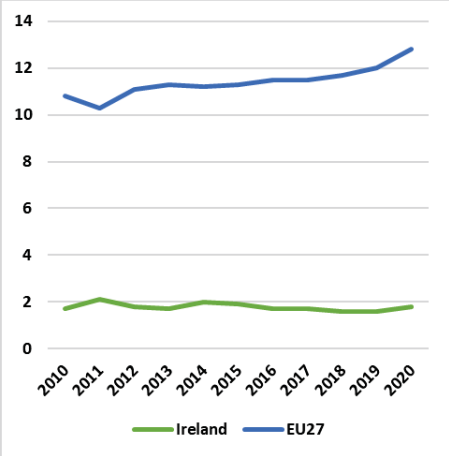
Measures towards a circular economy

The new Circular Economy Action Plan adopted in March 2020 is one of the main building blocks of the European Green Deal. The EU's transition to a circular economy will reduce pressure on natural resources and will create sustainable growth and jobs. It is also a prerequisite to achieve the EU's 2050 climate neutrality target and to halt biodiversity loss. The Action Plan announces initiatives along the entire life cycle of products, aiming to reduce the EU's consumption footprint and to double the EU's circular material use rate by 2030. It targets how products are designed, promotes circular economy processes, encourages sustainable consumption, and aims to ensure that waste is prevented and the resources used are kept in the EU economy for as long as possible.

The circular material use rate is a good indicator of an economy's circularity, as it includes all the materials that are fed back into our economy. Large differences in the circularity rate exist between countries. To help achieve the goal in the EU circular economy action plan of doubling the EU's circular material-use rate by 2030, ambitious measures targeting the whole product life cycle are needed at Member State level. Such measures range from sustainable product design that makes it possible to increase the durability, reparability, upgradability and recyclability of products, to other measures, like: (i) 'remanufacturing'; (ii) increasing circularity in production processes; (iii) recycling; (iv) boosting eco-innovation; and (v) increasing the uptake of green public procurement.

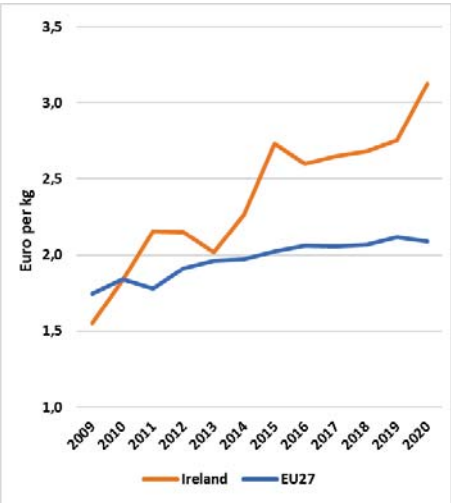
Ireland's circular (secondary) use of material i was 1.7 % in 2016 and was 1.8 % in 2020, compared to the EU average of 12.8%. As its growth was lower than that of the EU overall, the gap to the EU average has widened.

Figure 1: Circular material use rate (%), 2010-2020[1]



Resource productivity expresses how efficiently the economy uses material resources to produce wealth. Improving resource productivity can help minimise negative impacts on the environment and reduce dependency on volatile raw material markets. As shown in figure 2, with EUR 3.13 generated per kg of material consumed in 2020, resource productivity in Ireland is well above the EU average of EUR 2.09 per kg. This positive performance is further supported by a continuous increase in the resource productivity of Ireland over the last decade.

Figure 2: Resource productivity, 2010-2020[2]



[1] Eurostat, Circular Economy Monitoring Framework.
[2] Eurostat, Resource productivity.

Circular economy strategies

The Commission encourages Member States to adopt and implement national/regional circular economy strategies covering the whole life cycle of products. This is because such strategies are one of the most effective ways to progress towards a more circular economy at Member State level. Since the launch of the online European Circular Economy Stakeholder Platform in 2017[3], national, regional or local authorities have used the platform to share their strategies and roadmaps.

A 'whole of government circular economy strategy' published in December 2021 is set to replace the current suite of policies, plans and programmes..

Moreover, in September 2020, the Government adopted a 'Waste Action Plan for a Circular Economy', the new national waste ction plan for 2020-2025. The policy document contains over 200 measures across various waste areas including municipal waste, consumer protection and citizen engagement, plastics and packaging, construction and demolition, textiles, green public procurement and waste enforcement. Ireland does not have specific sectoral strategies for plastics, construction or textiles, however these sectors are targeted in the circular economy programme (formerly know as the national waste prevention programme) led by the Environmental Protection Agency (EPA), as well as the waste action plan for circular economy.

Eco-innovation

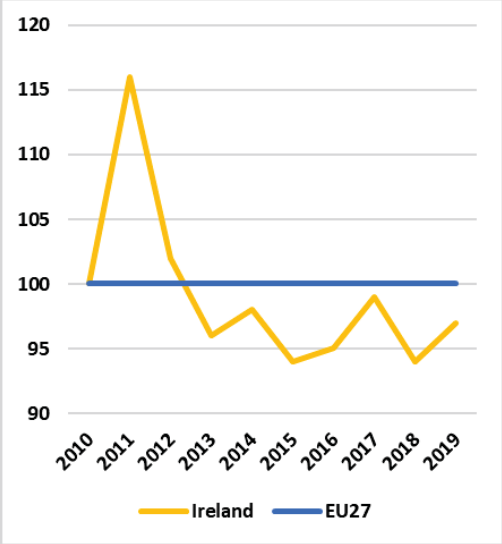
A successful transition to a circular economy requires social and technological innovation. This is because the full potential of the circular economy can only when it is implemented across all value chains. Therefore, eco-innovation is an important enabling factor for the circular economy. New approaches to product design and new business models can help to produce systemic circularity innovations, creating new business opportunities.

The country ranked 14th in EU scoring 109 in the 2021 Eco-Innovation Scoreboard[4], resulting in an average eco-innovation leader performance status. In two out of five components of the 2021 Eco-innovation index , Ireland performs above the EU average, namely in eco-innovation activities and resource efficiency outcomes, while, its performance is below the EU average in eco-innovation inputs, eco-innovation outputs and socio-economic outputs.

[3] Circular Economy Stakeholder Platform

[4] https://ec.europa.eu/environment/ecoap/indicators/index_en

Figure 3: Eco-innovation performance, 2010-2019[5]



Green public procurement (GPP)

Public procurement accounts for a large proportion of European consumption, with public authorities' purchasing power representing around 14% of EU GDP. Public procurement can help drive the demand for sustainable products that meet reparability and recyclability standards.

In Ireland, a national action plan – 'Green Tenders' (Jan 2012) was published by the Department of the Environment, who has the lead role in 'greening' procurement across the Irish public sector. In September 2021 the EPA published a national guidance document for the public sector[6]. In addition, the EPA published its first monitoring report on GPP in 18 government departments which collates and reports on activities and data[7]. In October 2019, Circular 20/2019[8] was published to support the climate action plan by promoting the wider use of environmental and social considerations in public procurement. Ireland has committed to implementing GPP in all tenders that involve public funds by 2023. This transition is being supported through guidance and training. Moreover, the EPA takes the lead on the monitoring and reporting of government procurement by government departments.

[5] European Commission - Directorate-General for Environment (DG ENV), Eco-innovation Observatory', Eco-innovation index.

[6] Green Public Procurement | Environmental Protection Agency (epa.ie)

[7] Resources | Environmental Protection Agency (epa.ie)

[8] gov.ie - Circular 20/2019 : Promoting the use of Environmental and Social Considerations in Public Procurement (www.gov.ie)

EU Ecolabel and the eco management and audit scheme (EMAS)

The number of EU Ecolabel products and EMAS-licensed[9] organisations in a given country provides some indication of the extent to which the private sector and national stakeholders in that country are actively engaged in the transition to a circular economy. It also shows how committed public authorities are to supporting instruments designed to promote the circular economy.

As of September 2021, Ireland had 171 products out of 83 590, and 21 licences out of 2 057 registered in the EU Ecolabel scheme, showing a very low take-up of products and licences[10]. Moreover, one organisation, amounting to one site from Ireland is currently registered in EMAS, down from three sites in 2019[11]. Figures for Ecolabel have improved, with 136 new product and 16 new licence registrations under the EU Ecolabel.

Overall, Ireland has made good progress in strengthening its circular economy policy framework, having developed a new comprehensive strategy. However, its circular material use rate is far below the EU average, so a priority action is proposed.

2022 priority actions

- Adopt the national circular economy strategy
- Adopt measures to improve the circular material use rate

Waste management

Turning waste into a resource is supported by:
(i) fully implementing EU waste legislation, which includes the waste hierarchy, the need to ensure separate collection of waste, the landfill diversion targets, etc.;
(ii) reducing waste generation and waste generation per capita in absolute terms;
(iii) limiting energy recovery to non-recyclable materials and phasing out landfilling of recyclable or recoverable waste.

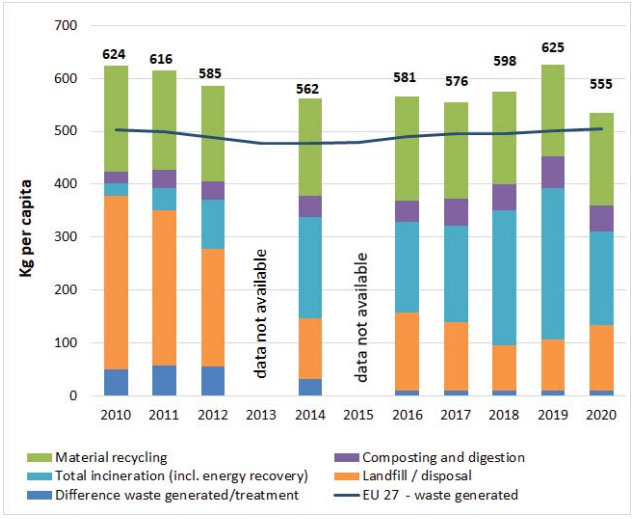
This section focuses on management of municipal waste[12] for which EU law sets mandatory recycling targets.

Preventing products and materials from becoming waste for as long as possible is the most efficient way to improve resource efficiency and to reduce the environmental impact of waste. Waste prevention and product re-use are the most preferred options under the waste hierarchy. The revised Waste Framework Directive adopted in 2018 sets new obligations on waste prevention and introduces more effective waste prevention programmes.

The generation of municipal waste per capita in Ireland decreased significantly in 2020, with 555 kg per capita after a relatively steady increase over 2014-2019. The stringent implementation of the national circular economy programme might partly explain this positive outcome. Still, the amount of municipal waste generated per capita remains considerably above the EU average of 502 kg.

In November 2021, Ireland has published a climate action plan[13] which includes specific targets, including reductions in household waste, landfill use, plastics and food waste, and sets recycling targets for municipal, plastic and packaging waste.

Figure 4: Municipal waste by treatment in Ireland, 2010-2020[14]



Between 2010 and 2020 Ireland substantially reduced its landfill rate from 53 %[15] to 22.5 %, albeit with an upward

[9] EMAS is the European Commission's Eco-Management and Audit Scheme, a programme to encourage organisations to behave in a more environmentally sustainable way.

[10] European Commission, Ecolabel Facts and Figures.

[11] However, it should be noted that several Irish companies have ISO accreditation for their EMAS.

[12] Municipal waste consists of (a) mixed waste and separately collected waste from households, including paper and cardboard, glass, metals, plastics, bio-waste, wood, textiles, packaging, waste electrical and electronic equipment, waste batteries and accumulators, and bulky waste, including mattresses and furniture; (b) mixed waste and separately collected waste from other sources, where such waste is similar in nature and composition to waste from households. (Directive 2008/98/EC, Art. 3 2b).

[13] Irish Department of the Environment, Climate and Communications, Climate Action Plan 2021.

[14] Eurostat, Municipal waste by waste operation, April 2022.

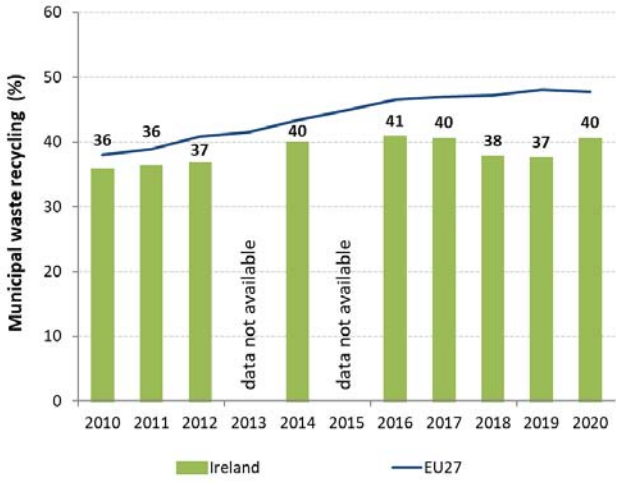
[15] 58% according to the EPA data https://www.epa.ie/publications/monitoring--assessment/waste/national-waste-statistics/EPA_NWR_2010.pdf

trend over the last two years. In the meantime Ireland has strongly shifted towards incineration as waste treatment, the rate rising from 4 % in 2010 reaching 46 % in 2019, although this fell to 32 %according to the provisional figures for 2020. This trend has continued since the last EIR report in 2019, where the risk of not meeting the post 2020 recycling targets due to increasing incineration had already been highlighted.

Ireland's recycling rate of municipal waste has increased in recent decades, but with 40.5 % in 2020, it still remains below the EU average of 48 %. This shows that Ireland needs to step up investment in recycling to meet the EU 2025 recycling targets. Ireland's waste action plan for a circular economy attempts to improve waste recycling[16] (making all packaging reusable or recyclable by 2030, introducing a waste recovery levy to encourage recycling, reviewing government support for the development of recycling infrastructure etc.).

Figure 5 shows that Ireland needs to step up investment in recycling to meet the EU 2020 and 2025 recycling targets.

Figure 5: Recycling rate of municipal waste, 2010-2020[17]



The Commission's 2018 Early Warning report'[12] did not list Ireland as one of the countries at risk of missing the EU 2020 target of recycling 50 % of municipal waste. The Commission is currently finalising its analysis of the progress made on the recommendations from the 2018 early warning reports as well as an analysis of progress towards achieving the 2025 waste recyling targets. This report will be presented at the end of 2022[18] and will assess the progress made to date, and will make recommendations as appropriate.

[16] Irish Department of the Environment, Climate and Communications, Waste Action Plan for a Circular Economy.

[17] Eurostat, *Recycling rate of municipal waste*, April 2022.

Implementation of the 2018 waste legislative package

Ireland has notified the transposition of the 2018 waste package[19] to the Commission. A conformity assessment is ongoing.

Waste management plans and waste prevention programmes are instrumental for the full implementation of EU waste legislation. These plans and programmes set out key provisions and investments to ensure compliance with existing and new legal requirements (e.g. on waste prevention; on separate collection for certain waste streams, on recycling and on landfill targets). Revised plans and programmes were due on 5 July 2020.

Ireland has not notified its updated waste management plan, however, a new national waste management plan for a circular economy is being prepared by the regional waste management planning offices with a view to completing and publishing it by end 2022 .

2022 priority actions

- Introduce new policy instruments, including economic instruments, to promote prevention, make reuse 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 is in place.

[19] Directive (EU) 2018/851, Directive (EU) 2018/852, Directive (EU) 2018/850 and Directive (EU) 2018/849 amend the previous waste legislation and set more ambitious recycling targets for the period up to 2035.

2. Biodiversity and natural capital

The 2030 EU biodiversity strategy adopted in May 2020 aims to put the EU's biodiversity on a path to recovery and sets out new targets and governance mechanisms to achieve healthy and resilient ecosystems.
In particular, the strategy sets out ambitious targets to:
(i) protect a minimum of 30% of the EU's land area and 30% of its sea area and integrate ecological corridors, as part of a true trans-European nature network;
(ii) strictly protect at least a third of the EU's protected areas, including all remaining EU primary and old-growth forests;
(iii) effectively manage all protected areas, defining clear conservation objectives and measures, and monitoring them appropriately.
The strategy also sets out an EU nature restoration plan – a series of concrete commitments and actions to restore degraded ecosystems across the EU by 2030, and manage them sustainably, addressing the key drivers of biodiversity loss.

The EU's Habitats and Birds Directives are key legislative tools to deliver on the targets in the EU's biodiversity strategy for 2030 and are the cornerstone of the European legislation aimed at conserving of the EU's wildlife[20].

Ireland's third national biodiversity action plan[21], for the period 2017-2021, sets out actions to be carried out by a range of government, civil and private sectors in order to achieve Ireland's 'Vision for Biodiversity'. This follows on from the work of the first and second national biodiversity action plans.

It has been developed in line with the EU and international biodiversity strategies and policies. The fourth national biodiversity action plan is currently in development.

Nature protection and restoration

Natura 2000[22], the largest coordinated network of protected areas in the world, is the key instrument to achieve the objectives in the Birds and Habitats Directives. These objectives are to ensure the long-term protection, conservation and survival of Europe's most valuable and threatened species and habitats and the ecosystems they underpin. Key milestones towards meeting the objectives of the Birds and Habitats Directives are: (i) the setting up of a coherent Natura 2000 network; (ii) the designation of sites of community importance (SCIs) as special areas of conservation (SACs)[23]; and (iii) the setting of conservation objectives and measures for the Natura 2000 sites.

Setting up a coherent network of Natura 2000 sites

Ireland hosts 59 habitat types[24] and 60 species[25] covered by the Habitats Directive. The country also hosts populations of 42 bird taxa listed in Annex I the Birds Directive [26].

By 2021, 13.2 % of the national land area of Ireland was covered by Natura 2000 (EU average 18.5 %), with special protection areas (SPAs) classified under the Birds Directive covering 6.2 % (EU average 12.8 %) and SCIs. under the Habitats Directive covering 10.2 % (EU average 14.2 %) of Ireland's territory.

Taking into account both Natura 2000 and other nationally designated protected areas, Ireland legally protects 13.9% of its terrestrial areas (EU-27 average 26.4%) and 2.3% of marine areas (EU-27 average 10.7%)[27]. Ireland rigourously protects 2.25% of the EU's protected areas.

On the basis of the latest update, Ireland's terrestrial Natura 2000 network under the Birds and Habitats Directive is now considered complete. There are significant knowledge and designation gaps in Ireland's marine Natura 2000 network, especially under the Birds Directive. Delays in finalising the list of SSCIs, including for the habitat reefs, as well as poor progress in

[20] These should be reinforced by the Nature Restoration Law, according to the new EU Biodiversity Strategy.
[21] https://www.npws.ie/sites/default/files/publications/pdf/National%20Biodiversity%20Action%20Plan%20English.pdf
[22] Natura 2000 comprises Sites of Community Importance (SCIs) designated pursuant to the Habitats Directive as well as Special Protection Areas (SPAs) classified pursuant to the Birds Directive. Figures of coverage do not add up because some SCIs and SPAs overlap. 'Special Areas of Conservation (SACs)' means an SCI designated by the Member States.
[23] Sites of Community Importance (SCIs) are designated pursuant to the Habitats Directive, whereas Special Protection Areas (SPAs) are designated pursuant to the Birds Directive. Figures of coverage do not add up because some SCIs and SPAs overlap. Special Areas of Conservation (SACs) are SCIs designated by the Member States.
[24] EEA, Article 17 dashboard, Annex I total, 2019.
[25] EEA, Article 17 dashboard, Annex II + Annex IV excluding those in Annex II + Annex V excluding those in Annex II, 2019. This counting only takes into account species and habitats for which assessment of conservation status was requested.
[26] EEA, Article 12 dashboard, Annex I, 2020. This counting only takes into account birds taxa for which information was requested.
[27] European Environment Agency, Protected Areas, terrestrial protected area percentage (2021) and marine protected area percentage (2019), March 2022.

identifying, selecting and designating SPAs under the Birds Directive is of particular concern, given the very ambitious plans for developing renewables in offshore waters. These knowledge and designation gaps must be addressed.

