EUROPEAN
COMMISSION

Brussels, 3.2.2017
SWD(2017) 60 final

COMMISSION STAFF WORKING DOCUMENT

The EU 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

The EU Environmental Implementation Review: Common Challenges and how to combine efforts to deliver better results

{COM(2017) 63 final}
{SWD(2017) 33 - 59 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

More information on the European Union is available on the internet (http://europa.eu).

Table of Content

EXECUTIVE SUMMARY 4

1. TURNING THE EU INTO A CIRCULAR, RESOURCE-EFFICIENT, GREEN AND COMPETITIVE LOW-CARBON ECONOMY 5

Developing a circular economy and improving resource efficiency 5
Waste management 7

2. PROTECTING, CONSERVING AND ENHANCING NATURAL CAPITAL 10

Nature and Biodiversity 10
Estimating Natural Capital 12
Green Infrastructure 13
Soil protection 13
Marine protection 14

3. ENSURING CITIZENS' HEALTH AND QUALITY OF LIFE 16

Air quality 16
Noise 17
Water quality and management 17
Enhancing the sustainability of cities 20
International agreements 21

PART II: ENABLING FRAMEWORK: IMPLEMENTATION TOOLS 22

4. MARKET BASED INSTRUMENTS AND INVESTMENT 22

Green taxation and environmentally harmful subsidies 22
Green Public Procurement 23
Investments: the contribution of EU funds 23

5. EFFECTIVE GOVERNANCE AND KNOWLEDGE 26

Effective governance within central, regional and local government 26
Compliance assurance 27
Public participation and access to justice 29
Access to information, knowledge and evidence 30

Executive summary

About the Environmental Implementation Review

In May 2016, the Commission launched the Environmental Implementation Review (EIR), a two-year cycle of analysis, dialogue and collaboration to improve the implementation of existing EU environmental policy and legislation[1]. As a first step, the Commission drafted 28 reports describing the main challenges and opportunities on environmental implementation for each Member State. These reports are meant to stimulate a positive debate both on shared environmental challenges for the EU, as well as on the most effective ways to address the key implementation gaps. The reports rely on the detailed sectoral implementation reports collected or issued by the Commission under specific environmental legislation as well as the 2015 State of the Environment Report and other reports by the European Environment Agency. These reports will not replace the specific instruments to ensure compliance with the EU legal obligations.

The reports will broadly follow the outline of the 7th Environmental Action Programme[2] and refer to the 2030 Agenda for Sustainable development and related Sustainable Development Goals (SDGs)[3] to the extent to which they reflect the existing obligations and policy objectives of EU environmental law[4].

The main challenges have been selected by taking into account factors such as the importance or the gravity of the environmental implementation issue in the light of the impact on the quality of life of the citizens, the distance to target, and financial implications.

The reports accompany the Communication "*The EU Environmental Implementation Review 2016: Common challenges and how to combine efforts to deliver better results*", which identifies challenges that are common to several Member States, provides preliminary conclusions on possible root causes of implementation gaps and proposes joint actions to deliver better results. It also groups in its Annex the actions proposed in each country report to improve implementation at national level.

General profile

The Republic of Ireland has made significant progress across a range of environmental policy areas and has taken important steps towards a circular economy. Besides national strategies and plans like those on resource efficiency, jobs and green procurement there are several programmes focussing mainly on SMEs (Green Offer Programme, Green Business Programme, SMILE) that aim at supporting the development of the green economy.

Main Challenges

The main challenges Ireland faces with regard to implementing EU environmental policy and law are:

- The need to complete the Natura 2000 designation process, with clearly defined conservation objectives, for terrestrial and marine sites.
- Protecting the raised and blanket bogs.
- Maintaining the important investments required for water services, given the urgent need to invest in water infrastructure.

Main Opportunities

Ireland could perform better on issues where a sound knowledge base and good practices already exist. This applies in particular to:

- Making better use of the significant potential in nature for tourism by better managing and protecting natural sites.

Points of excellence

Where Ireland leads in environmental implementation, it could share innovative approaches more widely among other countries. Concrete examples include:

- To comply with a ruling by the Court of Justice, Ireland implemented a major reform of its waste sector, closed illegal landfills and financed costly clean-up and remediation works. This exercise has transformed the waste sector in Ireland, providing useful lessons for other countries. Over ten years ago, Ireland established the Network for Ireland's Environmental Compliance and Enforcement (NIECE) to ensure an effective, national approach to enforcing environmental legislation.
- Ireland has taken a proactive approach towards managing complaints in the environmental sector, in cooperation with the Commission.