Figure 6: Marine & terrestrial protected area coverage, 2021[28]

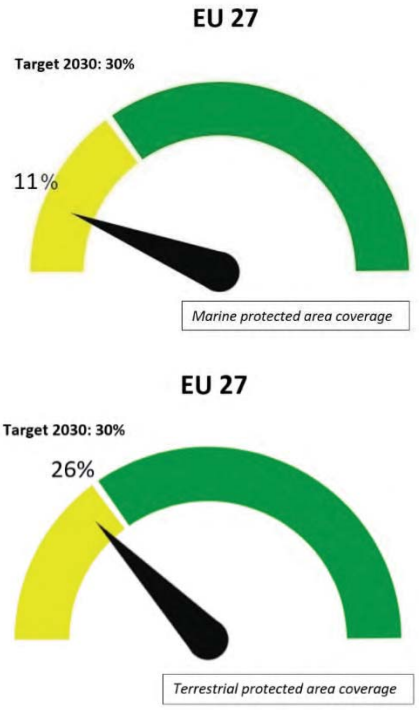
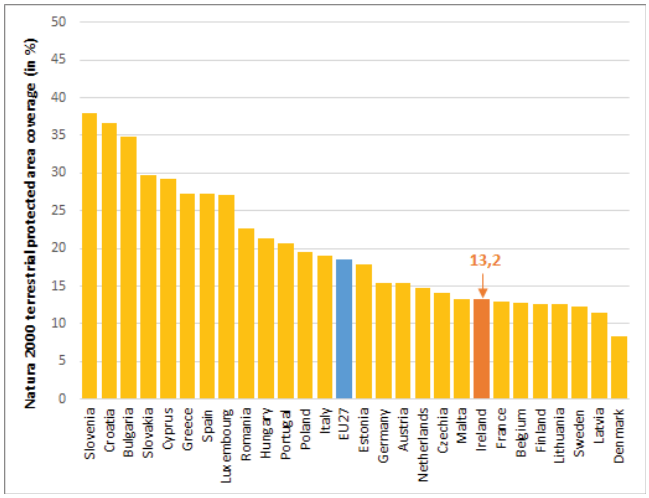


Figure 7: Natura 2000 terrestrial protected area coverage, 2021[29]



[28] EU Biodiversity Strategy Dashboard, indicators A1.1.1 and A1.2.1, February 2022.

[29] European Environment Agency (EEA), Natura 2000 Barometer, February 2022.

Designating SACs and setting conservation objectives and measures

The Commission has submitted a case against Ireland to the EU Court of Justice in 202130 for failing to complete the designation of SACs under the Habitats Directive and the establishment of the necessary conservation measures, based on clearly defined conservation objectives.

There are still concerns about the conservation of raised and blanket bogs SACs, which is still the subject of an infringement procedure. In recent years, Ireland has made significant progress by drawing up a national peatlands strategy and national raised-bog SAC management plan. . Moreover, there is a LIFE project that involves 12 raised-bog SACs and a LIFE Integrated Project for managing of 24 blanket-bog SACs in Ireland. In addition, a LIFE integrated project called 'Peatlands and People' is underway, which will significantly restore and rehabilitate peatlands in Ireland's midlands, bringing together best practices, as well as monitor and analyse carbon storage in the peatlands. However, restoration work has still to be completed on many of the raised-bog SACs and started on most blanket-bBog SACs[31]. Also, illegal turf cutting is still taking place in raised-bog SACs and Ireland has yet to make any progress in ensuring that turf cutting is carried out in these SACs in a way that is compatible with the conservation of this habitat. For designated blanket bog sites domestic turf cutting on any new banks may not be opened or commercial peat extraction may not be undertaken on these sites without the prior consent of the Minister or the relevant consent authorities. As part of those consenting processes the impact of the conservation objectives of the site should be assessed.

[30] Case C-444/21.

[31] In total, 52% (29 SACs) of the raised-bog SAC network have had restoration works undertaken, underway or preparatory works completed. In addition Ireland is restoring sites within its raised-bog natural heritage area which will help achieve Ireland's national conservation target for active raised bog.

Also, the agri-environmental EIP project FarmPeat funded by the Department of Agricullture, Food and the Marine is seeking to improve management of habitats on peat soils with a number of raised bog SACs included as project sites.

Furthermore, the LIFE IP Wild Atlantic Nature project: under the INTERREG VA programme, two blanket bog projects ('Collaborative Action for the Natura Network' and 'Cooperation across Borders for Biodiversity') are focused on protecting wetland habitats, including developing conservation action plans for several blanket-bog SACs, restoration works and other management measures. The NPWS is also involved in a public-private partnership blanket-bog SAC restoration project in one of its national parks, which will inform how restoration work will be done across a larger area covering approximately 20 000 hectares.

Ireland has significant conservation issues in SPAs and the wider landscape. One such issue is the dramatic decline of waders, particularly the curlew and dunlin, for which there have been declines of over 90 % of the breeding populations in recent decades. A curlew conservation programme began in 2017 and a LIFE project for machair, which will include actions for breeding Dunlin in 2022. However, to halt the decline of breeding waders, conservation action is needed at a landscape scale, including ongoing support for farmers to take the necessary measures as well as ensuring any forestry practices are fully compatible with protecting breeding waders and their habitats. There is also a continuing need to reconcile the protection of the hen harrier with forestry and wind-farm development[32].

Progress in maintaining or restoring favourable conservation status of species and habitats

To measure the performance of Member States, Article 17 of the Habitats Directive and Article 12 of the Birds Directive require reporting on the progress made towards maintaining or restoring the favourable conservation status of species and habitats.

According to the report submitted by Ireland on the conservation status of habitats and species covered by Article 17 of the Habitats Directive for 2013-2018, the share of assessments for habitats in good conservation status in 2018 was 15.25 %, more than the 8.62 % reported under the previous reporting period (2007-2012)[33]. As to species protected under the Habitats Directive, the share of assessments for these species in good conservation status in 2018 was 56.67 %, more than the 52.46 % reported under the previous reporting period (2007-2012).

At the same time, the share of habitats in bad conservation status decreased to 38.98% and the share of assessments for species in bad conservation status increased to 15%. The main pressures are agriculture, development construction and related infrastructure, invasive alien species, changes in water regimes, forestry, extraction of resources (for habitats), and, for species, extraction and cultivation of biological resources.

Figure 8: Assessments on conservation status for habitats for 2007-2012 and 2013-2018 reporting periods[34]

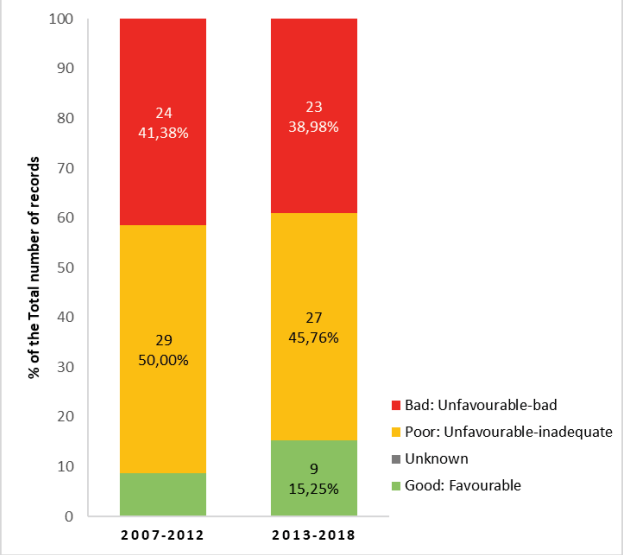
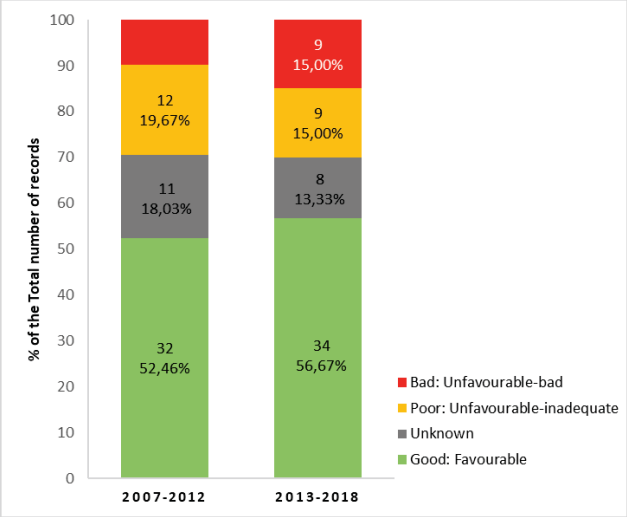


Figure 9: Assessments on conservation status for species for 2007-2012 and 2013-2018 reporting periods[35]



In conclusion, some improvements in the status of species and habitats have recently been reported in Ireland, where targeted actions have taken place.

[32] A Hen Harrier threat response plan is due for public consultation in 2022.

[33] Changes between reporting periods may be partially explained by improved knowledge or changes in assessment methodology.

[34] European Environment Agency, Conservation status and trends of habitats and species, December 2021. Note: when comparing the figures shown for 2007-2012 and 2013-2018 these may also be affected by changes of methods or by better data availability.

[35] idem.

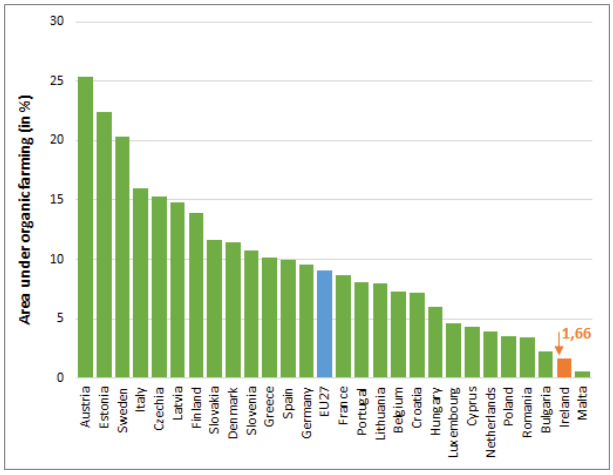
Bringing nature back to agricultural land and restoring soil ecosystems

Agricultural land

The biodiversity strategy works alongside the new farm to fork strategy and the new common agricultural policy (CAP) to support and achieve the transition to fully sustainable agriculture.
The biodiversity and farm to fork strategies have set four important targets for 2030:
- a 50% reduction in the overall use of – and risk from – chemical pesticides;
- a 50% reduction in the use of more hazardous pesticides;
- a 50% reduction in losses of nutrients from fertilisers while ensuring there is no deterioration of soil fertility (which will result in a 20% reduction in the use of fertilisers);
- bring back at least 10% of agricultural area under high-diversity landscape features and increase areas under organic farming to at least 25%.

Ireland, with an estimated 1.66 % of area under organic farming, is well below the EU average of 9.07 % (2020 data, Eurostat).

Figure 10: Share of total utilised agricultural area occupied by organic farming per Member State, 2020[36]



According to the Commission recommendations for Ireland's CAP strategic plan[37], Ireland's ammonia emissions from agriculture pose a significant risk. These make up 99% of the country's total ammonia emissions – the highest proportion in the EU – and have been climbing since 2011. Almost 36% of the total reported emissions of nitrogen oxides, almost 40% of the total reported emissions of non-methane volatile organic compounds and 8% of the total fine particulate matter emissions in Ireland, come from agricultural sources.

Ireland's soil shows generally positive characteristics There is no significant pressure from erosion by water, or from soil sealing.

Just 3.6 % of Ireland's agricultural area lies in Natura 2000 zones, compared with 11 % for the EU However in any case, similar problems related to farmland habitats are observed more generally, even though the monitoring of flora and fauna outside Natura 2000 zones needs to be improved..

Key pressures on grasslands and heathlands include land use intensification – or, in some areas, abandonment – as well as inappropriate mowing practices and harmful burning of vegetation. Peatlands are under threat, which has a negative influence on biodiversity.

Uptake of organic farming is very low in Ireland, covering 1.6 % of utilised agricultural areas in 2020.

Soil ecosystem

Soil is a finite and extremely fragile resource. It is increasingly degrading in the EU.
The new EU soil strategy, adopted on 17 November 2021, stresses the importance of soil protection, of sustainable soil management and of restoring degraded soils to achieve the Green Deal objectives as well as land-degradation neutrality by 2030.
This entails:
(i) preventing further soil degradation;
(ii) making sustainable soil management the new normal;
(iii) taking action for ecosystem restoration

One factor in the degradation of soil ecosystems is the area of soil that is sealed or artificialised[38]. In Ireland (Figure 12) the land taken (i.e. land that is sealed or artificialised) per year in 2012-2018 can be seen as a measure of one significant pressure on nature and biodiversity – land-use change. At the same time, land-use change constitues an environmental pressure on people living in urbanised areas.

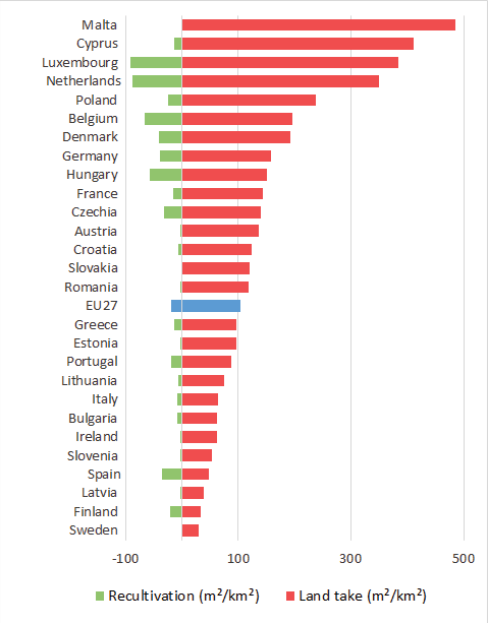
Ireland ranks below the EU average with net land take of 58.9 m^2/km^2 (EU-27 average: 83.8 m^2/km^2).

[36] https://ec.europa.eu/eurostat/databrowser/view/sdg_02_40/default/table?lang=en (Eurostat, Area under organic farming, February 2022).
[37] EUR-Lex - 52020SC0377 - EN - EUR-Lex (europa.eu).

[38] Artificial land cover is defined as the total of roofed built-up areas (including buildings and greenhouses), artificial non-built-up areas (including sealed area features, such as yards, farmyards, cemeteries, car parking areas etc. and linear features, such as streets, roads, railways, runways, bridges) and other artificial areas (including bridges and viaducts, mobile homes, solar panels, power plants, electrical substations, pipelines, water sewage plants, and open dump sites).

In 2018, Ireland updated its reporting on land degradation according to the latestPRAIS3 reporting platform[39] with actions intended to deal with the degradation identified.

Figure 11: Land take and re-cultivation in the EU-27 (m2/km2), 2012-2018[40]



However, Ireland has not yet committed to setting Land degradation neutrality targets under the UN Convention to Combat Desertification (UNCCD)[41].

As already stated in the 2019 EIR, soil organic matter plays an important role in the carbon cycle and in climate change. Soils are the second largest carbon sink in the world after the oceans.

Forests and timber

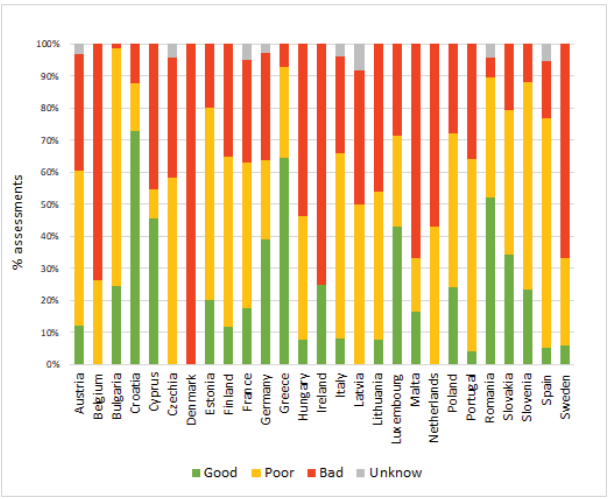
The EU forest strategy for 2030, adopted in July 2021, is part of the 'Fit for 55' package. The strategy promotes the many services that forests provide. Its key objective is to ensure healthy, diverse and resilient EU forests that contribute significantly to the strengthened biodiversity and climate ambitions.
Forests are important carbon sinks and conserving them is vital if the EU is to achieve climate neutrality by 2050.

Out of the 27 % of EU forest area protected under the Habitats Directive, less than 15% of assessments show a favorable conservation status[42]. Bad conservation status increased from 27% to 31% in the EU compared to 2015.

In Ireland, forests cover 10.51 % of territory[43] and the situation for woodland habitats protected under the Habitats Directive is particularly worrying as more than half of the protected forests assessed show a bad status[44].

Afforestation in Ireland is not well covered by the EIA process. Very few, if any, EIAs have been carried out.

Figure 12: Conservation status of forests protected under the Habitats Directive in EU Member States, 2013-2018 (% assessments)[45]



The European Union Timber Regulation (EUTR)[46] prohibits the placing on the EU market of illegally harvested timber. According to the EUTR, EU Member States' competent authorities must conduct regular checks on operators and traders, and apply penalties for non-compliance. With the amendment of Article 20 of the EUTR, reporting every 2 years has been changed to become annual reporting, and covers the calendar year as of 2019.

In the period from March 2017 to February 2019[47], Ireland carried out 8 checks on domestic timber operators. It also carried out 42 checks on operators importing timber. Over the reporting period, it is estimated that Ireland had 2 169 operators placing imported timber types onto the internal market.

[39] All Reports | Prais3 (unccd.int)
[40] European Environment Agency, Land take in Europe, December 2021.
[41] The LDN Target Setting Programme | UNCCD
[42] EEA, State of Nature in the EU
[43] EEA, Forest information system for Europe.
[44] COM SWD (2021) 652.
[45] European Environment Agency, Conservation status and trend in conservation status by habitat group - forests, January 2022.
[46] Regulation (EU) No 995/2010 of the European Parliament and of the Council of 20 October 2010.
[47] COM/2020/629 final.

On 17 November 2021, a proposal for the Regulation on prohibiting products associated with deforestation and forest degradation from being placed on the EU market and from being exported (Deforestation Regulation) was adopted. adopted. This followeda request from the Council in 2019 to table a legislative proposal to address this problem and a European Parliament resolution recommending the Commission to come forward with an EU legal framework to halt and reverse EU-driven global deforestation.

This new Regulation will repeal and replace the EU Timber Regulation, as it will essentially integrate and improve the existing system to check the leality of timber.

Invasive alien species (IAS)

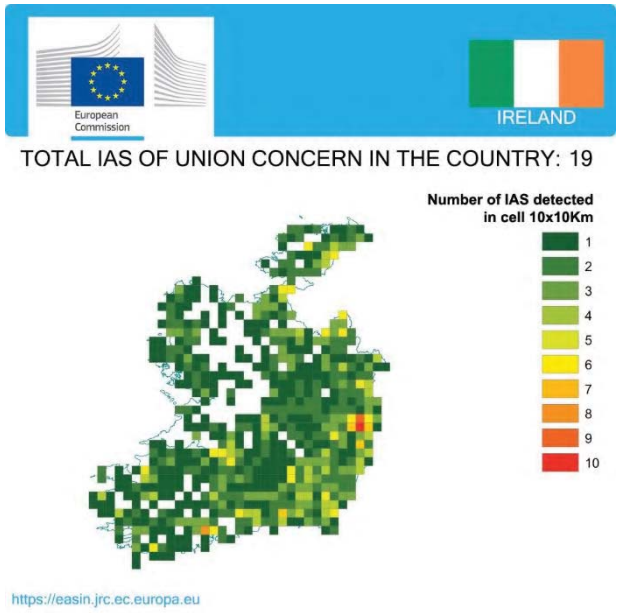
IAS are a key cause of biodiversity loss in the EU (alongside changes in land and sea use, overexploitation, climate change and pollution).
Besides inflicting major damage on nature and the economy, many IAS also facilitate the outbreak and spread of infectious diseases, posing a threat to humans and wildlife.
The implementation of the EU Invasive Alien Species Regulation and other relevant legislation must be stepped up.
The biodiversity strategy for 2030 aims to manage recognised invasive alien species and decrease the number of 'red list' species they threaten by 50%.

The core of the Regulation on Invasive Alien Species[48] (the IAS Regulation) is 'the list of IAS of Union concern'.

The total number of IAS of Union concern is currently 66, of which: 30 are animal species, 36 are plant species; 41 are primarily terrestrial species, 23 are primarily freshwater species, 1 is a brackish-water species and 1 is a marine species.

A 2021 report[49] on the baseline distribution shows that of the 66 species on the Union list, 22 have been observed in the environment in Ireland. The spread can be checked in Figure 13. Of these species, 13 have been recorded but are not known to be established.

Figure 13: Number of IAS of EU concern, based on available georeferenced information for Ireland, 2021



An infringement case is ongoing as Ireland failed to draw up and implement one single action plan or a set of action plans fulfilling the requirements specified in Article 13 of of the IAS Regulation by 13 July 2019 and to notify it/them to the Commission without delay.

2022 priority actions

- Address serious delays and deficiencies in Ireland's marine Natura 2000 network through 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 they may meet their 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-bBog SACs and to ensure that any turf cutting on blanket-bog SACs is fully compatible with their protection in Natura 2000.
- Take practical steps to address the serious decline of waders, and further develop the conservation programme for the curlew, both in Natura 2000 sites and the wider countryside.
- Step up action on implementing the recommendations set out in the Irish CAP Strategic Plan.
- Step up implementation action on the EU Invasive Alien Species Regulation.

[48] Regulation (EU) No 1143/2014 of the European Parliament and of the Council of 22 October 2014 on the prevention and management of the introduction and spread of invasive alien species.
[49] Cardoso A.C., Tsiamis K., Deriu I., D' Amico F., Gervasini E., EU Regulation 1143/2014: assessment of invasive alien species of Union concern distribution, Member States reports vs JRC baselines, EUR 30689 EN, Publications Office of the European Union, Luxembourg, 2021, ISBN 978-92-76-37420-6, doi:10.2760/11150, JRC123170;

Marine ecosystems

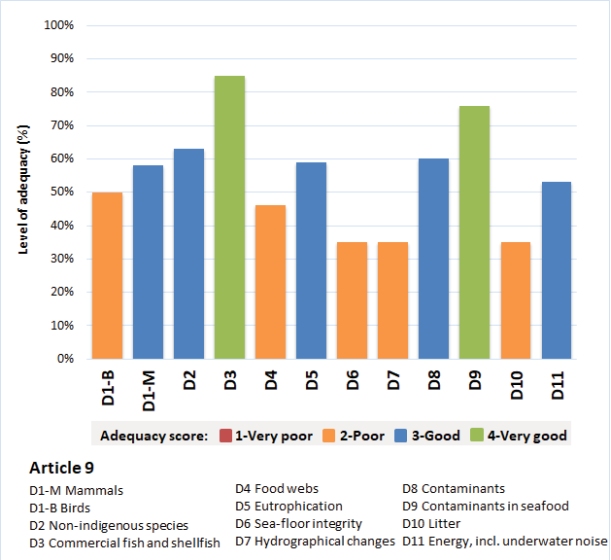
The EU Biodiversity Strategy for 2030 aims to substantially reduce the negative impacts on sensitive species and habitats in marine ecosystems and to achieve good environmental status as well as eliminate or reduce the incidental catches of protected, endangered, threatened and sensitive species to a level that allows species recovery and conservation[1].

The Marine Strategy Framework Directive (MSFD)[50] requires Member States to achieve good environmental status (GES) for their marine waters. To that end, Member States must draw up marine strategies for their marine waters, and cooperate with Member States sharing the same marine region or subregion. These marine strategies comprise different steps to be developed and implemented over six-year cycles.

Among other obligations, the MSFD requires Member States by 15 October 2018 to draw up a set of GES characteristics for each descriptor (Article 9), and to provide an initial assessment of their marine waters (Article 8). The Commission then assesses whether this constitutes an appropriate framework to meet the requirements of the Directive.

The Commission assessed Ireland's 2018 determinations of GES for each of the MSFD's 11 descriptors[51] and determined their level of adequacy in relation to the Commission GES Decision[52]. A good or very good score in the Commission assessment indicates that the national determinations of GES are well aligned with the requirements of the Commission GES Decision, and provide qualitative and quantitative national environmental objectives to be achieved for their marine waters.

Figure 14: Level of adequacy of GES determination by Ireland (ACS region) with criteria set under the Commission GES Decision Decision – Article 9 (2018 reporting exercise)[53]



Ireland has one marine sub-region: ACS-NE Atlantic: Celtic Seas. In this marine sub-region, 7 out of 11 determinations of GES were assessed as good or very good. The national determination of GES by Ireland is coherent for 7 out of 11 descriptors.

The MSFD also requires Member States to assessthe current environmental status of their marine waters in relation to the determination of GES. A good or very good score indicates that the Member State has good capabilities to assess their marine environment in accordance with the requirements set out in the Commission GES Decision.

[1] The EU Common Fisheries Policy (CFP) aims to contribute to the achievement of the objectives of the environmental legislation for marine ecosystems.

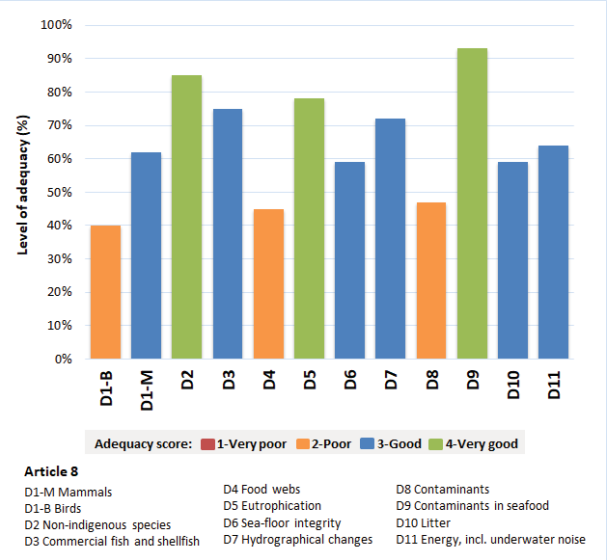
[50] Directive 2008/56/EC establishing a framework for community action in the field of marine environmental policy.

[51] Annex I of Directive 2008/56/EC establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive), OJ L 164, 25.6.2008, p. 19–40.

[52] This assessment was made in relation to the Commission GES Decision, Commission Decision No 2017/848, pp. 43-74.

[53] Assessment carried out by the European Commission of the data reported by the Member States in, January 2022. Note that only two sub-sections of descriptor D1 are displayed (D1-M Mammals and D1-B Birds). For the analysis, these two sub-sections were considered as a whole after averaging them.

Figure15: Level of adequacy of national assessment of Ireland's marine environment (ACS region) with criteria set under the Commission GES Decision – Article 8 (2018 reporting exercise)[54]



A total of 9 descriptors out of 11 were scored as good or very good. Ireland's assessment of its marine environment is coherent with requirements set under the Commission GES Decision for 9 out of 11 descriptors.

As highlighted in the Commission's report on the implementation of the MSFD[55], while regional cooperation has improved since the MSFD was adopted, more cooperation is needed to attain regional alignment of the marine strategies, as required by the Directive.

The 2019 EIR noted that 77 % of Ireland's measures were deemed appropriate, with 23 % partially appropriate, and none labelled as insufficient. Nonetheless, the Commission suggested that Ireland should: (i) set the timelines for achieving GES, (ii) provide more information about measures, (iii) decide on whether more measures that directly affect the pressures on marine and coastal habitat are needed, and (iv) quantify the expected level of reduction in the pressure thanks to these measures. In addition, it should ensure regional cooperation with Member States sharing the same marine (sub)region to address the main sources of pressure, as well as ensure the different items under the MSFD are reported by the set deadline. Ireland made some progress on the above actions[56]. However, the levels measured above (see figures 14 and 15) suggest that further actions are needed to achieve GES in those descriptors ranked as poor.

Furthermore, in March 2022, the European Commission published a Communication with recommendations for Member States. The Commission assessment highlights that Member States need to step up their efforts to determine the good environmental status and the use of the criteria and methodological standards according to the Commission GES Decision. The above considerations form the basis for the 2022 priority actions.

2022 priority actions

- Implement the recommendations made by the Commission[57] in the staff working document accompanying the Communication[58] on recommendations for each Member State and region on the 2018 updated reports for Articles 8, 9 and 10 of the MSFD.
- Ensure regional cooperation with Member States sharing the same marine (sub) region to address predominant pressures.

Ecosystem assessment and accounting

The EU biodiversity strategy for 2030 calls on Member States to better integrate biodiversity considerations into public and business decision making at all levels and to develop natural capital accounting. The EU needs a better performing biodiversity observation network and more consistent reporting on the condition of ecosystems.

An ecosystem assessment is an analysis of the pressures on – and the condition of – terrestrial, freshwater and marine ecosystems and their services. It uses spatially explicit data and a comparable methodology based on European data about the functions of ecosystem assets and the ecosystem services they produce.

Ecosystem accounting is built on five core accounts (ecosystem extent, ecosystem condition, physical ecosystem services, monetary ecosystem services and

[54] Assessment carried out by the European Commission of the data reported by the Member States, January 2022. Note that only two sub-sections of descriptor D1 are displayed (D1-M Mammals and D1-B Birds). For the analysis, these two sub-sections were considered as a whole after averaging them.

[55] COM(2020)259.

[56] Ireland is currently drafting stand-alone legislation to enable marine protected areas to be identified, designated and managed in line with Ireland's national and international commitments. Information on the development of Ireland's marine protected area network can be found here.

[57] SWD(2022)1392.

[58] COM(2022)550.

monetary ecosystem assets). These accounts are compiled using indicators of ecosystem assets and the ecosystem services they produce.

In 2015, the National Parks and Wildlife Service of the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs commissioned consultants to carry out a short pilot to map and assess an initial suite of prioritised ecosystem services. The project developed spatial indicators for mapping potential ecosystem services, based on available national data, using methodologies developed in the UK and the EU. In the course of this work, it reviewed the availability and suitability of spatial data, identified data and knowledge gaps to inform future research calls. The project was completed in late 2016. More information is available on the NPWS website[59] and the interactive mapping[60].

The Irish Forum on Natural Capital (IFNC), established in 2015, continues to grow from strength to strength, providing a range of seminars and training workshops, aimed at developing and applying the agenda for natural capital in Ireland.

The national biodiversity action plan (2017-2021) included a number of activities related to ecosystem services and accounting, as does the biodiversity climate change sectoral adaptation plan.

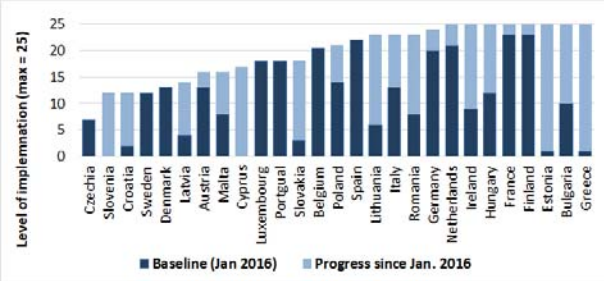
The recently established Environment Statistics Accounts Division[61] of Ireland's Central Statistics Office have begun a number of pilot projects in collaboration with other government authorities looking at forestry accounts and catchment level statistics.

At regional level, Dublin and adjacent administrations participated in the EnRoute project (2017-2019). In line with the project's overarching objectives, the Irish project aims to promote urban ecosystem services and develop green infrastructure.

Ireland's EPA has a statutory role in coordinating environmental research. Natural capital and ecosystem services including soils and biodiversity were themes included under its sustainability research pillar for 2014 to 2020 (more info[62]). Irish Natural Capital Accounting for Sustainable Environments (INCASE)[63] is an EPA-funded research project. It kicked off in March 2019 and will run until 2023. INCASE is the first Irish project to develop natural capital accounts for different sites in Ireland.

Ireland has provided updated information and significant progress has been recorded since January 2016 (Figure 16). This assessment is based on 27 implementation questions and is updated every 6 months.

Figure 16: ESMERALDA MAES Barometer, January 2016 - March 2021[64]



2022 priority action

- Continue supporting the mapping and assessment of ecosystems and their services, and ecosystem accounting development, 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.

[59] Ecosystems Services, Mapping and Assessment | National Parks & Wildlife Service (npws.ie).
[60] National Ecosystem and Ecosystem Services Mapping Pilot (arcgis.com)
[61] Home - CSO - Central Statistics Office.
[62] MAES (europa.eu).
[63] https://www.incaseproject.com/about.

[64] European Commission, Joint Research Centre, Publication Office, EU. Ecosystem assessment: summary for policymakers, page 80, May 2021.

3. Zero pollution

Clean air

EU clean air policies and legislation need to significantly improve air quality in the EU, moving the EU closer to the quality recommended by the WHO and curbing emissions of key air pollutants.
Air pollution and its impacts on ecosystems and biodiversity should be further reduced with the long-term aim of not exceeding critical loads and levels. This requires strengthening efforts to reach full compliance with EU clean-air legislation and defining strategic targets and actions for 2030 and beyond.
The 2030 zero-pollution action-plan targets are to reduce the health impacts of air pollution by 55% and to reduce the EU ecosystems threatened by air pollution by 25%, compared to 2005.

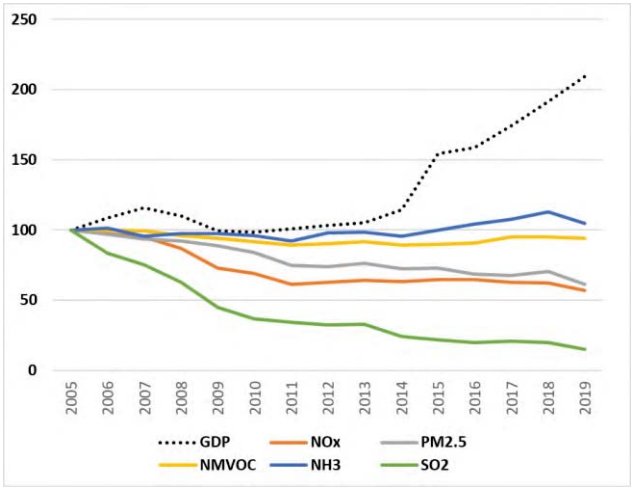
The EU has developed a comprehensive suite of air quality legislation, which sets health-based air- quality standards[65] and emission-reduction commitments[66] by Member State for a number of air pollutants.

Air quality in Ireland is generally good with exceptions.The latest available annual estimates (for 2019) from the European Environment Agency (EEA)[67] point to about 1 300 premature deaths (or 15 800 years of life lost (YLL)) attributable to fine particulate matter concentrations[68], 50 (600 YLL) to ozone concentration[69] and 30 (400 YLL) to nitrogen dioxide concentrations[70] [71].

The emissions of several air pollutants have decreased significantly in Ireland in recent years, while GDP growth continued (see graph). According to the latest projections as submitted under Article 10(2) of the National Emission Reduction Commitments Directive (NECD)[72] Ireland projects to reach emission reduction commitments for SO_2, NO_x and $PM_{2.5}$ for 2020-2029 and for most pollutants from 2030 onwards. However, the projections do not demonstrate that 2020-2029 emission-reduction commitments for non-methane volatile organic compounds (NMVOC) and NH_3, or the emission-reduction commitment for NMVOC from 2030 onwards, will be reached. The latest inventory data submitted by Ireland, prior to review by the Commission, indicate that in 2020, Ireland complied with the emission reduction commitments for NO_x, NMVOC, SO_2 and $PM_{2.5}$, and did not comply with the emission reduction commitment for NH_3. Particularly problematic are rising emissions from cattle, a sector where Ireland has seen significant expanosion over recent years.

Ireland has submitted its national air pollution control programme (NAPCP) on 13 February 2021.

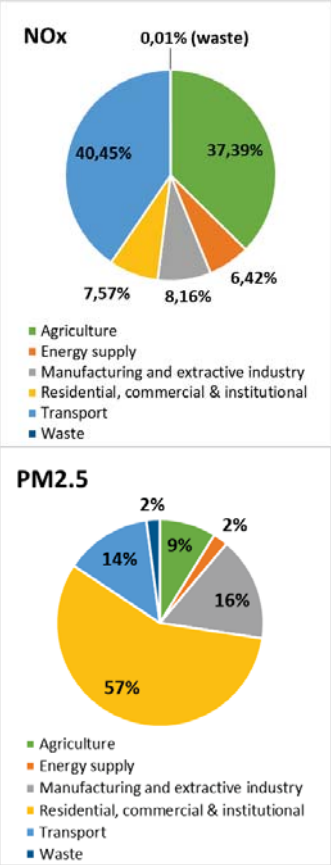
Figure 17: Emission trends of main pollutants/ GDP in Ireland, 2005-2019[73]



[65] European Commission, 2016. Air Quality Standards..
[66] European Commission, Reduction of National Emissions.
[67] European Environment Agency, Air Quality in Europe –2021 Rapport. Please see details in this report as regards the underpinning methodology, p.106.
[68] Particulate matter (PM) is a mixture of aerosol particles (solid and liquid) covering a wide range of sizes and chemical compositions. PM10 (PM2.5) refers to particles with a diameter of 10 (2.5) micrometres or less. PM is emitted from many human sources, including combustion.
[69] Low-level ozone is produced by photochemical action on pollution.
[70] NOx is emitted during fuel combustion e.g. from industrial facilities and the road transport sector. NOx is a group of gases comprising nitrogen monoxide (NO) and nitrogen dioxide (NO2).
[71] Please note that these figures refer to the impacts of individual pollutants, and to avoid double-counting cannot be added up to derive a sum.
[72] Directive 2016/2284/EU

[73] European Environment Agency.

Figure 18: PM2.5 and NOx emissions by sector in Ireland, 2019[74]



In 2020, no exceedances above the limit values set by the Ambient Air Quality Directive were registered[75].

Ireland has not yet ratified the amended Gothenburg Protocol under the United Nations Economic Commission for Europe (UNECE) Air Convention.

In the 2019 EIR, Ireland received four priority actions. The first was related to carrying out specific actions under the national air pollution control programme (NAPCP). Only limited progress has been made so far on this action, so it has been included again. The other three addressed reductions of nitrogen oxide, ammonia and volatile organic compounds emission. On these actions also, only little progress has been made, as there have only been small reductions. Ireland also received a general priority action in 2019 on signing and ratifying outstanding international agreements.

2022 priority actions

- As part of the NAPCP take actions towards reducing emissions from the main sources mentioned above.
- Ensure full compliance with EU air quality standards and maintain downward 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 UNECE Air Convention.

Industrial emissions

The main objectives of EU policy on industrial emissions are to:
(i) protect air, water and soil;
(ii) prevent and manage waste;
(iii) improve energy and resource efficiency;
(iv) clean up contaminated sites.
To achieve this, the EU takes an integrated approach to the prevention and control of routine and accidental industrial emissions. The cornerstone of the policy is the Industrial Emissions Directive[76] (IED). The Commission tabled a proposal in April 2022[77]. The revision seeks to improve the Directive's contribution to the zero-pollution objective, as well as its consistency with climate, energy and circular-economy policies.

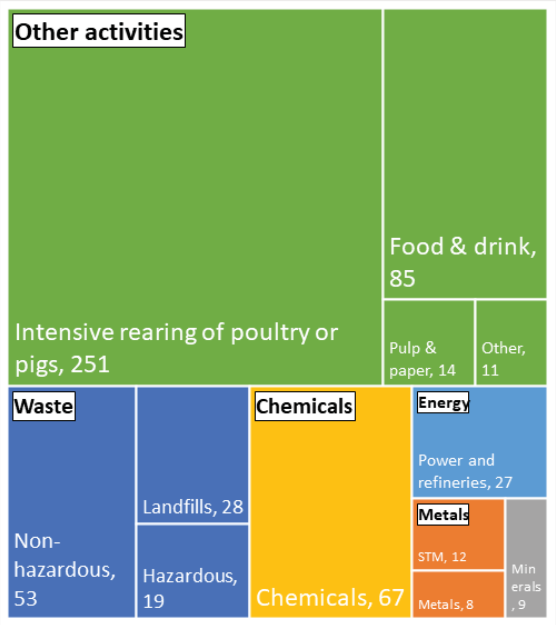
The overview of industrial activities regulated by the IED below is based on data reported to the EU Registry (2018)[78].

In Ireland, around 580 industrial installations are required to have a permit based on the IED. This is an increase of over 100 installations since 2015, mainly in the waste management sector and in the intensive rearing of poultry or pigs. The distribution of installations is shown in the Figure below.

Industrial sectors in Ireland with the most IED installations in 2018 were intensive rearing of poultry and pigs (43%), followed by the waste management sector, including landfills (17%), food and drink industries (15%) and the chemicals sector (12%).

[74] idem.
[75] European Environment Agency, Eionet Central Data Repository
[76] Directive 2010/75/EU covers industrial activities carried out above certain thresholds. It covers the energy industry, metal production, the mineral and chemical industry, waste management, and a wide range of industrial and agricultural sectors (e.g. intensive rearing of pigs and poultry, pulp and paper production, painting and cleaning).
[77] European Commission, proposal for a revision of the Industrial Emissions Directive, 4 April 2022. The revision of the IED is performed in parallel to the revision of Regulation (EC) No 166/2006 on the European Pollutant Release and Transfer Register (E-PRTR).
[78] EEA, European Industrial Emissions Portal.