[1] Communication "Delivering the benefits of EU environmental policies through a regular Environmental Implementation Review" (COM/2016/ 316 final).
[2] Decision No. 1386/2013/EU of 20 November 2013 on a General Union Environmental Action Programme to 2020 "Living well, within the limits of our planet".
[3] United Nations, 2015. The Sustainable Development Goals
[4] This EIR report does not cover climate change, chemicals and energy.

Part I: Thematic Areas

1. Turning the EU into a circular, resource-efficient, green and competitive low-carbon economy

Developing a circular economy and improving resource efficiency

The 2015 Circular Economy Package emphasizes the need to move towards a lifecycle-driven 'circular' economy, with a cascading use of resources and residual waste that is close to zero. This can be facilitated by the development of, and access to, innovative financial instruments and funding for eco-innovation.

SDG 8 invites countries to promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. SDG 9 highlights the need to build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation. SDG 12 encourages countries to achieve the sustainable management and efficient use of natural resources by 2030.

Measures towards a circular economy

Transforming our economies from linear to circular offers an opportunity to reinvent them and make them more sustainable and competitive. This will stimulate investments and bring both short and long-term benefits for the economy, environment and citizens alike[5].

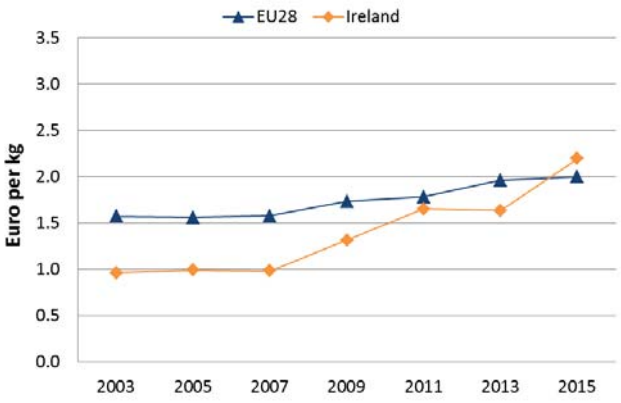
The Irish Government has identified several sectors which present opportunities for economic growth and job creation in the Green Economy Policy Statement on "Delivering Our Green Potential". These areas are renewable energy; energy efficiency and resource efficiency; green products and services; green financial services; agriculture, marine and forestry; tourism; waste management; water and wastewater management; low carbon transport; research, development and innovation.

An important policy development related to the circular economy is the adoption of a national strategy on resource efficiency in 2014. The strategy 'Towards a resource efficient Ireland' incorporates the fourth National Waste Prevention Programme and sets out a framework for delivering the vision of 'living better, using less'.

The 2015 Action Plan for Jobs sets out a number of other actions aimed at supporting the development of the green economy, developing a strategy and appropriate tools to communicate the performance of Ireland's Green Economy in order to encourage greater investment in the sector; and examining the potential to increase innovation in public procurement which could support green products and services.

Ireland is performing below average in the EU as regards resource productivity[6] (how efficiently the economy uses material resources to produce wealth), with 1.88 EUR/kg (EU average is 2.0) in 2015. Figure 1 depicts a significant increase in resource productivity since 2007. Resource productivity is lower in countries with heavy service-based economies, like professional services in Ireland.

Figure 1: Resource productivity 2003-15[7]



SMEs and resource efficiency

Ireland's Small and Medium-sized enterprises (SMEs) sector was one of the hardest hit by the crisis in the EU. Since 2011, there has been significant and sustained recovery. However, employment and value added are not yet back to pre-crisis levels.

In general, Ireland proposes a wide range of measures to support business in improving its resource efficiency, ranging from voluntary measures to regulatory measures. An analysis[8] shows that Ireland offers nine out of ten support activities assessed in the study so that it belongs to the ten best performing member states.

[5] European Commission, 2015. Proposed Circular Economy Package

[6] Resource productivity is defined as the ratio between gross domestic product (GDP) and domestic material consumption (DMC).

[7] Eurostat, Resource productivity, accessed October 2016

[8] European Commission, 2015. A framework for Member States to support business in improving its resource efficiency, p. 59

Three measures could be mentioned as successful examples:

The Environmental Protection Agency (EPA) has been active in supporting resource efficiency investments and projects. Its Green Business programme provides free resource efficiency audits and recommendations to SMEs. The EPA also operates the Green Enterprise grant scheme (originally known as the Cleaner Greener Production Programme, rebranded in 2012), which supports organisations and companies in demonstration-type projects aimed at improving their environmental performance and minimising emissions through cleaner production methods. Since 2012, 41 Green Enterprise demonstration projects have been funded, valued at around EUR 1.9 million (EPA, 2014a).