Figure 19: Number of IED industrial installations per sector in Ireland, 2018[79]

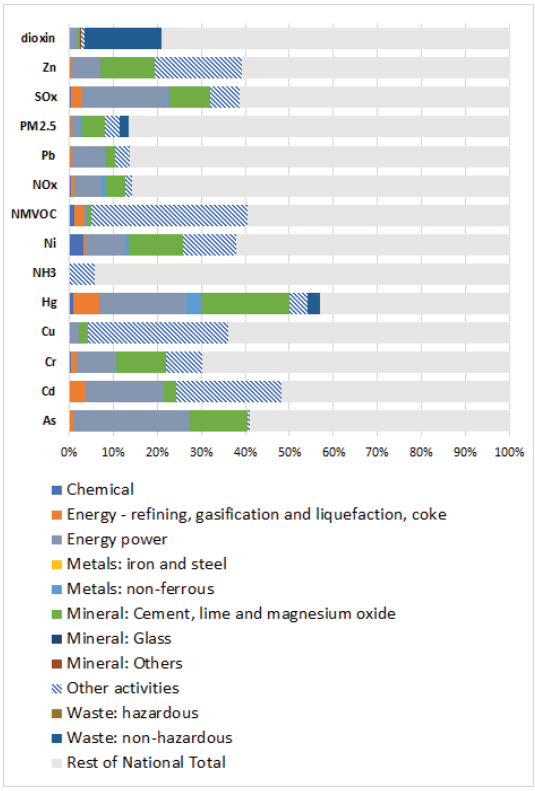


The industrial sectors identified as contributing the largest burden to the environment for emissions to air were:

- the power sector for sulfur oxides (SOx), nitrogen oxides (NOx), arsenic (As), mercury (Hg) and lead (Pb);
- the mineral sector for chromium (Cr), mercury (Hg), nickel (Ni) and particulate matter ($PM_{2.5}$);
- food and drink industries for NMVOCs;
- intensive rearing of poultry and pigs for ammonia (NH_3);
- stationary combustion in manufacturing industries for nickel (Ni);
- 'other solvent use' for cadmium (Cd), copper (Cu) and zinc (Zn); and
- waste management for dioxins.

The breakdown is shown in Figure 20.

Figure 20: Emissions to air from IED sectors and rest of national total air emissions in Ireland, 2018[80]



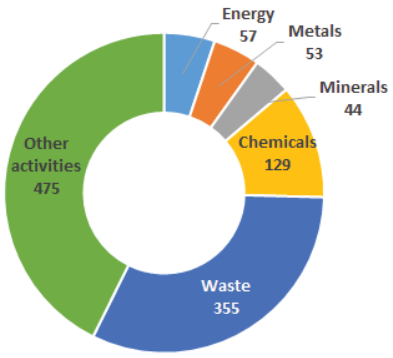
The environmental burdens for industrial emissions to water, excluding emissions from wastewater treatment, mainly result from the production of chemicals for total phosphorous and from the chemical and extractive sectors in case of heavy metals (based on E-PRTR data).

The EU approach taken to enforcement under the IED creates strong rights for citizens to have access to relevant information and to participate in the permitting process. This empowers citizens, and NGOs, to ensure that permits are appropriately granted and the conditions of these permits are complied with. As part of environmental inspections, competent authorities undertake site visits to IED installations to take samples and to gather necessary information. According to Article 23(4) of the IED, site visits must be carried out between once a year and once every 3 years, depending on the environmental risks posed by the installations. In 2018, Ireland undertook 1 113 site visits, most of which were to installations in the waste management sector (32%), followed by the food and drinks industries (28%), the chemicals sector (11%) and the intensive rearing of poultry or pigs (9%).

[79] European Environment Agency, EU Registry, European Industrial Emissions Portal (data retrieved on 3 November 2021).

[80] European Environment Agency, LRTAP, Air pollutant emissions data viewer (Gothenburg Protocol, LRTAP Convention) 1990-2019 (data retrieved on 3 November 2021).

Figure 21: Number of inspections in IED installations in Ireland in 2018[81]



The development of best available techniques (BAT) reference documents (BREFs) and BAT conclusions[82] ensures good collaboration between stakeholders and enables better implementation of the IED. Since the last EIR, the Commission adopted BAT conclusions for Ireland for: (i) waste incineration; (ii) the food, drink and milk industries; and (iii) for surface treatment using organic solvents including the preservation of wood and wood products with chemicals.

The Commission relies on the efforts of national competent authorities to implement the legally binding BAT conclusions and associated BAT emission levels in environmental permits. This should result in considerable and continuous reductions in pollution.

In 2019, Ireland received priority actions to review (i) permits in order to comply with newly adopted BAT conclusions and (ii) to strengthen control and enforcement to ensure compliance with BAT conclusions. The Commission has followed up on these actions through Ireland'sreporting to the EU Registry. The Commission is currently verifying with Ireland the reported information about the permits granted for each installation within the scope of the IED. Ireland also received the priority action to address air pollution from the power sector (use of higly polluting peat for power generation). Action has been taken on this front with Ireland having closed two of its peat burning power plants (the Shannonbridge and Lanesboro plants) in 2020 with the last plant (Edenderry) due to stop burning peat in 2023. The BAT conclusions for large combustion plants needed to be addressed by August 2021.

Ireland also has some issues related to the transposition of the IED, which the subject to an infringement case.

[81] European Environment Agency, EU Registry, European Industrial Emissions Portal (data retrieved on 3 November 2021).
[82] BAT reference documents | Eippcb (europa.eu).

2022 priority action

- Continue addressing air pollution from the energy sector.

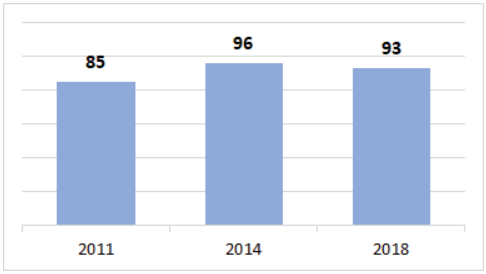
Major industrial accidents prevention – SEVESO

The main objectives of EU policy on the prevention of major industrial accidents are to:
(i) control major accident hazards involving dangerous substances, especially chemicals;
(ii) limit the consequences of such accidents for human health and the environment;
(iii) continuously improve prevention, preparedness and response to major accidents.
The cornerstone of the policy is Directive 2012/18/EU (the Seveso-III Directive[83]).

The below overview of industrial plants regulated by Seveso-III Directive, ('Seveso establishments'), is based on data reported to the eSPIRS database (2018)[84] and Ireland's report on the implementation of the Seveso-III Directive for 2015-2018[85].

In Ireland, of the 93 Seveso establishments, 44 are categorised as lower-tier establishments (LTEs) and 49 as upper-tier establishments (UTEs) – based on the quantity of hazardous substances likely to be present in them. The UTEs are subject to more stringent requirements. The change in the number of Seveso establishments is presented in Figure 22.

Figure 22: Number of Seveso establishments in Ireland, 2011, 2014 and 2018[86]

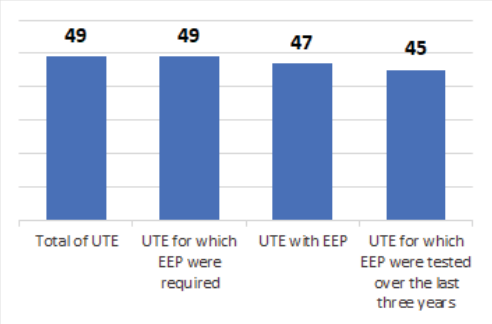


Many Seveso establishments are required to draw up external emergency plans (EEPs). These EEPs are essential to allow proper preparation and effective implementation of the necessary actions to protect the

[83] Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances
[84] European Commission, Seveso Plants Information Retrieval System.
[85] As provided for by Article 21(2) of the Seveso-III Directive
[86] European Commission, Assessment and summary of Member States' implementation reports for Implementing Decision 2014/896/EU (implementing Directive 2012/18/EU on the control of major accident hazards involving dangerous substances), 2022.

environment and the population should a major industrial accident occur at them. According to Ireland, the EEP is required for 49 UTEs. In 2018, 47 UTEs had an EEP and 45 of these EEPs have been tested over the last 3 years. The summary of EEPs in Ireland is shown in Figure 23. Drawing up EEPs is essential to allow for the necessary actions to be prepared properly and implemented effectively to protect the environment and the population should a major industrial accident ever happen.

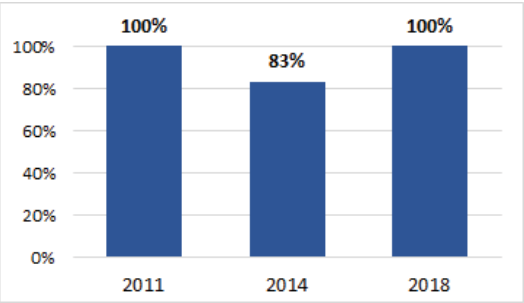
Figure 23: Situation regarding EEP in Ireland, 2018[87]



The following types of information are permanently available for 100% of the Seveso establishments in Ireland: (i) information to the public referred to in Annex V of the Seveso-III Directive, especially about how the public concerned will be warned if there is a major accident; (ii) information about appropriate behaviour if a major accident occurs; and (iii) the date of the last site visit.

The share of UTEs for which information on safety measures and requisite behaviours were actively made available to the public in recent years are presented in Figure 24.

Figure 24: Share of UTE for which information on safety measures and requisite behaviours were actively made available to the public in Ireland, 2011, 2014 and 2018[88]



[87] idem.
[88] idem.

Ireland has some issues with the transposition of the Seveso III Directive which are subject to an infringement case.

2022 priority actions

- Strengthen control and enforcement to ensure compliance with Seveso-III Directive provisions, especially on EEPs.
- Sign and ratify the TEIA convention

Noise

The Environmental Noise Directive[89] provides for a common approach to avoid, prevent and reduce the harmful effects of exposure to environmental noise, although it does not set noise limits as such. The main instruments it uses in this respect are strategic noise mapping and planning. A relevant 2030 zero pollution action plan target is a reduction by 30% of the share of people chronically disturbed by transport noise compared to 2017.

Excessive noise from aircraft, railways and roads is one of the main causes of environmental health-related issues in the EU. It can cause ischemic heart disease, stroke, interrupted sleep, cognitive impairment and stress[90].

In Ireland, based on a limited set of data[91], environmental noise is estimated to cause at least around 50 premature deaths and 200 cases of ischaemic heart disease annually[92]. Moreover, some 30 000 people suffer from disturbed sleep. In Irelthe proportion of people exposed to noise reduced by 15 % between 2012 and 2017. On the basis of the latest full set of information that has been analysed, the noise mapping of agglomerations, roads and railways is complete .

Water quality and management

EU legislation and policy requires that the impact of pressures on transitional, coastal and fresh waters (including surface and ground waters) be significantly reduced. Achieving, maintaining or enhancing a good

[89] Directive 2002/49/EC
[90] WHO 2018, Environmental Noise Guidelines for the European Region
[91] For further information: European Environment Agency, Noise Fact Sheets 2017.
[92] These figures are an estimation by the European Environmental Agency based on : **(i)** the data reported by Member States on noise exposure covered by Directive 2002/49/EC; **(ii)** ETC/ATNI, 2021, Noise indicators under the Environmental Noise Directive 2021: Methodology for estimating missing data, ETC/ATNI Report No 2021/06, European Topic Centre on Air Pollution, Transport, Noise and Industrial Pollution; **(iii)** the methodology for health impact calculations, ETC/ACM, 2018, Implications of environmental noise on health and wellbeing in Europe, Eionet Report ETC/ACM No 2018/10, European Topic Centre on Air Pollution and Climate Change Mitigation.

status of water bodies as defined by the Water Framework Directive will ensure that EU citizens benefit from good quality and safe drinking and bathing water. It will further ensure that the nutrient cycle (nitrogen and phosphorus) is managed in a more sustainable and resource-efficient way.

Water Framework Directive

The Water Framework Directive (WFD)[93] is the cornerstone of EU water policy in the 21st century[94]. The WFD and other water-related directives[95] set the framework for sustainable and integrated water management, which aims at a high level of protection of water resources, prevention of further deterioration and restoration to good status.

By March 2022, Member States had to report on the third round of river basin management plans (RBMPs). Under the WFD, Member States must draw up management plans for all river basins on their territory. Ireland has not yet reported on it. The Commission will assess the reported status of river basins and the progress made, checking how the findings identified in the Commission's assessment of the second round of RBMPs[96] have been addressed. Ireland has yet to report on the third round of RBMPs.

The Commission published in December 2021 the 6th Implementation Report, which assesses implementation of the WFD and the Floods Directive[97]. This report includes an interim assessment of: (i) the implementation of the programmes of measures; and (ii) the new priority substances. The assessment report for Ireland[98]showed that it was difficult to assess the extent to which the measures included in the Programme of Measures are reaching the WFD's objectives given the short time frame since the second RBMPs were adopted. A total of 25 key type measures have been drawn up to target 41 significant pressures or chemical substances across Ireland's three river basin districts.

[93] The Water Framework Directive (2000/60/EC).

[94] The EU Water Policy.

[95] This includes the Groundwater Directive (2006/118/EC), the Environmental Quality Standards Directive (2008/105/EC), the Floods Directive (2007/60/EC), the Bathing Water Directive (2006/7/EC), the Urban Waste Water Treatment Directive (91/271/EEC), the new Drinking Water Directive (2020/2184/EC), the Nitrates Directive (91/676/EEC), the Marine Strategy Framework Directive (2008/56/EC) and the Industrial Emissions Directive (2010/75/EU).

[96] Detailed information can be found in the 5th Report from the Commission on the implementation of the Water Framework Directive and the Floods Directive, as well as in the 2019 EIR.

[97] See the 6th Implementation Report of the WFD and FD.

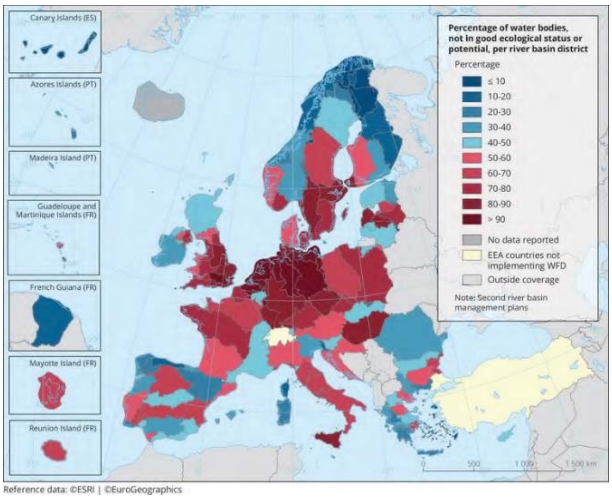
[98] European Commission, Directorate-General for Environment, Assessment of Member States' progress in Programmes of Measures during the second planning cycle of the Water Framework Directive. Member State: Ireland, 2022.

The Irish administration was restructured to improve coordination between authorities at local, regional and national levels for the 2nd RBMP, and to ensure engagement with people at local level for solutions at catchment level.

Based on the reporting and data obtained from the second round of RBMPs, published in 2020[99], in Ireland, 45.4% of all surface water bodies[100] achieved a good ecological status (with 24.7% having unknown status 24.7%), while only 6.9% achieved a good chemical status (with 91.9% having unknown status). For groundwaters, 8.6% failed to achieve good chemical status while 0.2% failed to achieve good quantitative status.

Ffigure 25 illustrates the proportion of surface water bodies in Ireland and other European countries that failed to achieve good ecological status.

Figure 25: Proportion of surface water bodies (rivers, lakes, transitional waters and coastal waters) in less than good ecological status per rRiver basin district[101]



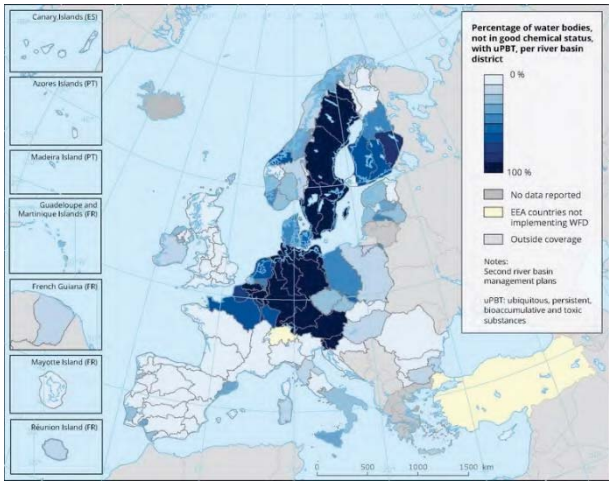
The following figure presents the percentage of surface water bodies in Ireland and other European countries failing to achieve good chemical status. For Ireland, the percentage is 1.2% (with 91.9% having unknown status), if one includes water bodies failing due to substances behaving as ubiquitous PBTs (uPBTs – substances that are persistent, bio-accumulative and toxic). Without uPBTs, the percentage of Irish surface water bodies failing to achieve good chemical status remains less than 1% (with 92% having unknown status).

[99] WISE Freshwater (europa.eu)

[100] River, lake, transitional, coastal, territorial.

[101] European Environment Agency, 2021.

Figure 26: Percentage of surface water bodies not achieving good chemical status[102]

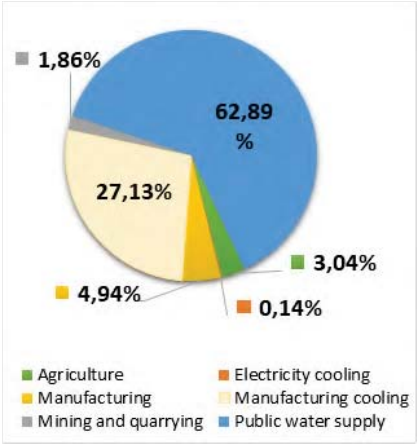


Under the IED framework, for industrial releases of heavy metals like Cd, Hg, Ni, Pb, Ireland showed a significant decrease over the last decade (41.8%). ,However, there was an increase (40.5%) in total organic carbon (TOC) to water[103].

Currently, the legislation governing water abstraction is being reviewed with the aim of introducing a water abstraction licencing regime through new legislation. Ireland uses a register for water abstractions. However, small volume abstractions (less than 25 m^3/day) are not registered. The level of risk due to abstraction pressures in Ireland is relatively low compared with other water management pressures.

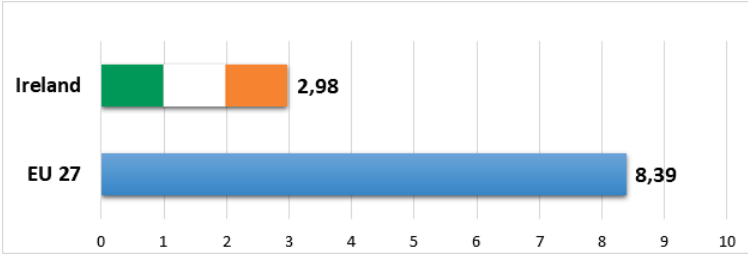
Total water abstracted annually (corresponding to 2019 baseline) in Ireland from surface and groundwater sources is 1340,94 hm^3 (EEA, 2022). The percentage for water abstraction per sector is (I) 3.04% for agriculture, (ii) 62.89% for public water supply, (iii) 0.14% for electricity, (iv) 4.94% for manufacturing and (v) 27.13% for manufacturing cooling, and (vi) 1.86% for mining and quarrying, as shown in Figure 27 below.

Figure 27: Water abstraction per sector in Ireland[104]



In Ireland, the water exploitation index plus (WEI+)[105] is 2.98% (corresponding to year 2017), less than 20% that is generally considered to indicate water scarcity[106].

Figure 28: Water exploitation index plus (WEI+) inside the EU, 2017[107]



On pollution, Ireland showed a significant decrease over the last decade (41.8%) in industrial releases of heavy metals like Cd, Hg, Ni, Pb. However, there was an increase (40.5%) in Total Organic Carbon, (TOC) to water (EEA, 2021).

Floods Directive

As mentioned above, the Commission published in December 2021 the 6th Implementation Report, which assesses the implementation of both the WFD and the Floods Directive. The report includes a review and update of the preliminary flood-risk assessments drawn up by all Member States during the second cycle (2016-2021).

[102] European Environment Agency, December 2019.
[103] European Environment Agency, June 2021.

[104] European Environment Agency, Water abstraction by source and economic sector in Europe, 2022.
[105] The Water Exploitation Index plus (WEI+) is a measure of total fresh water use as a percentage of the renewable fresh water resources (groundwater and surface water) at a given time and place. It quantifies how much water is abstracted and how much water is returned after use to the environment.
[106] By May 2022, the EEA will develop a seasonal WEI+ at river basin and NUTS2 level, which will provide a more complete picture of water stress and water scarcity for each Member State.
[107] European Environment Agency, Water exploitation Index Plus, 2022.

The assessment report[108] showed that Ireland has improved its procedures for collecting data on floods, including information on the impacts of flooding. A clear methodology is in place for the designating areas of potential significant flood risk (APSFRs). Climate change has been taken into account in the flood risk assessment. A cross-border coordination group has been established to coordinate the implementation of the Floods Directive between Ireland and Northern Ireland, which can be seen as a model for good practice as it builds on well-established working relationships. However, the assessment identified that the collection of further information about how floods affect the environment and cultural heritage needs to be improved.

Ireland has recently reported the second generation of flood risk management plans (FRMPs) under the Floods Directive. The European Commission will now assess progress since the adoption of the first Flood Risk Management Plans. It will then publish a new report, as it did in 2019.

Drinking Water Directive

On the Drinking Water Directive[109], there has been no new assessment of the quality of Drinking Water isince the EIR 2019. The Commission has an open infringement procedure (INFR(2017)4007) against Ireland which is at the Referral to Court stage (Art 258 TFEU). This raises concerns about Ireland's failure to comply with the parametric value for trihalomethanes in a number of systems that supply drinking water across the whole country.

The recast Directive[110] entered into force on 12 January 2021. Member States have until 12 January 2023 to transpose it into their national legal system. Ireland will have to comply with these reviewed quality standards.

Bathing Water Directive

On the Bathing Water Directive, Figure 17 shows that in 2020, out of the 148 Irish bathing waters, 75%) % were of excellent quality[111]. Detailed information on the Irish bathing waters is available from a national portal[112] and via an interactive map viewer on the European Environment Agency website[113].

Figure 29: Bathing water quality in Europe in the 2020 season[114]

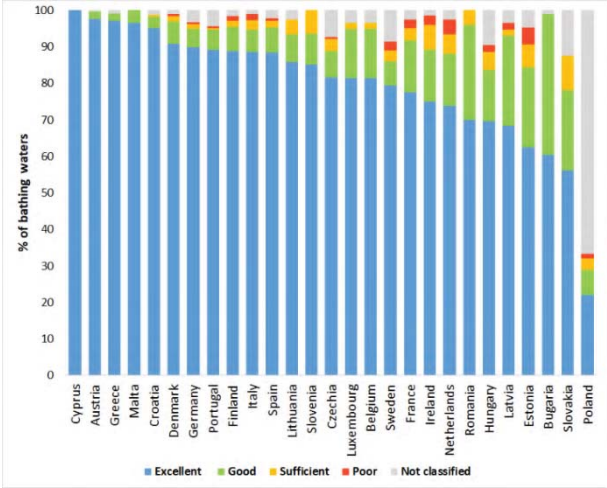
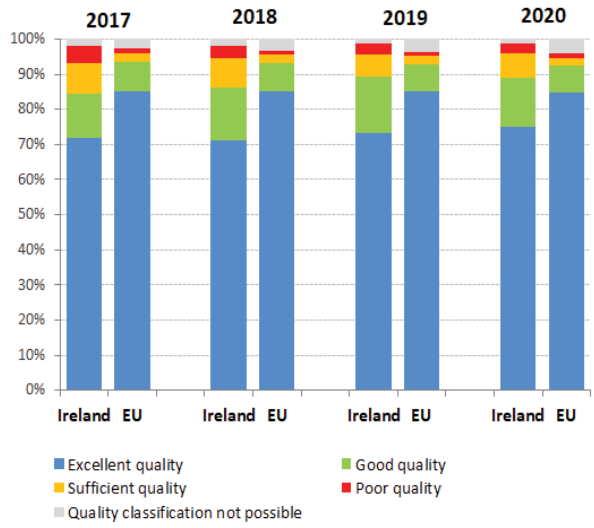


Figure 30: Ireland, Bathing water quality, 2017-2020[115]



*For 2017, 2018 and 2019, data about the UK bathing waters are included under the EU average.

Nitrates Directive

The latest Commission Report on the Implementation of the Nitrates Directive[116], referring to the period 2016-

[108] European Commission, Directorate-General for Environment, Assessment of Second Cycle Preliminary Flood Risk Assessments and Identification of Areas of Potential Significant Flood Risk under the Floods Directive : Member State : Ireland, 2022.
[109] OJ L 330, 5.12.1998, p. 32–54.
[110] OJ L 435, 23.12.2020, p. 1–62.
[111] European Environment Agency, 2021. State of bathing water — European Environment Agency (europa.eu).
[112] https://www.beaches.ie/
[113] EEA, State of bathing waters in 2020 — European Environment Agency (europa.eu).
[114] European Environment Agency, Bathing Water Quality in 2020, 2022.
[115] European Environment Agency, European Bathing Water Quality in 2017, 2018, 2019, 2020.
[116] Implementation of the Nitrates Directive in the EU.

2019[117], warns that nitrates are still causing harmful pollution in EU water. Excessive nitrates in water are harmful to both human health and ecosystems, causing oxygen depletion and eutrophication. Where national authorities and farmers have cleaned up waters, it has had a positive impact on drinking water supply and biodiversity, and on the sectors such as fisheries and tourism that depend on them. Nevertheless, excessive fertilisation remains a problem in many parts of the EU.

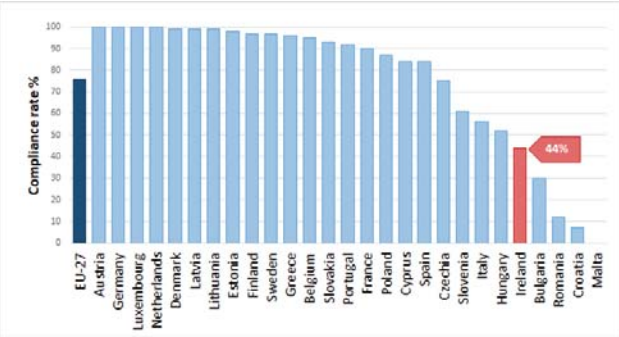
Livestock pressure in Ireland is above the EU average. The surplus of nitrogen is about the EU average, while the surplus of phosphorus is among the highest in the EU. The network of monitoring stations is sufficiently developed. The groundwater quality is generally good, while the number of monitoring stations have an increasing trend. Surface waters also have low nitrate concentrations and the number of waters that are eutrophic remains limited. On 11 March 2022, Ireland published its fifth Nitrates Action Programme[118].

Urban Waste Water Treatment Directive

Over the years, Ireland has encountered difficulties in meeting its obligations under the Urban Waste Water Treatment Directive (UWWTD).

Overall, 44% of the urban waste water in Ireland is treated according to the requirements of the UWWTD[119]. This is below the EU average of 76% in 2018. Further efforts are needed to provide biological treatment to an additional 50.5% and biological treatment with nitrogen and/or phosphorus removal to 75.1%.

Figure 31: The proportion of urban waste water that meets all requirements of the UWWTD (collection, biological treatment, biological treatment with nitrogen and/or phosphorus removal) in compliant urban areas of the UWWTD ('compliance rate'), 2018[120]



Despite improved compliance throughout the years, the incomplete implementation of the UWWTD has led to several rulings of the Court of Justice of the European Union against Ireland. Currently, the Commission is following up on a judgment of the Court in case C-427/17 (rendered under Article 258 TFEU which covers numerous agglomerations which are in breach of the Directive, including the two biggest agglomerations of Dublin and Cork).

The 2019 EIR for Ireland included two priority actions on water management. Considering that the progress has been limited, the following actions are suggested.

2022 priority actions

- New physical modifications of water bodies should be assessed in line with Article 4(7) of the WFD. In these assessments alternative options and adequate mitigation measures have to be considered.
- Maintain efforts to reduce diffuse nutrients pollution and to address hydromorphological pressures.
- Maintain efforts to improve monitoring, in particular of hydromorphological conditions, priority substances and groundwater quantity.
- Urgently ensure an appropriate control over water abstraction and hydromorphological changes in compliance with the Water Framework Directive.
- Efforts should be made to improve coordination in the implementation of water, marine and nature policies.
- Review its action programme regarding the high nutrients phosphorus 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.

Chemicals

The EU seeks to ensure that chemicals are produced and used in a way that minimises any significant adverse effects on human health and the environment. In October 2020, the Commission published its chemicals strategy for sustainability - 'Towards a Toxic-Free Environment'[121] which led to some systemic changes in EU chemicals legislation. The strategy is part of the EU's zero-pollution ambition – a key commitment of the European Green Deal.

The EU's chemicals legislation[122] provides a baseline protection for human health and the environment. It also

[117] Last Implementation Report 2016-2019.

[118] In response to water quality trends, new measures have been included the new Regulations as either additions or enhancements of the Good Agricultural Practice Regulations 2017 (S.I. No. 65 of 2017), as amended,

[119] Ireland (europa.eu).

[120] European Commission, WISE Freshwater, 2021.

[121] COM(2020) 667 final.

[122] REACH: OJ L 396, 30.12.2006, p.1. - CLP: OJ L 252, 31.12.2006, p.1

ensures stability and predictability for businesses operating within the internal market.

Since 2007, the Commission has gathered information on the enforcement of the Regulation on the Registration, Evaluation, Authorisation and Restriction of Chemicals (the REACH Regulation) and the Regulation on Classification, Labelling and Packaging (the CLP Regulation). In December 2020, the Commission assessed the Member States' reports on the implementation and enforcement of these Regulations[123], in line with Article 117(1) of the REACH Regulation and Article 46(2) of the CLP Regulation. According to the latest available data, national enforcement structures have not changed much. However, it is apparent from this report that there are still many disparities in the implementation of the REACH and CLP Regulations, notably in the area of law enforcement. Recorded compliance levels in Member States seem to be quite stable over time, but with a slight worsening trend, which is likely due to: (i) enforcement authorities being more effective in detecting non-compliant products/companies; and (ii) more non-compliant products being put on the EU market.

In August 2021, the Commission published a measurable assessment of the enforcement[124] of the two main EU Regulations on chemicals (the REACH Regulation and the CLP Regulation) using a set of indicators on different aspects of enforcement.

Responsibility for checking compliance with REACH in Irelandlies with the following authorities[125]:

- Department of Agriculture Food and the Marine (DAFM) (also for CLP)
- Health and Safety Authority (also for CLP)
- Environmental Protection Agency (EPA)

Ireland has devised and fully implemented both REACH and CLP enforcement strategies[126]. Their content consists of:

- The Health and Safety Authority:
  - The Authority's REACH enforcement strategy is a subset of its Authority's overall strategy statement;
  - The annual enforcement work programme;
  - Priorities for enforcement activities based on broad analysis of the risk of non-compliance. Priorities given to chemicals of highest risk (substances that are carcinogenic, mutagenic or toxic for reproduction CMRs and sensitisers) and to actors with the greatest responsibility in the supply chain;
  - The work programme indicates the number of inspections, including audits, to be carried out annually and the number of product assessments to be undertaken;
  - Both proactive and reactive inspection; on-site inspections focus on registration obligations, compliance with SDS, Annex XIV and Annex XVII requirements.
- The DAFM:
  - Risk-based approach.
- The EPA:
  - Strategy forms part of the Agency's overall Internal Market Surveillance strategy;
  - Risk-based approach.

. In addition to prosecution for offences, the responsible authority may also, where necessary, order the provisional seizure of assets and documents.

The following is the breakdown of the number of staff members allocated to REACH and CLP enforcement[127] :

- The Health and Safety Authority (HSA): 20.7 full time equivalent (FTE) inspectors to enforce all chemicals regulations and other environmental regulations, 5.95 FTEs to enforce REACH, and 6.2 FTEs to enforce CLP;
- The HHSA also created a new chemicals market surveillance unit of 5 FTEs in preparation for the impact of Brexit;
- The DAFM: 28 inspectors whose duties include REACH and CLP. In addition, there is the EPA Chemicals Team. Accordingly, more than 533 REACH and CLP controls carried out in the reporting period. Almost all the REACH controls done are proactive (inspections), compared with reactive/non-routine controls (i.e. investigations in response to complaints, accidents and referrals).

The high percentage of non-compliance cases out of the total number controls should be underlined[128].

[123] European Commission, Final Report, on the operation of REACH and CLP, Final report_REACH-CLP MS reporting_2020.pdf (europa.eu).

[124] European Commission, REACH and CLP enforcement: EU level enforcement indicators.

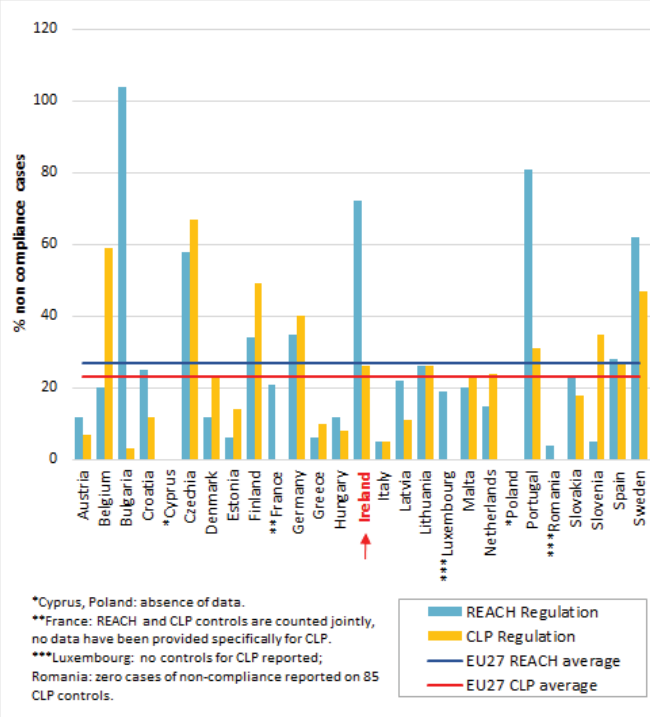
[125] Final report_REACH-CLP MS reporting_2020.pdf (europa.eu), p. 69.

[126] Final report_REACH-CLP MS reporting_2020.pdf (europa.eu), p. 76.

[127] European Commission, Final Report, on the operationof REACH and CLP, Final report_REACH-CLP MS reporting_2020.pdf (europa.eu), p. 74.

[128] Final report_REACH-CLP MS reporting_2020.pdf (europa.eu), p. 87-88.

Figure 32: Percentage % of non-compliance cases out of the total number of REACH and CLP controls during 2019 per Member State and compared to the EU average[129]



2022 priority action

- Upgrade the administrative capacities for implementation and enforcement in order to follow a zero-tolerance approach to non-compliance

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[129] European Commission, Final Report, on the operation of REACH and CLP, pp.87-88, 2022.

4. Climate action

In line with the Paris Agreement and as part of the European Green Deal, the European Climate Law sets the EU target of reaching climate neutrality by 2050 and reducing greenhouse gas (GHG) emissions by 55% by 2030 compared to 1990. The law also limits the contribution that carbon removals can make towards emission reductions in 2030 to ensure a sufficient mitigation effort.

The EU and its Member States submitted updated nationally determined contributions (NDC) to the UNFCCC in December 2020.

The EU is working across all sectors and policies to cut GHG emissions and make the transition to a climate-neutral and sustainable economy, as well as addressing the unavoidable consequences of climate change.

EU climate legislation incentivises emissions reductions from transport, the maritime sector and fluorinated gases (F-gases) used in products.

For road transport, EU legislation requires the GHG intensity of vehicle fuels to be cut by 6% by 2020 compared to 2010[130] and sets binding GHG emission standards for different vehicle categories[131].

Under the F-gas Regulation, the EU's F-gas emissions will be cut by two thirds by 2030 compared with 2014 levels.

From 2021, emissions and removals of GHGs from LULUCF have been included in the EU emission-reduction efforts.

The EU adaptation policy is an integral part of the European Green Deal. From 2021, Member States are required to report on their national adaptation policies[132], as the EU Climate Law recognises adaptation as a key component of the long-term global response to climate change. Member States will be required to adopt national strategies, and the EU will regularly assess progress as part of its overall governance on climate action. The updated EU adaptation strategy, published in February 2021, sets out how the EU can adapt to the unavoidable impacts of climate change and become climate resilient by 2050.

Key national climate policies and strategies

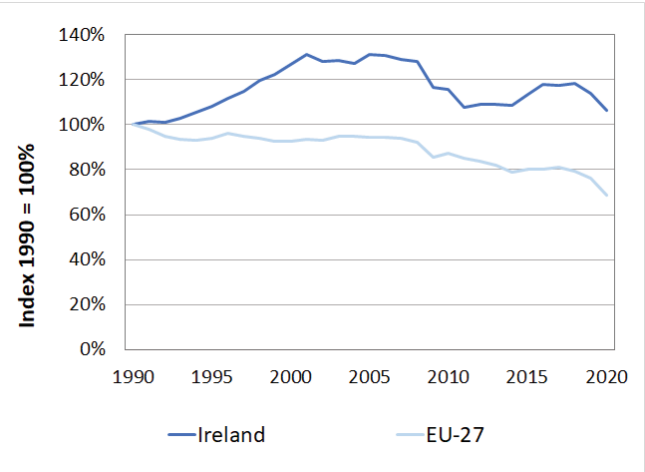
Ireland has an integrated National Energy and Climate Plan (NECP) for 2021-2030 that includes investments and reforms in line with its target under the Effort Sharing Regulation. This work builds upon long-term energy and climate plans. The adoption of the first Climate Action Plan in 2019 represented a breakthrough in climate policy, and Ireland adopted legislation in 2021 that sets a national climate neutrality target by 2050 with an intermediate objective of reducing total emissions by 51% by 2030 compared to 2018 levels. National legislation establishes a strong framework for climate policy, which includes the drawing up of economy-wide and sector-specific 5-year carbon budgets on a rolling 15-year basis. It also sets out an obligation to revise annually the Climate Action Plan and makes government Departments responsible for the delivery of their carbon budgets and mitigation targets.

In its national Recovery and Resilience Plan (RRP), Ireland allocates 42% of it to climate objectives and outlines crucial reforms and investments to further the transition to a more sustainable, low-carbon and climate-resilient economy.

Ireland's first statutory National Adaptation Framework (NAF) was published in 2018. It sets out the national strategy to reduce the country's vulnerability to the negative effects of climate change and to take advantage of the positive impacts. The NAF was developed under the Climate Action and Low Carbon Development Act 2015. A statutory review of the NAF will be completed in 2022.

GHG emissions in 2020 were 6% above 1990 levels and emissions per capita are among the highest in the EU, having decreased little since 1990.

Figure 33: Total greenhouse gas emissions (incl. international aviation) in Ireland 1990-2020



[130] The Fuel Quality Directive (Directive 98/70/EC) sets strict quality requirements for fuels used in road transport in the EU to protect human health and the environment, and to make road travel across the EU safer.

[131] Directive 98/70/EC.

[132] Article 29 of Regulation (EU) 2018/1999.

Effort sharing

For emissions not covered by the EU's emissions trading scheme (ETS), Member States have binding national targets under the Effort Sharing legislation[133]. Under EU legislation, Ireland has a target of reducing GHG emissions in the non-ETS sectors (buildings, road and domestic maritime transport, agriculture, waste and small industries) by 20% by 2020 and by 30% by 2030, compared to 2005 levels. In 2020, the country's ESR emissions were well above its 2020 target. -In its NECP, Ireland intends to achieve similar reductions than its current ESR target for 2030 of 30%.