Enterprise Ireland helps companies improve their environmental performance through its Green Offer programme. The programme includes a GreenStart scheme which offers grant support for SMEs to hire a consultant to undertake a short in-company assignment with a view to introducing environmental best practice systems and structures, achieving cost reduction targets and laying a foundation for future environmental improvement projects. Companies can also apply for funding towards the cost of undertaking a 'GreenPlus Assignment' aimed at developing a high level of environmental management capabilities, driving environmental efficiency and improving sustainability.

The Irish government provides support for Industrial Symbiosis through the "*SMILE Resource Exchange*"[9]. This support measure was launched locally in 2011 and nationally in 2014, and aims to encourage the exchange of resources between its members in order to save them money, reduce waste going to landfill and to develop new business opportunities. SMILE is a free service for companies. Potential exchanges are identified through regional networking events and an online exchange tool. SMILE is now available nationwide and operates more strongly in some regions of Ireland: Cork, Dublin, Clare, Limerick and Kerry. As of the second quarter of 2015, SMILE Resource Exchange has 1,232 members. In 2014, through SMILE 60 successful synergies were concluded, altogether helping to divert 357 tonnes of material from landfill with an estimated value of EUR 398,000.

In the Flash 426 Eurobarometer " SMEs, resource efficiency and green markets" it is shown that 65% of Ireland's SMEs have invested up to 5% of their annual turnover in their resource efficiency actions (EU28 average 50%), 37% of them are currently offering green products and services, 57% took measures to save energy (EU28 average 59%), 75% to minimise waste (EU28 average 60%), 44% to save water (EU28 average 44%), and 53% to save materials (EU28 average 54%). From a circular economy perspective, 68% took measures to recycle by reusing material or waste within the company, 22% to design products that are easier to maintain, repair or reuse and 32% were able to sell their scrap material to another company.

According to the Flash 426 Eurobarometer, the resource efficiency actions undertaken allowed the reduction of production costs in a 34% of the Irish SMEs.

The Flash Eurobarometer shows that 41% of the SMEs in Ireland have one or more full time employee working in a green job at least some of the time. Ireland has an average number of 1.4 full time green employees per SME[10].

Using the full potential of resource efficiency measures, there are cost savings possible: for only four SME sectors (food & beverages; energy, power & utilities; environmental technologies; construction) the savings that would strengthen their competitiveness could already amount to around EUR 187,000 million. About 5,600 new jobs could be created and about 16,000 jobs could be secured if all SMEs in the four sectors would fully use their potential for resource efficiency[11].

Recent research indicates national economic gains of EUR 1 billion for a modest national production efficiency of 2 % [12].

Eco-Innovation

Ireland ranks third in Europe in the Eco-Innovation Scoreboard, with a composite index of 134 relative to the EU-average index of 100 as shown in Figure 2. This represents a substantial improvement compared to 2013, when Ireland ranked 11th and was close to the EU average with a composite index of 95.4.

Several factors are driving the transition to a circular economy and the development of eco-innovation in Ireland. In terms of natural capital, Ireland has substantial and diverse renewable energy resources, raising the prospects for further innovation in the energy sector and future exports of clean energy. It is also rich in natural resources such as clean water, natural landscapes and biodiversity, which can underpin sustainable economic development and 'green' tourism (DJEI, 2012).