Figure 34: Emissions and targets under the Effort Sharing Decision/ Effort Sharing Regulation in Ireland, 2020 and 2030 as percentage change from 2005

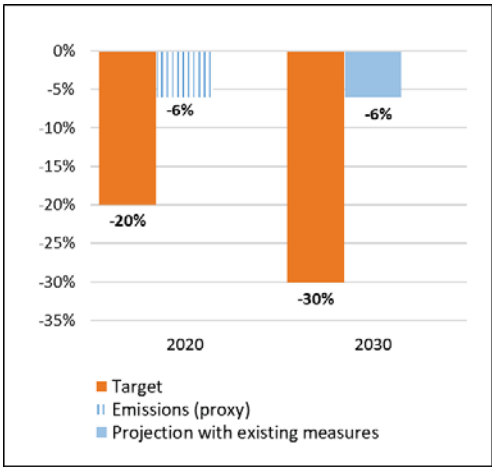
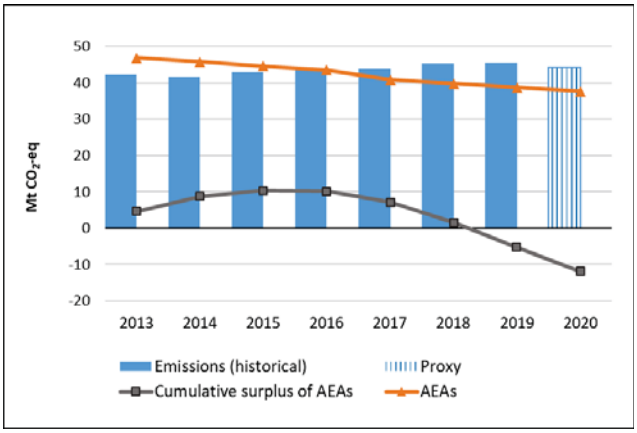


Figure 35: Emissions, annual emission allocations (AEAs) and accumulated surplus/ deficit of AEAs under the Effort Sharing Decision in Ireland, 2013-2020



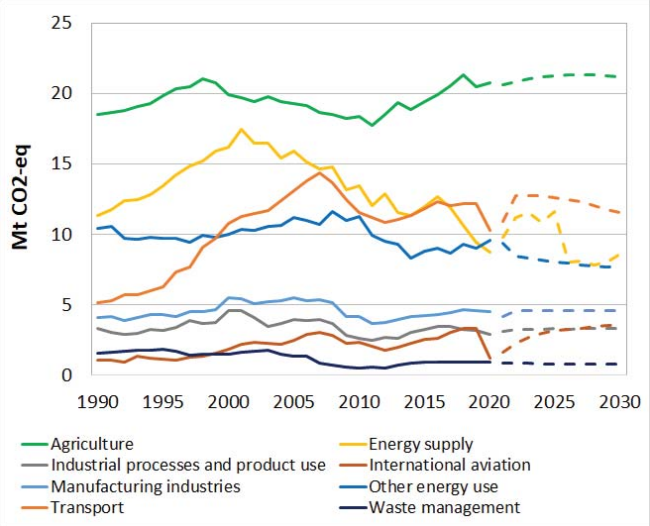
Key sectoral developments

In road transport, the GHG intensity of vehicle fuels in Ireland decreased by 3,4% between 2010 and 2019. Ireland needs to act swiftly to meet the current EU-wide target of 6% by 2020 compared to 2010. There are several types of action that Member States can take in this regard, for example further expanding the use of electricity in road transport, supporting the use of biofuels, in particular advanced biofuels, incentivizing the development and deployment of renewable fuels of non-biological origin and reducing upstream emissions before refining processes.

Road transport in 2019 in Ireland represented 18% of the country's total GHG emissions. Emissions of GHG from road have decreased by 7% compared to 2005.

[133] Regulation (EU) 2018/842.

Figure 36: Greenhouse gas emissions by sector in Ireland[134] – historical emissions 1990-2020, projections 2021-2030[135]

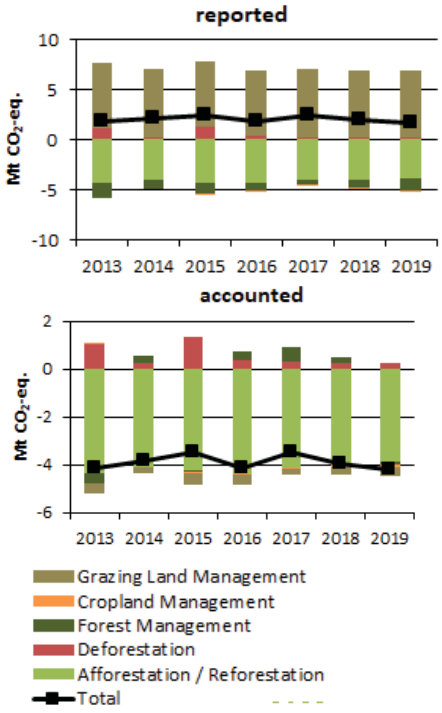


To further reduce emissions from buildings, more measures to support investments in energy efficiency and to promote the uptake of heating systems based on renewable energies are needed in existing buildings. The national retrofit plan[136] identifies steps to further reduce GHG emissions from residential buildings

Emissions from agriculture have increased. The share of non-CO2 emissions in total GHG emissions in Ireland is atypically large in the EU context, mainly due to emissions of biogenic methane. Mitigating emissions from the cattle and dairy farming will clearly be a challenge, but it will also offer opportunities for agriculture and the agro-food industry to transition to sustainable modes of production.

The Land Use, Land Use Change and Forestry (LULUCF) sector is currently a net source of emissions. Projections indicate a slight decrease of LULUCF emissions by 2030. Reported quantities under the Kyoto Protocol for the LULUCF sector in Ireland show net emissions of, on average, 2.1 Mt CO_2-eq between 2013 and 2019. Therefore, Ireland represents -0.6% of the annual average sink of 344.9 Mt CO_2-eq of the EU-27. Accounting for the same period shows net credits of, on average, -3.9 Mt CO_2-eq, which corresponds to 3.4% of the EU-27 accounted sink of -115.0 Mt CO_2eq. Reported net emissions and accounted net credits show fluctuations with no clear trend. Ireland is one of three EU Member States with average net emissions and one of six EU Member States that show net emissions for at least one year. Ireland elected to report and account for cropland management as one of six EU Member States and for grazing land management as one of five EU Member States.

Figure 37: Reported and accounted emissions and removals from LULUCF in Ireland[137]



Use of revenues from the auctioning of EU ETS allowances

Total revenues from the auctioning of emission allowances under the EU ETS in 2012-2021 were EUR 765 million. In Ireland, the revenues are not earmarked for specific purposes, amounts spent are equivalent to 100% of these revenues and are allocated to emission reduction activities.

2022 priority actions

- Increase the uptake of renewables.
- Decarbonise transport.
- Improve energy efficiency in existing residential and commercial buildings.

[134] The sectors in the figure correspond to the following IPCC sectors: Energy supply: 1A1, 1B and 1C. Energy use in manufacturing industries: 1A2. Industrial processes and product use: 2. Transport: 1A3. Other energy use: 1A4, 1A5 and 6. Agriculture: 3. Waste: 5. International aviation: 1.D.1.a.

[135] European Environmental Agency, Total GHG trends and projections.

[136] 215252_a53faf62-c2ec-44d3-9cff-b61715a6d79f.pdf

[137] The differences between reported and accounted emissions from LULUCF under the Kyoto Protocol are described in the 'explanatory note on LULUCF – accounted and reported quantities under the Kyoto Protocol'.

- Upgrade the current power infrastructure and strengthen its ability to cope with high shares of variable generation.
- Reduce non-CO_2 emissions in agriculture while enabling the agro-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.

Part II: Enabling framework: Implementation tools

5. Financing

Environmental investment needs in the European Union

Financing environmental measures is essential for their success. Although most financing comes from national sources, various EU funds contribute significantly, helping to close the financing gaps. Post-2020, environmental measures will also be supported by the EU's COVID-19 Recovery Fund (via the RRF) and the 'do no significant harm' principle which runs across the EU budget. The renewed commitments made at COP26 (Glasgow, October-November 2021) and the Biodiversity Convention (April-May 2022)[138] will also be reflected in the EU budget.

Overall environmental investment gaps (EU27)

The EU's investment needs for the green transition cover a range of interlinked areas. The additional investment needs over the baselines (i.e. the gap between what is needed and what is forecast to be invested if no additional action is taken) for climate, energy and transport were estimated in 2021 at EUR 390 billion per year (EU-27)[139], with a further EUR 130 billion a year to deliver the EU's core environmental objectives[140]. The costs of climate-change adaptation can also be significant, and are estimated to reach a total of EUR 35-62 billion (narrower scope) or EUR 158-518 billion (wider scope) per year[141]. Those investment needs reflect the implementation objectives to 2020 and to 2030 (except for climate-change adaptation, the costs of which are expected to last over a longer time horizon).

A preliminary update of the EU's environmental investment gap is provided in Table 1[142]. Almost 40% of the environmental investment gap relate to dealing with pollution, accounting for nearly two-thirds of the total gap if combined with water management. The investment gap in circular economy and waste is estimated between EUR 13-28 billion a year, depending on levels of circularity implemented. The annual biodiversity financing gap is estimated at around EUR 20 billion.

Table 1: Estimated breakdown of the EU27's environmental investment gaps, by environmental objective, 2021-2030 (per annum)[143]

Environmental objective	Estimated investment gap (EU-27, p.a.)	
	EUR billion	%
Pollution prevention & control	42.8	39%
Water management & industries	26.6	24%
Circular economy & waste	13.0	12%
Biodiversity & ecosystems[144]	21.5	20%
R & D & I and other	6.2	6%
Total	**110.1**	**100%**

Environmental investment needs in Ireland

Ireland's top priority for environmental investment is biodiversity, followed by water, pollution management and waste. The following environmental investment needs have been identified by sector.

Pollution prevention & control

The EU's first Clean Air Outlook[145] estimated that the total air pollution control costs for Ireland to reach the

[138] The Convention on Biological Diversity (cbd.int); Post-2020 Global Biodiversity Framework | IUCN.

[139] SWD (2021) 621, accompanying proposal COM (2021) 557 to amend the REDII Directive (EU) 2018/2001.

[140] SWD (2020) 98 final/2.

[141] SWD(2018)292 Impact assessment accompanying the LIFE Regulation.

[142] With decreases due to Brexit and some reconciliation among the objectives. Source: DG ENV "Study supporting EU green investment needs analysis" (ongoing, 2021-2023) and DG ENV internal analysis" Environmental investment needs and financing in the EU's green transition" July 2020.

[143] European Commission, DG Environment, "Study supporting EU green investment needs analysis" (ongoing, 2021-2023) and DG Environment internal analysis "Environmental Investment needs and financing in the EU's green transition", July 2020.

[144] To meet the needs of the 2030 Biodiversity Strategy (Natura 2000, green infrastructure), at least EUR 20 billion a year should be unlocked for nature (COM/2020/380 final) while to fully cover the strategy (including restoration) EUR 30-35 billion may be needed, indicating a gap of EUR 10-20 billion a year compared to current baseline expenditure.

NECD emission reduction requirements (ERRs)[146] by 2030 amount to EUR 915 million per year, including EUR 581 million for capital investment (assuming the achievement the 2030 climate and energy targets).

The second EU's Clean Air Outlook[147] suggests that, if all relevant legislation adopted up to 2018 (including all air pollution and the 2030 climate and energy targets set in 2018) delivered its full benefits and if Member States also implemented the measures announced in their NAPCPs, the EU would largely achieve the reductions of air pollutant emissions that correspond to the obligations under the NEC Directive for 2030, except for 15 Member States for ammonia (NH3), including Ireland.

Water management

According to the OECD study 'Financing a Water Secure Future' (2022)[148], nutrient enrichment from agriculture and untreated sewage (i.e. inappropriate treatment or sewer overflow when rainfall occurs) is the main pressure on water quality in Ireland. Nitrate concentration in groundwater is an issue, particularly in the southeast and south part of Ireland. It is also estimated that Ireland will need to invest an additional cumulative EUR 1 479 million by 2030 over baselines for drinking water and sanitation – corresponding to around EUR 148 million investment need (capital expenditure) per annum, almost 90% of that relating to wastewater[149]. An attempt to introduce water charges for water supply and sanitation services was repelled in the spring 2017. As a consequence, domestic water users in Ireland do not pay a bill for normal water use[150]. [Information from the 6th Water Framework Directive and Floods Directive Implementation Report[151] and the financial - economic study[152] accompanying the 6th Implementation Report to be taken into account].

Waste & circular economy

According to a Commission's study[153] to meet the recycling targets for municipal waste and packaging waste, Ireland still needs to invest an additional EUR 371 millions (around 53 million per annum) between 2021 and 2027 in collection, recycling reprocessors, biowaste treatment, waste sorting facilities and waste registry digitalisation - which already includes additional costs of replacting bio-waste treatment faciliites (a total of EUR 9.3 million in 2021-2027). This does not include investment necessary for other key waste streams (plastics, textile, furniture) or to reach higher circularity and waste prevention across the economy.

Biodiversity & ecosystems

The recently submitted priority action framework (PAF) for Ireland shows that nature protection costs (including Natura 2000) in 2021-27 are EUR 1138 million. This represents an annual cost of about EUR 162.6 million, of which EUR 23.5 million are one-off costs[154]. More efforts may be necessary to cover the increased ambitions of the EU Biodiversity Strategy 2030 and any relevant financing gaps on protection and restoration.

EU environmental funding 2014-2020

The multiannual financial framework (MFF) for 2014-2020 allocated almost EUR 960 billion (in commitments, 2011 prices)[155] for the EU to spend over this period. The commitment in this 2014-2020 MMF to the green transition included a 20% climate spending target. It also included funding opportunities for the environment, in particular, under the European Structural and Investment (ESI) Funds[156]. The 2014-2020 MFF budget was subsequently topped up with over EUR 50 billion (current prices) from the REACT-EU programme (for cohesion-policy action against COVID-19)[157].

Ireland received EUR 4.3 billion from the ESI Funds over 2014-2020 to invest in job creation and a sustainable and healthy European economy and environment. The planned direct environmental investment amounted to EUR 373.0 million with further EUR 38.3 million identified

[145] International Institute for Applied Systems Analysis (IIASA), Progress towards the achievement of the EU's air quality and emissions objectives, 2018.

[146] Covering the reductions of and the emission ceilings for 5 atmospheric pollutants, SOx, NOx, PM2.5, NH3 and VOC by 2030, compared to 2005. Source: Progress towards the achievement of the EU's air quality and emissions objectives, IIASA 2018. (page 29). Requirements are based on Directive (EU) 2016/2284.

[147] COM(2021) 3 Final and Report Annex.

[148] OECD, Financing Water Supply, Sanitation and Flood Protection: Challenges and Options, 2020.

[149] OECD, *Ireland- Country fact sheet- Financing Water Supply, Sanitation and Flood Protection*.

[150] OECD, *Financing a Water Secure Future*, 2022.

[151] WFD and FD Implementation Reports - Environment - European Commission (europa.eu)

[152] European Commission, Directorate-General for Environment, Economic data related to the implementation of the WFD and the FD and the financing of measures : final report, Publications Office, 2021, https://data.europa.eu/doi/10.2779/163850

[153] European Commision, *Study on investment needs in the waste sector and on the financing of municipal waste management in Member States*, 2019.

[154] The N2K Group, *Strengthening investments in Natura 2000 and improving synergies with EU funding instruments report to the European Commission*, 2021.

[155] Council Regulation (EU, Euratom) No 1311/2013.

[156] The European Structural and Investment (ESI) Funds include the European Regional Development Fund (ERDF), the Cohesion Fund (CF), the European Social Fund (ESF) with the Youth Employment Initiative (YEI), the European Agricultural Fund for Rural Development (EAFRD) and the European Maritime and Fisheries Fund (EMFF).

[157] Regulation (EU) 2020/2221.

as indirect environmental investment value, totalling to EUR 411.3 million. Figure 39 shows an overview of (planned) individual ESI Funds earmarked for Ireland (EU amounts, without national amounts).

Figure 38: ESI Funds allocated to Ireland, including environmental investments, 2014-2020[158]

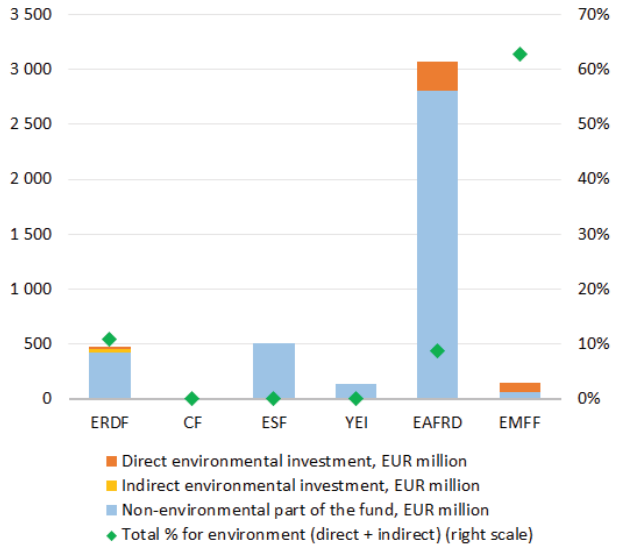


Table 2: Direct and indirect Environmental investments under the ESI Funds in Ireland, 2014-2020159

Instrument	Allocations for the environment (EUR million)
Under Cohesion policy (ERDF)	**50.8**
Direct environmental investments	18.0
land rehabilitation	18.0
Indirect environmental investments	32.8
energy efficiency	31.6
sustainable transport	1.2
Under EAFRD/rural development	**267.7**
Direct environmental investments	262.3
water	1.4
climate and risk management	260.9
Indirect environmental investments	5.4
renewable energy	0.6
energy efficiency	4.8
Under EMFF	**92.8**
Direct environmental investments	92.6
environment protection & resource efficiency	92.6
Direct environmental investments	0.2
business development, R&I	0.2
Under ESI Funds total	**411.3**
Direct environmental investments	373.0
Indirect environmental investments	38.3

Funding for the environment from the ESI Funds has been also supplemented by other EU funding programmes available to all Member States, such as, the LIFE programme, the Horizon 2020, or loans from the European Investment Bank (EIB), that add up to an estimated total of EUR 782 million of EU environmental financing for Ireland in 2014-2020.

The LIFE programme[160] is entirely dedicated to environmental and climate objectives. It finances demonstration and best practice actions for green solutions to be deployed. In the 2014-2020 period, Ireland has received EU support for nine LIFE projects (for nature and environment) with EUR 43.0 million from the LIFE programme (out of 1 028 EU27 LIFE projects with the total EU contribution of EUR 1.74 billion)[161].

In 2014-2020, the Horizon 2020 allocated about EUR 27.5 million for Ireland for the environment (in particular, for climate action, circular economy and nature and resources) which is about 2.3% of Ireland's total allocation[162]. From the European Fund for Strategic Investments (EFSI), Ireland received EUR 28.5 million for direct environmental investments out of its total allocation (EUR 811.9).[163] From the EIB, Ireland received EUR 300.0 million for direct environmental investments, specifically, for water and sewerage) out of the total EIB loans for Ireland (EUR 6.1 billion)[164]. The country ranks number 14 in size in total EIB lending.

[158] European Commission, DG Environment - Data analysis, DG Environment analysis based on ESI Funds Open Data Portal (cohesiondata.ec.europa.eu), Integration of environmental concerns in Cohesion Policy Funds (COWI, 2017), Regulation (EU) No 1303/2013, Regulation (EU) 2021/1060 and Implementing Regulation (EU) No 215/2014. Cut-off date for data: December 2021. Environmental investments here are captured via the combined use of intervention fields and coefficients under the Regulation (EU) No 1303/2013 and Regulation (EU) 2021/1060 allowing for a more precise identification and valuation of relevant environmental investments. N.B. Indirect environmental investments are valued using the Annex I environmental coefficients of the Regulation (EU) 2021/1060 (as opposed to full value).

[159] European Commission, DG Environment - Data analysis. The values of environmental investments identified here in the specific environmental areas may differ from the tracking values at cohesiondata.ec.europa.eu, e.g. for clean air or biodiversity due to two factors: the set of environmental coefficients used and the range of funds assessed. DG Environment's analysis here covered the full range of ESI Funds. See also previous footnote.

[160] European Commission, LIFE Programme.

[161] LIFE (europa.eu).

[162] Source: https://sc5.easme-web.eu/.

[163] Approved and signed EFSI financing - EIB, 2015-2020: Source: https://www.eib.org/en/products/mandates-partnerships/efsi/index.htm.

[164] EIB loans in EU countries in 2014-2020. Source: EIB Open Data Portal: https://www.eib.org/en/infocentre/eib-open-data.htm

In 2020, the EIB provided EUR 24.2 billion to fight climate change, 37% of its total financing and EUR 1.8 billion (3% of its financing) for the environment[165] [166].

EU environmental funding 2021-2027

The 2020 European Green Deal investment plan calls upon EUR 1 trillion green investments (public and private) by 2030. The multiannual financial framework (MFF) 2021-2027 and the NextGenerationEU will mobilise EUR 2.018 trillion (in current prices) to support the COVID-19 recovery and the EU's long-term priorities, including environmental protection.[167] Following the EU Green Deal's[168] 'do no harm' pledge and the Interinstitutional Agreement on the 2021-2027 MFF[169], 30% of the EU budget will support climate efforts and 7.5% (as of 2024) and 10% (as of 2026) biodiversity that requires increased programming of financial resources for biodiversity, specifically under the 2021-2027 Cohesion policy and the 2023-2027 CAP to reach those targets.

Sustainable finance significantly increases transparency on environmental sustainability (a goal promoted by the EU Taxonomy)[170], strengthens non-financial reporting requirements, facilitates green bond issuance (by the EU green bond standard[171]). Reinforced by the Renewed Sustainable Finance Strategy (2020)[172] it will increase investment flows to climate and environment. In support of financing climate adaptation, the new strategy on adaptation to climate change[173] can facilitate to close the insurance protection gap from non-insured climate-related events[174]. The EIB will align 50% of its lending with climate and environment by 2025[175] with an EUR 250 billion contribution to the Green Deal Investment Plan by 2027.

Table 3 makes an overview of the EU funds earmarked specifically to Ireland for the 2021-2027 period.

Table 3: Key EU funds allocated to Ireland (current prices), 2021-2027

Instrument	Country funding allocation (million EUR)
Cohesion policy ERDF ESF+ ETC (ERDF)	**Total: 1 197.7**[176] 395.8 508.3 293.6[177]
Just Transition Fund	**84.6**[178]
EAFRD/rural development under CAP Strategic Plans 2023-2027[179]	**1 558.2**[180]
European Maritime, Fisheries and Aquaculture Fund (EMFAF)	**142.4**[181]
Recovery and Resilience Facility (RRF) 2021 – 2026[182]	**989.0 (grants)**[183]

In Ireland, the programming for the majority of EU funds (cohesion policy funds, EAFRD and EMFAF) is ongoing. However, the negotiations have been concluded under the RRF.

Ireland's recovery and resilience plan consists of 16 investment measures and 9 reforms across 3 components. They will be supported by EUR 989 million in grants. 41.8% of the plan will support climate investments and reforms (see Figure 40). In terms of green transition, the plan reflects its climate pledge by

[165] The EIB Group jointly works with the European Commission in implementing several programs that finance environmental implementation: InvestEU, the successor of EFSI, Pillar II and III of the Just Transition Mechanism. The EIB Group stands as a key implementing partner for InvestEU with responsibility for managing 75% of the overall budgetary capacity of the mandate.

[166] EIB 2021 Activity Report..

[167] European Commission, 2021-2027 long-term EU budget & NextGenerationEU.

[168] COM/2019/640 final.

[169] Interinstitutional Agreement, OJ L 433I.

[170] https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-taxonomy-sustainable-activities_en

[171] EU Green Bond Standard - 2021/0191 (COD).

[172] COM (2021) 390 Final - European Commission, Strategy for Financing the Transition to a Sustainable Economy.

[173] COM(2021) 82 final.

[174] The strategy would support improved insurance gap coverage including through the natural catastrophe markets as reflected with the EIOPA (the Association for European Insurance and Occupational Pension Authorities) dashboard on insurance protection gap for natural catastrophes. See: The pilot dashboard on insurance protection gap for natural catastrophes | Eiopa (europa.eu).

[175] EIB Climate Bank Roadmap 2021-2025, November 2020.

[176] European Commission, 2021-2027 Cohesion policy EU budget allocations.

[177] Interreg initial allocations per MS including ETC transnational and ETC cross-border co-operation.

[178] European Commission, 2021-2027 Cohesion policy EU budget allocations.

[179] European Commission, CAP strategic plans.

[180] Regulation (EU) 2021/2115, Annex XI.

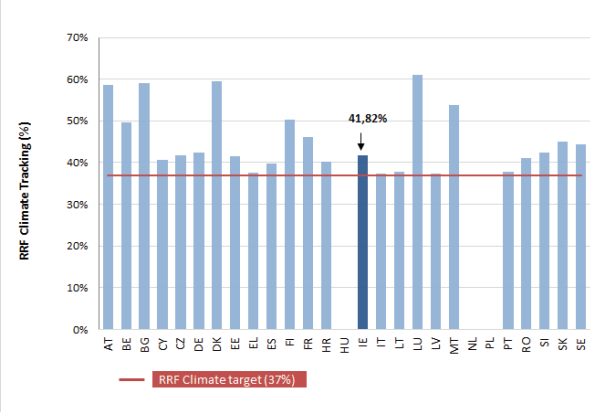
[181] Regulation (EU) 2021/1139, Annex V.

[182] The actual reforms and investments under the RRF have to be implemented until 31 December 2026.

[183] Council Implementing Decision, FIN 636.

enshrining the objective to achieve climate neutrality by 2050 into legislation and disincentivising the use of fossil fuels, as well as encouraging a shift from private cars to rail transport by investing in the commuter rail network in Cork (EUR 164 million). It will also assist households, businesses and the public sector to implement energy efficiency investments and green technology solutions to reduce carbon emissions (EUR 155 million) and restoration and rehabilitation of wetlands to change land use from peat extraction to carbon sequestration[184].

Figure 39: Climate expenditure in RRP, 2021-2026[185]



Under NextGenerationEU, the Commission will issue up to EUR 250 billion of EU green bonds (one third of all bonds issued under NextGenerationEU) until 2026 that will comply with the general spirit of the 'do no significant harm' principle. However, this EUR 250 billion in green bonds will not be subject to the currently developed delegated acts related to the EU Taxonomy and will not fully align with the proposed EU standards for green bonds.

In addition to EU funds earmarked specifically for Ireland in the 2021-2027 period, there are also funding programmes that can be accessed at the EU level and which are open to all member states on competitive basis. These include, among others, the LIFE programme[186] (EUR 5.4 billion), Horizon Europe (EUR 95.5 billion)[187], the Connecting Europe Facility (EUR 33.7 billion)[188] or the funds to be mobilised via the InvestEU[189]. They will also support the green transition, including research and innovation activities for environmental protection (Horizon Europe)[190], clean transport and energy (the Connecting Europe Facility)[191] or sustainable infrastructure (InvestEU)[192].

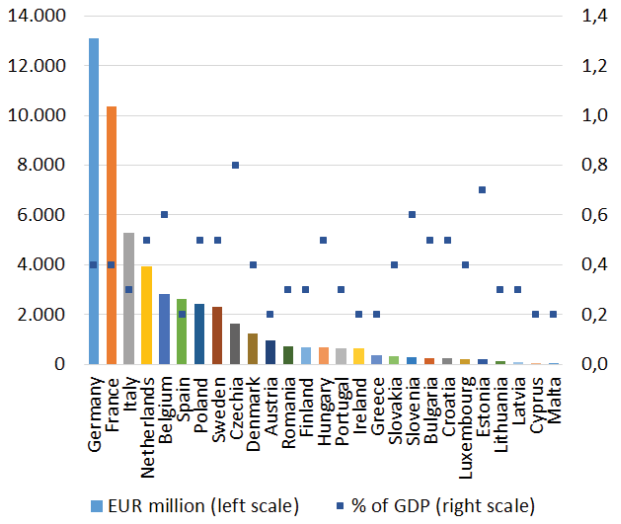
National environmental protection expenditure

Total national environmental protection expenditure (including all relevant current and capital expenditure)[193] in the EU-27 was EUR 272.6 billion in 2020, representing 2% of the common GDP being quite stable over time. While absolute expenditure is concentrated in a few countries, as a share of GDP, most countries spend between 1-2%, with Ireland below that range (0.6%).

Of the above total, capital expenditure (Capex) on environmental protection (i.e. investment) amounted to EUR 56.3 billion in 2018, lowering to EUR 54.5 billion in 2020, representing around 0.4% of GDP. Most Member States invested 0.2-0.5% of their GDP in environmental protection, Ireland dedicated 0.2%. During 2014-2020, this totalled to around EUR 376 billion of environmental investment in the EU-27, and to EUR 3.91 billion for Ireland.

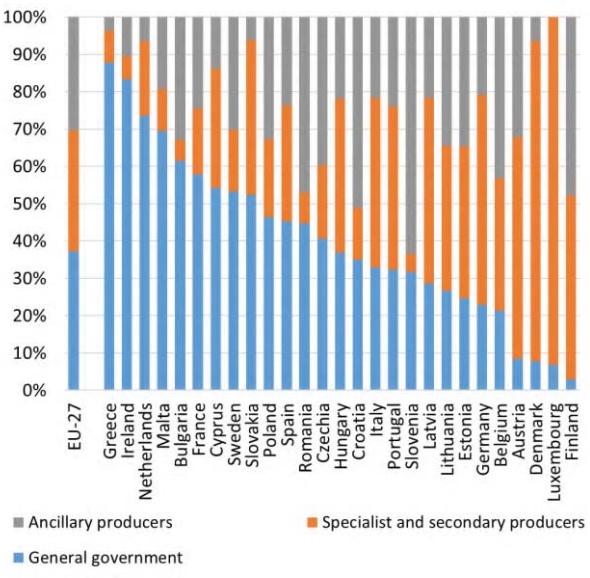
[184] European Commission, Ireland recovery and resilience plan.
[185] European Commision
[186] European Commission, LIFE Programme.
[187] European Commission, Multiannual Financial Framework 2021-2027 (in commitments) - Current prices.
[188] Regulation (EU) 2021/1153.
[189] The InvestEU Fund is foreseen to mobilise over EUR 372 billion of investment through an EU budget guarantee of EUR 26.2 billion to back the investment of financial partners such as the European Investment Bank (EIB) Group and others.
[190] European Commission, Horizon Europe.
[191] European Commission, Connecting Europe Facility.
[192] European Union, InvestEU.
[193] At economy level, including final consumption, intermediate consumption and capital expenditure of households, corporations and governments related to environmental protection goods and services. It excludes EU funds, while may include some international expenditure beyond domestic. Data source: Environmental Protection Expenditure Accounts (EPEA), Eurostat. EPEA accounts are based on the CEPA 2000 classification, excluding climate, energy and circular economy.

Figure 40: Direct and indirect environmental protection investments in the EU-27 (EUR million and % of GDP), 2018[194]



By institutional sector, most of Ireland's environmental protection investments (83%) came from the general government, 6% from specialist producers (of environmental protection services, e.g. waste and water companies) and 11% from the industry (business) sector that normally pursues environmental activities as ancillary to their main activities. At EU level, 37% comes from governments, 33% from specialist producers and 30% from industry (business).

Figure 41: EU-27 Member States' environmental protection investments (Capex) by institutional sectors (Total economy = 100%), 2018[195]



Breakdown of investment by environmental topic is partially available, at the level of institutional sectors only (rather than at economy level), due to different reporting patterns[196]. At Ireland's general government level, 72% of environmental protection investments went to wastewater, 7% to waste management and 17% was non-classified. In case of the country's specialist producers, the dominant, almost exclusive, area was waste management (97%). The business sector was concerned with several areas: waste management (34%), protection of air (31%), wastewater (17%), water- and soil protection (14%).

The total annual European green bond issuance[197] in 2020 was USD 156 billion (EUR 137 billion[198]), growing from USD 117 billion (EUR 105 billion) in 2019, also including some non-EU European countries. By EU-27 Member States only, the 2020 annual green bond issuance was EUR 124 billion. 83% of the green bonds issued by European countries served energy, buildings or

[194] Eurostat, Environmental Protection Expenditure Account, 2021.

[195] Eurostat, Environmental Protection Expenditure Accounts (env_epe).

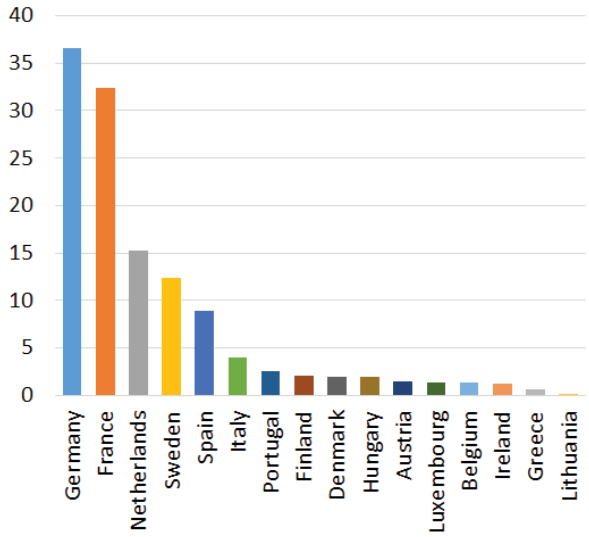
[196] Data reporting is different for the 3 institutional sectors, leading to aggregation difficulties. Specialist companies provide comprehensive data across all environmental areas (CEPA 1-9), while this is less the case for general government and industry that often report (the non-obligatory) data in merged categories only (with difficulty to split) or not at all.

[197] Green bonds were created to fund projects that have positive environmental and/or climate benefits. The majority of green bonds issued are green "use of proceeds" or asset-linked bonds. The very first green bond was issued in 2007 with the AAA-rated issuance from multilateral institutions, the European Investment Bank (EIB) and the World Bank.

[198] At Eurostat's annual average EUR/USD exchange rates.

transport objectives between 2014-2020, 8% supported water and waste, with further 6% supporting land use – with links to ecosystem conservation & restoration, based on the Climate Bonds Taxonomy being broadly similar to the EU Taxonomy[199]. Of this 2020 annual EU green bond issuance, Ireland's had a EUR 1.23 billion amount.

Figure 42: Annual EU green bond issuance in 2020 (EUR billion)[200]

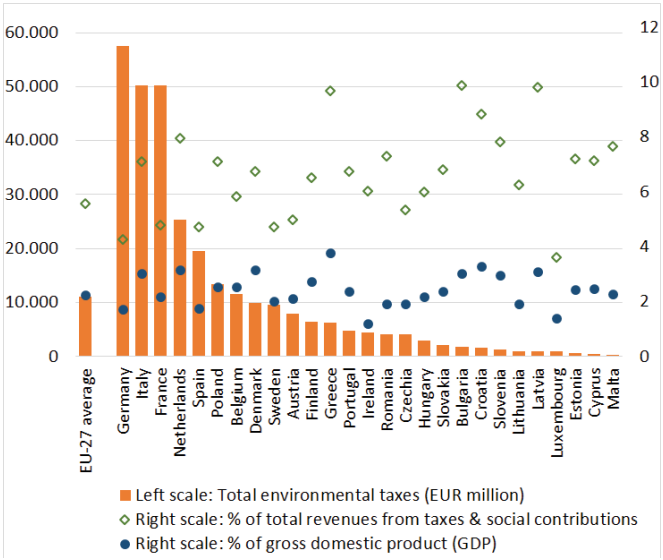


Green budget tools

Green taxation & tax reform

Ireland revenue from environmentally-related taxes remains around the lowest in 2020 with EUR 4520.2 million in absolute amount, as shown in the Figure 43. Compared to GDP it was also low (1.21%), a bit more than half of the EU-average. Within this, energy taxation represents the highest share with 61.5% in 2020, while transport tax represents 38.2% and pollution/resources tax accounts for 0.2%. The share of transport taxes are double that of the EU-average (18.9%), while pollution and resource taxes are almost non-existing.

Figure 43: Environmental taxes in the EU27, 2020[201]



The 2019 European Green Deal underlines that well-designed tax reforms can boost economic growth and resilience, foster a fairer society, and promote a just transition. Tax reforms can contribute to this by sending the right price signals and incentives to economic players. The Green Deal creates the context for broad-based tax reforms, the removal of fossil-fuel subsidies, and a shift in the tax burden from labour to pollution. It achieves this while simultaneously taking account of social considerations[202]. The Green Deal promotes the 'polluter pays principle' (PPP)[203], which stipulates that polluters should bear the cost of measures to prevent, control and remedy pollution. The polluter-pay principle is facilitated by the European Commission's Technical Support Instrument (TSI) project on greening taxes[204]. According to a Commission's study on Green taxation and other economic instruments (2021) Ireland could introduce an intensive agriculture tax and a waste water pollution taxes to further address particular areas of environmental concern[205].

[199] Interactive Data Platform at www.climatebonds.net. Further information on Climate Bonds Taxonomy: https://www.climatebonds.net/standard/taxonomy

[200] Climate Bonds Initiative, 2022.

[201] Eurostat, Environmental taxes accounts (env_eta).

[202] COM (2019/640 final), p.17.

[203] Enshrined in Article 191(2) of the Treaty on the Functioning of the European Union: 'Union policy on the environment (…) shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay'.

[204] European Commission, Greening taxes- applying polluter pays principle in practice

[205] European Commission, Green taxation and other economic instruments, 2021.

Environmentally-harmful subsidies

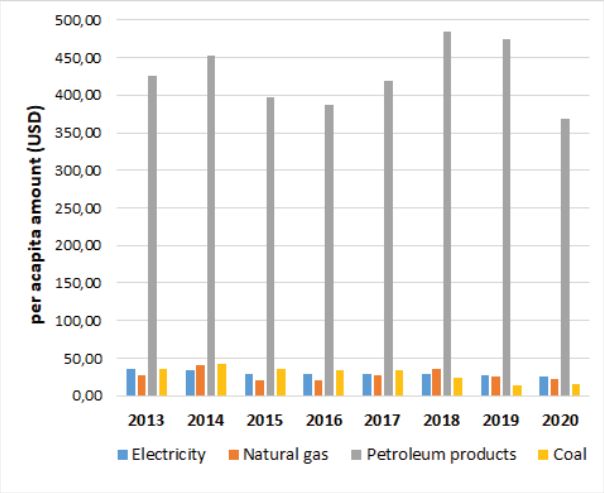
Addressing and removing environmentally-harmful subsidies (EHS) is a further step towards wider fiscal reforms[206].

Fossil fuel subsidies are costly for public budgets and adversely impact the achievement of the Green Deal objectives. In many cases they also go against incentives for green investments not contributing to levelling the playing field. Fossil fuel subsidies vary around EUR 55 billion in the EU since 2015. They rose by 4% between 2015 and 2019, however some countries, such as Latvia, Lithuania Sweden, Greece or Ireland, managed to decrease subsidies for fossil fuels. In the EU, subsidies on petroleum products, in sectors such as transport and agriculture, kept on growing over this period, whereas subsidies on coal and lignite decreased, largely owing to diminishing role of solid fuels in electricity generation.

As a share of GDP, fossil fuel subsidies ranged from 1.2% in Hungary to less than 0.1% in Malta in 2019 (being 0.4% on EU average). In 2019 For Ireland, the total fossil fuel subsidies amounted to EUR 1.5 billion, representing 0.44 % of the GDP. Ireland allocates more than the EU average on fossil-fuel subsidies — and higher than renewable-energy subsidies[207].

In 2020, the EU27's total amount of fossil fuel subsidies decreased to EUR 52 billion (due to falling consumption trends amid the COVID-19-related restrictions) which, without Member State actions, are likely to rebound as economic activity picks up from 2020[208]. Further information regarding environmental harmful subsidies in Ireland is shown below.

Figure 44: Trends in natural gas, petroleum products, electricy and coal subsidies in Ireland[209]



% GDP	2013	2014	2015	2016	2017	2018	2019	2020
Electricity	0,07	0,06	0,05	0,04	0,04	0,04	0,03	0,03
Natural gas	0,05	0,07	0,03	0,03	0,04	0,05	0,03	0,03
Petroleum products	0,82	0,81	0,63	0,61	0,59	0,61	0,58	0,43
Coal	0,07	0,08	0,06	0,05	0,05	0,03	0,02	0,02

Fossil fuel subsidies remain significant in Ireland and have in fact been rising over the past decade. In 2018, peat production and consumption remained subsidised and other subsidies and exceptions existed for oil, natural gas and coal. Diesel is still taxed at a lower rate. The different tax treatment of diesel and gasoline for road use is beginning to be addressed with a 1% vehicle registration tax surcharge for diesel engine passenger vehicles registered in Ireland from 1 January 2019. In addition, fiscal measures are being extended in 2019 to support the purchase of electric, hybrid and plug-in hybrid vehicles.

Green budgeting practices

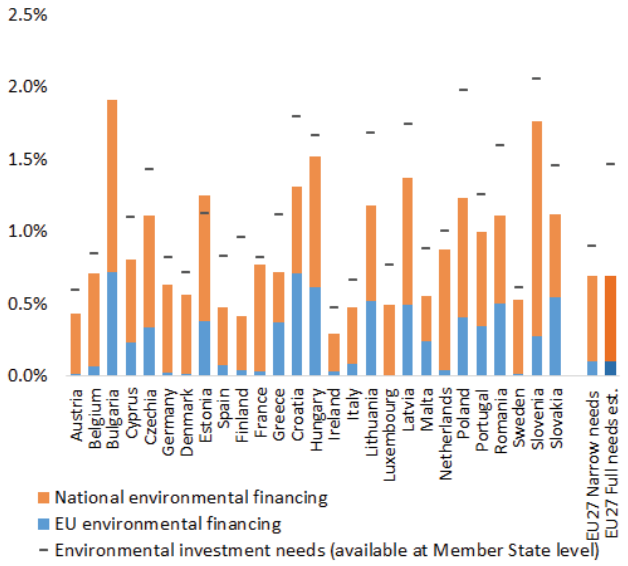
Green budgeting[210] encompasses various climate and environmental tagging and tracking practices in budgets and some EU Member states already use green budgeting elements[211]. Green budgeting helps identify

[206] European Commission, Study on assessing th environmental fiscal reform potential for the EU 28, 2016.
[207] European Court of Auditors, Energy taxation, carbon pricing and energy subsidies, 2022.
[208] See table on EU FFS data in 2019 which is based on (for info) COM(2021) 950 and Annex.