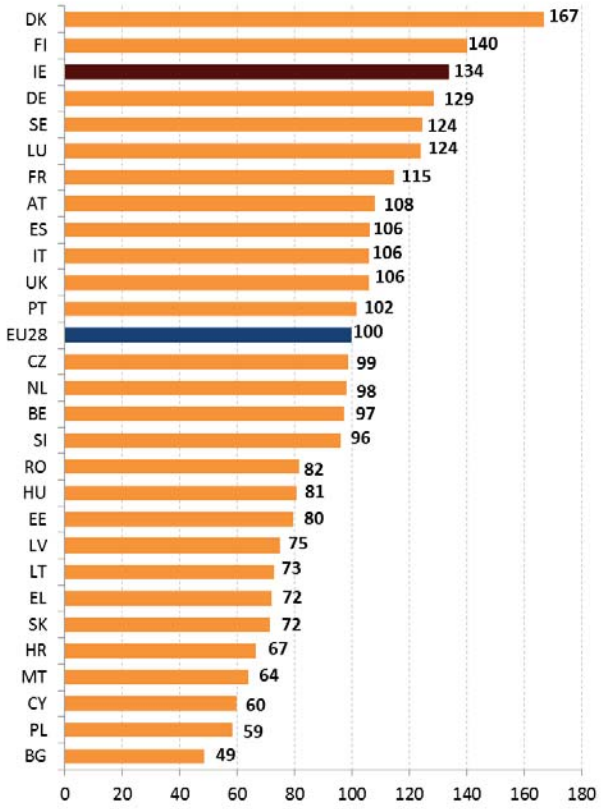
[9] SMILE Resource Exchange, 2016

[10] The Flash 426 Eurobarometer "SMEs, resource efficiency and green markets" defines "green job" as a job that directly deals with information, technologies, or materials that preserves or restores environmental quality. This requires specialised skills, knowledge, training, or experience (e.g. verifying compliance with environmental legislation, monitoring resource efficiency within the company, promoting and selling green products and services).

[11] Risk and Policy Analysts, 2015. Study on Assessing the Potential Cost Savings and Resource Savings of Investments in 4 SME sectors, p. 30 and 38

[12] Environmental Protection Agency, 2013. Roadmap for a National Resource Efficiency Plan for Ireland, p. 25

Figure 2: Eco-Innovation Index 2015 (EU=100)[13]



On the technological side, Ireland enjoys a strong R&D base for developing and testing green technologies, products and applications, as well as a comparative advantage in key enabling technologies such as engineering, ICT and biotechnology (DJEI[14], 2012). Ireland is home to numerous technology companies – large and small, indigenous and foreign-owned – as well as research institutes and facilities which can deliver R&D in areas related to eco-innovation (DCENR[15], 2015).

The policy environment has generally been conducive to eco-innovation. Ireland is committed to achieving EU targets on reducing greenhouse gas emissions, increasing energy efficiency and renewable energy, increasing re-use, recovery and recycling of waste, improving water quality, and conservation. In November 2012, the government announced its commitment to promote the Green Economy in a Communication entitled 'Delivering our Green Potential' (see EIO Country Report Ireland 2013). A Consultative Committee on the Green Economy was created with a view to identifying emerging opportunities in this area. More recent policy initiatives supporting eco-innovation and the circular economy include a national strategy on resource efficiency ('Towards a resource efficient Ireland'), an Energy Policy White Paper ('Ireland's Transition to a Low Carbon Energy Future'), an Offshore Renewable Energy Development Plan, and a new strategy for R&D, science and technology ('Innovation 2020'). These strategic documents will set the framework for policy actions related to eco-innovation and the circular economy in the forthcoming years.

In addition, the Government committed itself to Corporate Social Responsibility and its role in business led social, environmental and economic sustainability (National Plan on Corporate Social Responsibility[16]).

Waste management

Turning waste into a resource requires:

- Full implementation of Union waste legislation, which includes the waste hierarchy; the need to ensure separate collection of waste; the landfill diversion targets etc.
- Reducing per capita waste generation and waste generation in absolute terms.
- Limiting energy recovery to non-recyclable materials and phasing out landfilling of recyclable or recoverable waste.

SDG 12 invites countries to substantially reduce waste generation through prevention, reduction, recycling and reuse, by 2030.

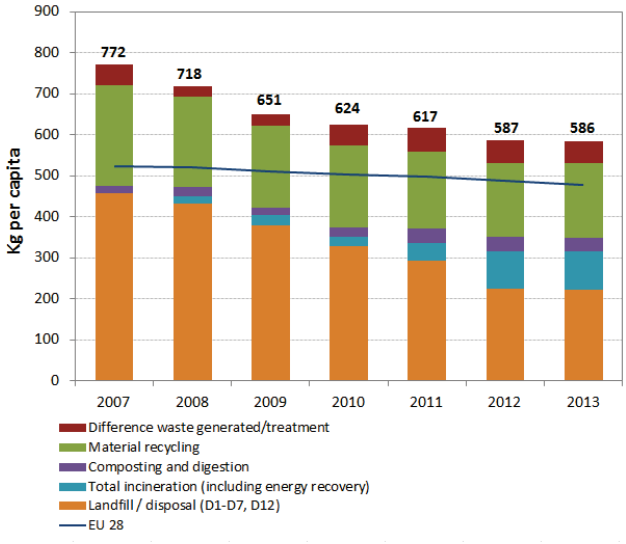
The EU's approach to waste management is based on the "waste hierarchy" which sets out an order of priority when shaping waste policy and managing waste at the operational level: prevention, (preparing for) reuse, recycling, recovery and, as the least preferred option, disposal (which includes landfilling and incineration without energy recovery).