[209] OECD, Fossil Fuel Subsidy Tracker.
[210] European Commission, Technical guidance on sustainability proofing for the InvestEU Fund.
[211] European Commission, Green Budgeting Practices in the EU: A First Review, 2021. and OECD, Public Governance Directorate, Climate Change and Long-term Fiscal Sustainability, Working Paper, February 2021. Climate Change and Long-term Fiscal Sustainability (oecd.org)

and track green expenditure and green revenues to increase transparency on the environmental implications of budgetary policies, improving policy coherence and supporting green policies (including climate and environmental objectives)[212].

EU climate proofing and sustainability proofing guidance have also been developed, as tools to assess project eligibility and compliance with environmental legislation and criteria.[213] The EU Commission established a green budgeting reference framework[214] and launched a technical support flagship (TSI) on green budgeting in 2021 to assist Member States in developing or further developing national green budgeting frameworks to reap the benefits for policy coherence and for the green transition. Ireland participates in the EU Commission's green budgeting TSI started in 2021.



Overall financing compared to the needs

The overall environmental financing for investments is estimated to have reached 0.6-0.7% of GDP in the 2014-2020 period in the European Union, taking into account major EU funds and national financing. This ranged from 0.3% (Ireland) to 1.91% (Bulgaria), linked to the level of individual environmental challenges in Member States. The overall EU environmental investment needs in the 2021-2027 period are estimated to range from 0.9-1.5% of the projected GDP (2021-2027), suggesting a potential environmental financing gap of 0.6-0.8% of GDP (EU level), unchanged financing patterns assumed[215].

Figure 45: Total environmental financing baseline (2014-2020) and estimated needs (2020-2030) in the EU27 (% of GDP)[216]

Ireland's overall environmental financing for investments is estimated to have been 0.3% of GDP in 2014-2020, mostly coming from national sources. The country's environmental investment needs in 2021-2027 are found to be over 0.48% of GDP (including needs with country-level breakdown available), suggesting a potential environmental financing gap of at least 0.18% of the GDP, that is likely to be higher when also accounting for need currently estimated at EU-level only (e.g. water protection, circularity, biodiversity strategy etc.).

In the 2019 EIR, Ireland had no priority actions for environmental financing. However, there is room for improvement in the next years.

2022 priority actions

- 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.

[212] European Commission, European Commission Green Budgeting Reference Framework.
[213] European Commission, Technical guidance on sustainability proofing for the InvestEU Fund.
[214] European Commission, Green Budgeting Reference Framework, based on the review of the OECD Paris Collaborative on Green Budgeting initiative, 2017.
[215] Source: DG Environment data analysis. EU financing sources covered: ESI Funds (ERDF, CF, ESF, YEI, EAFRD, EMFF), Horizon 2020, LIFE, EFSI (EU amount), EIB loans. National financing: total national environmental protection capital expenditure (investments) - source: Eurostat EPEA dataset. Cut-off date for data: end 2021. N.B. The total financing may be higher, in particular through further indirect investments, requiring further analysis in the future.
[216] Eurostat, ESI Funds Open Data, 2021.

6. Environmental governance

Information, public participation and access to justice

Citizens can more effectively protect the environment if they can rely on the three 'pillars' of the Aarhus Convention:
(i) access to information;
(ii) public participation in decision making;
(iii) access to justice in environmental matters.

It is of crucial importance to public authorities, the public and businesses that environmental information is shared efficiently and effectively217. Public participation allows authorities to make decisions that take public concerns into account. Access to justice is a set of guarantees that allows citizens and NGOs to use national courts to protect the environment218. It includes the right to bring legal challenges ('legal standing')[219].

Environmental information

Ireland's implementation of the INSPIRE Directive has been bad. Its performance has been reviewed based on the country's 2021 country fiche[220]. Ireland's progress on data identification and documentation has been slow , and the accessibility of spatial data sets is bad. More efforts are needed to:

- make the data more widely accessible, and
- prioritise environmental datasets in implementation, especially those identified as high-value spatial datasets for implementing environmental legislation[221].

Table 4: Country dashboard on the implementation of the INSPIRE Directive, 2016-2020[222]

	2016	2020
Effective coordination and data sharing		
Ensure effective coordination	■	■
Data sharing without obstacle	■	■
INSPIRE performance indicators		
i. Conformity of metadata	■	■
ii. Conformity of spatial data sets[223]	■	■
iii. Accessibility of spatial data sets through view and download services	■	■
iv. Conformity of network services	■	■

Legend

■ Implementation of this provision is well advanced or (nearly) completed. Outstanding issues are minor and can be addressed easily. Percentage: >89%

■ Implementation of this provision has started and made some or substantial progress but is still not close to be complete. Percentage: 31–89%.

■ Implementation of this provision is falling significantly behind. Serious efforts are necessary to close implementation gap. Percentage: <31%.

Public participation

The EIA Portal is the central portal for information on EIA projects. It contains all the relevant information related to an application for development consent. However, it does not provide a means to engage with a particular application but rather a conduit to the relevant competent authority website for further information and methods to make submissions/observations. There is currently no strategic environmental assessment (SEA) portal. However, developing an SEA Portal is part of the Ireland's current SEA Action Plan.

There is a lack of data available on the level of public participation in decision making processes including

217 The Aarhus Convention, the Access to Environmental Information Directive (Directive 2003/4/EC) and the INSPIRE Directive(Directive 2007/2/EC) together create a legal foundation for the sharing of environmental information between public authorities and with the public. This EIR focuses on the INSPIRE Directive's implementation.

218 These guarantees are explained in the Commission Notice on access to justice in environmental matters, OJL 275, 18.8.2017 and a related Citizen's Guide.

219 This EIR focuses on the means implemented by Member States to guarantee rights of access to justice, legal standing and to overcome other major barriers to bringing cases on nature and air pollution.

220 https://inspire.ec.europa.eu/INSPIRE-in-your-Country/IE.

221 European Commission, List of high value spatial data sets.

222 INSPIRE knowledge base.

223 The deadlines for implementation of the spatial data interoperability were in 2016 still in the future: 23/11/2017 for Annex I data and 21/10/2020 for Annex II and III data. It must be also considered that this conformity indicator will in many cases never reach 100% conformity as majority of the countries provide as-is-data sets in addition to the INSPIRE harmonised data sets.

authorisations linked to EIA Directive 2011/92/EU and SEA Directive 2001/42/EC. The public participation in the environmental impact assessment procedures is difficult to assess in the absence of public participation monitoring. Nonetheless, progress has been made in developing key standalone resources for SEA[224].

There is a lack of evidence of public participation, which makes it difficult to confirm whether public participation in EIA procedures has declined.

As Ireland was very late in transposing Directive 2014/52/EU on environmental impact assessments, the Commission has not yet assessed the correctness of the transposition of the legislation adopted by Ireland. Concerns have also been raised through an infringement procedure initiated by the Commission about the failure to carry out environmental impact assessments for peat extraction activities despite the large number of projects that fall into this category in Ireland.

Access to justice

For environmental NGOs to have standing in environmental cases, they have to meet some conditions as regards their legal status and operation, e.g. their aims must be related to promoting the environment and they must have pursued that objective over the previous 12 months. Both primary and secondary legislation can be challenged by way of judicial review. Where primary legislation is challenged, the reliefs will be declaratory in nature. A party only has locus standi (i.e. the right or capacity to bring an action or to appear in a court) to challenge the constitutionality of a statutory provision if they prove an interest.

As the Department responsible nationally for the Aarhus Convention, the Department of the Environment, Climate and Communications provides general information on access to justice[225]. The Citizens' Information website also provides general information on the Aarhus Convention[226] and specific information about planning/environmental judicial review[227]. There is some information on access to justice, usually in the official language of the country only, maintained by the government, and it needs to be searched for.

The costs of environmental court procedures represent a very significant obstacle to accessing justice, even fora high-income individual or organisation. Own costs in complex cases are not unknown to exceed EUR 500 000 Euros[228]. The Commission remains concerned about the high costs of environmental litigation and the lack of clarity as to what costs environmental litigants are likely to face from the outset. The Commission has opened an infringement procedure on this matter and adressed a letter of formal notice to Ireland under Article 258 of the Treaty on the Functioning of the European Union.For several years, Ireland has promised to clarify the rules on costs for access to justice through a consolidating Aarhus Bill, but this has not uet materialized. Instead, recent national court judgments have created confusion about what costs fall under the cost protection rule. Moreover, proposals in a Housing Bill appear to aim to further restrict access to environmental justice. Since 2019, access to environmental justice has not improved. Furthermore, environmental NGOs have been openly criticised by government ministers for bringing cases which challenge certain developments and some lawyers acting for environmental litigants have faced strategic lawsuits against public participation (SLAPP) suits.

In the 2019 EIR, priority actions were addressed to Ireland on access to justice, in particular, to remove the cost barriers and to better inform the public about their rights. There has been no progress on either of these two aspects.

2022 priority actions

- Improve access to spatial data and services by forming stronger linkages between the Federal INSPIRE website and regional portals, identify and document all spatial datasets required for implementating environmental law[229], and at least make the data and documentation accessible "as is" to other public authorities and the public through the digital services as set out in the INSPIRE Directive.

[224] The mentioned resources on SEA are: (i) EPA SEA WebGIS Search and Reporting tool, (ii) EPA Inventory of Spatial Information Sources ; (iii) EPA-funded SEA Environmental Sensitivity Mapping (ESM) webtool, (iv) the Interactive map of the Office of the Planning Regulator displaying details of live public consultations on statutory land use plans (https://gis.epa.ie/EPAMaps/SEA); (v) management of an SEA activity statistics portal; and (vi) the Public Participation and Performance Criteria in Strategic Environmental Assessment: The Way Forward to Advancing Practice (SEAWAY), co-founded by EPA and the Office of the Planning Regulator entitled. This is a 24-month project that will help to inform the development of an SEA portal.

[225] https://www.gov.ie/en/publication/b3b1a-aarhus-convention/#access-to-justice.

[226] https://www.citizensinformation.ie/en/environment/environment_and_the_law/aarhus_convention.html.

[227] https://www.citizensinformation.ie/en/environment/buildings_and_structures/judicial_review_in_planning_and_environmental_matters.html.

[228] Case C-470/16 – North East Pylons.

[229] European Commission, INSPIRE.

- Make significant improvements to ensure that high costs and the lack of clarity about those costs in advance of any legal action do not hinder the effective access to justice in environmental matters. It is recommended that Ireland draw up an action plan to address problems with prohibitively expensive judicial procedures in the environmental field.
- Better inform the public about their access to justice rights, in particular by referring to a range of resources, such as judicial and administrative portals, and to the Commission eJustice fact sheets on access to justice in environmental matters[174].
- Ensure that abusive SLAPP suits designed to deter legitimate environmental access to justice are identified and prevented via the appropriate means, e.g. via a fast track complaints mechanism.
    - Deliver an SEA portal to co-ordinate information on plans and programmes and consider whether it would be feasible to monitor the level of public participation in the EIA and SEA processes.

Compliance assurance

Environmental compliance assurance covers all the work undertaken by public authorities to ensure that industries, farmers and others fulfil their obligations to protect water, air and nature, and manage waste[230]. It includes support measures provided by the authorities such as:
(i) compliance promotion[231];
(ii) inspections and other checks that they carry out, i.e. compliance monitoring[232];
(iii) the steps that they take to stop breaches, impose sanctions and require damage to be remedied, i.e. enforcement[233].
Citizen science and complaints enable authorities to focus their efforts better. Environmental liability[234] ensures that the polluter pays to remedy any damage.

[230] The concept is explained in detail in the Communication on 'EU actions to improve environmental compliance and governance' COM(2018) 10 and the related Commission Staff Working Document, SWD(2018)10.
[231] This EIR focuses on the help given to farmers to comply with nature legislation and nitrates legislation.
[232]This EIR focuses on inspections of major industrial installations.
[233] This EIR focuses on the availability of enforcement data and coordination between authorities to tackle environmental crime.
[234] The Environmental Liability Directive, 2004/35, creates the framework.

Citizen science and complaints enable authorities to focus their efforts better. Environmental liability[235] ensures tat the polluter pays to remedy any damage. Compliance promotion and monitoring

There would appear to be strong, co-ordinated interaction between relevant stakeholders to promote compliance with the Nature and Nitrates Directives. There is improved co-operation, co-ordination and information available to support farmers and others in implementating these Directives. Teagasc and dairy industry representatives work as part of the ASSAP to advise farmers in risk catchment areas. The local authority waters programme (LAWPRO) also works with ASSAP to advise farmers and improve the implementation of the Nitrates Directive. There are many promotional programmes focused on biodiversity, including the national pollinator plan and Dragon Fly Ireland, citizen-science initiatives and the National Biodiversity Data Centre

The EPA is the responsible body for implementating and enforcing the IED in Ireland and have a robust system in place for compliance monitoring[236]. The EPA carries out routine inspections. Reports are completed and made available within a short time frame following the site visits. Any observations about detected non-compliance are set out in the reports.

Complaint handling and citizen science

Information about making an environmental complaint is readily available online whether through citizens information, local authorities, waste enforcement regional lead authorities (WERLA), or the EPA. The EPA has a specific phone line for complaints and an online app[237]. Information on the extent and level of complaints to the EPA and local authorities are summarised and reported on by both the EPA and local authorities as part of their annual reporting.

There are many citizen science initiatives including Citizen Science Ireland[238], LAWPRO[239] water quality monitoring, Explore Your Shore[240] and the Dragonfly

[235] The Environmental Liability Directive, 2004/35, creates the framework.
[236] https://www.epa.ie/our-services/compliance--enforcement/whats-happening/access-to-epa-information-on-compliance-and-enforcement/
[237] https://www.epa.ie/our-services/compliance--enforcement/whats-happening/make-an-environmental-complaint/
[238] http://citizen-science.ie/
[239] https://lawaters.ie/
[240] https://exploreyourshore.ie/

Ireland project[241]. Theseall promote public participation in the monitoring and collection of data. However, while there has been an increase in the promotion and awareness of citizen-science initiatives and the value thereof in the context of biodiversity, it is not clear from the information available whether this information is then collected and relied upon as a basis for investigations or complaints.

Enforcement

The EPA, local authorities, WERLA[242] and the Transfrontier Shipment office[243] publish statistics on complaints, prosecutions and enforcement. The NPWS is the authority responsible for combatting environmental crimes related to birds and habitats. The NPWS in consultation with the Irish Police (Gardai) recently launched a protocol to co-ordinate a joint collaboration, investigation and response approach in relation to environmental crime regarding birds and habitats[244]. However, as there is no lead regulator/authority and the enforcement can be complex/multi-faceted, it can be difficult to determine where responsibility/enforcement obligations lie and how investigations are co-ordinated and managed. There seems to not be sufficient and easily available online information on the co-ordination and co-operation between state agencies on environmental damages and crime. Additional information was provided by stakeholders, noting the role of Gardai (including NIECE[245]) and the co-operation between them and other state bodies including the National Waste Enforcement Steering Committee. However, the available information on procedures for and effectiveness of co-ordination and co-operation is limited at this stage.

Environmental Liability Directive

No Environmental Liability Directive (ELD) Registry is available online. However, the EPA confirmed as part of the stakeholder consultation that an internal register is maintained by the EPA. In the absence of publicly available information, it is unclear whether there have been any ELD cases.

2022 priority action

- Make information available on the enforcement of environmental law, including on ELD cases and on formal arrangements for cooperation among bodies responsible for combatting environmental crime.

Effectiveness of environmental administrations

Those involved in implementing environmental legislation at EU, national, regional and local levels need to have the knowledge, tools and capacity to ensure that the legislation and the governance of the enforcement process bring about the intended benefits.

Administrative capacity and quality

Central, regional and local administrations must be able to carry out their own tasks and work effectively with each other within a system of multi-level governance.

Much of the responsibility for compliance and enforcement lies with 31 small local authorities. The Environmental Protection Agency (EPA) is responsible for licensing and controlling major industrial, waste facilities, wastewater discharges, the contained use and controlled release of GMOs, dumping at sea activities, the EU Emissions Trading Scheme and sources of ionising radiation. In addition, the EPA co-ordinates environmental monitoring, and compiles and reports national data related to GHG emissions, air pollutants and waste statistics. Since 2003, the EPA has included an Office of Environmental Enforcement. One of the duties of the Office of Environmental Enforcement is to encourage local authorities to better enforce waste rules. Since 2014, Irish Water has responsibility over most water services (both drinking water and waste water) in the country (before this, 34 local authorities were responsible). This excludes private water schemes, mainly in rural areas. The EPA regulates permits controlling discharges to water.

Examples of electronic services available through the EPA include:

- online applications for permits, including under the EID have been introduced since 2017 with much of the administrative data for processing, enforcement and EU reporting purposes captured electronically;
- an online Geo tool to provide nature protection data for projects in special protection areas. The tool was

[241] https://biodiversityireland.ie/surveys/dragonfly-ireland/
[242] http://www.werla.ie/
[243] https://www.dublincity.ie/residential/environment/national-tfs-office
[244] https://www.gov.ie/en/press-release/57bea-launch-of-joint-protocol-between-national-parks-wildlife-service-an-garda-siochana-on-wildlife-crime/
[245] Network for Ireland's Environmental Compliance and Enforcement (NIECE) is a network of organisations and individuals involved in the enforcement of environmental legislation, environmental engagement and promotion.

developed by the EPA, in partnership with the National Parks and Wildlife Service (NPWS) of the Department of Housing, Local Government and Heritage;
- public databases of permits, which provide full access to all documents (including documents submitted by third parties);
- information on enforcement activities (site visits, enforcement notices, etc.).

Coordination and integration

As mentioned in the 2017 EIR, the transposition of the revised EEIA Directive provides an opportunity for countries to streamline their regulatory framework on environmental assessments. Despite a delay in full transposition, Ireland has now transposed the key elements of the revised Directive.

The Commission encourages the streamlining of the environmental assessments to reduce duplication and avoid overlaps in environmental assessments for projects. Moreover, streamlining helps to reduce unnecessary administrative burden. It also accelerates decision making, provided it is done without compromising the quality of the environmental assessment procedure. Ireland has started to coordinate its environmental assessments under the EIA and Habitats Directives.

Environmental impact assessments are an integral part of the planning and industrial permitting system in Ireland, which is under the responsibility of the Department of Housing, Local Government and Heritage, with the EPA regulating the industrial permitting system. While most planning decisions are made by local authorities, the national planning authority, An Bord Pleanála, is responsible for approving applications where an EIA is required (including where the project developer is a state authority). The purpose behind involving An Bord Pleanála is to ensure greater rigour and consistency. Environmental enforcement bodies include the EPA and Irish Water, and the NPWS. The shared competency environmental assessment roles undertaken by the EPA include Appropriate Assessments (AA), EIA and SEA. An Bord Pleanála is required by law to consult a number of environmental bodies for EIA decisions. These bodies known as statutory consultees) include the EPA, Irish Water, and the NPWS. There appears to be good inter-service cooperation between these bodies.

Strategic environmental assessments appear to be relatively well used. Although the government ministry responsible for policy on SEAs – the Department of Housing, Local Government and Heritage- – does not have detailed statistics on its website, the EPA provides data on the notifications of SEAs it receives annually.

Reforms through the Commission's Technical Support Instrument (TSI)

The Commission supports environmental implementation and the green transition, not only through the EU financing programs, but also granting technical assistance such as the Technical Support Instrument (TSI).

The Commission supported two environment-related projects under the TSI 2021 in Ireland: one to strengthen environmental considerations in public investment management and the other on the reform of marine management.

TAIEX EIR peer to peer

The Commission launched the TAIEX EIR Peer-to-Peer tool[246] to facilitate peer-to-peer learning between Member State's environmental authorities.

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Ireland participated in four multi-country workshops on circular economy for cities (2019), sustainable urban development (2019), ammonia reducing technology and measures (2021) and zero pollution (2022).

[246] TAIEX - Environmental Implementation Review - PEER 2 PEER - Environment - European Commission (europa.eu)