The progress towards reaching recycling targets and the adoption of adequate WMP/WPP[17] should be the key items to measure the performance of Member States. This section focuses on management of municipal waste for which EU law sets mandatory recycling targets.

In 2013 (the last year for which data for IE is available) a reduction in municipal waste[18] generation continues to be observed in Ireland (Figure 3). However, it still remains higher than the EU average (586 kg/y/inhabitant compared to 474 kg in 2014). Figure 3 depicts the municipal waste by treatment in Ireland in terms of kg per capita, which shows also the existence of not treated waste.

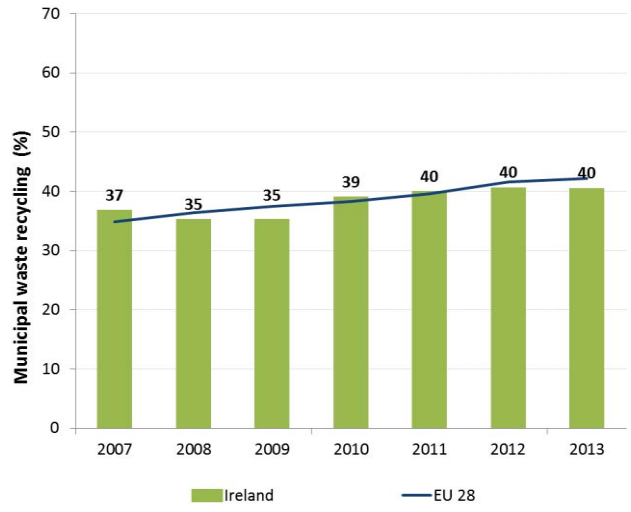
[13] Eco-innovation Observatory: Eco-Innovation scoreboard 2015
[14] Department of Jobs, Enterprise and Innovation
[15] Department of Communications, Energy & Natural Resources
[16] Department of Jobs, Enterprise and Innovation, 2014. National Plan on Corporate Social Responsibility
[17] Waste Management Plans/Waste Prevention Programmes
[18] Municipal waste consists of waste collected by or on behalf of municipal authorities, or directly by the private sector (business or private non-profit institutions) not on behalf of municipalities.

Figure 3: Municipal waste by treatment in Ireland 2007-13[19]



Nevertheless, impressive progress towards the targets has been made in recent years, although there is still a little way to go to achieve the 50% recycling target of the Waste Framework Directive by 2020 as shown in Figure 4.

Figure 4: Recycling rate of municipal waste 2007-13[20]



The high landfill levy and suite of regulations on household waste collection currently in place (as well as the current reforms being undertaken to strengthening the existing regulatory structure), have driven change and have potential to enable compliance with the current EU directive targets. In 2001 an Environment Fund was established. Revenues from levies on plastic shopping bags and the landfill of waste are paid into that fund and can be used mainly for assistance on waste related measures (general schemes or producer initiative to prevent/reduce waste, implementation on waste management plans).

Landfill rates in Ireland remain high (42%)[21]. It made use of the possibility to postpone by four year years the attainment of the 2016 35 % landfill diversion target. For biodegradable waste it achieved the landfill diversion target of 50% by 2013. In 2013, 589,000 tonnes of biodegradable municipal waste were going to landfill (being below the target 610,000 tonnes). Residual Waste sent to landfill experienced a considerable decline over the years 2011-13, driven by the recent increases in the cost. Figure 4 shows that for recycling (40% including composting) Ireland is on track to meet the recycling target for 2020 (50%)[22].

Caution is needed so that future investments in incineration (energy recovery) or in mechanical biological treatment (MBT) plants based on mixed waste input do not hinder Ireland from meeting the recycling target for 2020.

Despite good progress, the underlying causes for the remaining distance to EU waste targets are most likely the insufficient coverage of households by door-to-door separate collection of waste (i.e. some households not subscribed to any collection system) and insufficient fiscal incentives to move waste further up in the waste hierarchy (away from residual waste treatment towards prevention and recycling).

Full implementation of the existing legislation could create more than 6.100 jobs in Ireland and increase the annual turnover of the waste sector by over EUR 640 million. GHG emissions could be reduced by 2020 by between 1.8 (full implementation) and 3.1 Mt CO2 eq

[19] Eurostat, http://ec.europa.eu/eurostat/documents/2995521/7214320/8-22032016-AP-EN.pdf/eea3c8df-ce89-41e0-a958-5cc7290825c3,.

[20] Eurostat, Recycling rate of municipal waste, accessed October 2016. For Ireland, 2014 data were not available.

[21] Ireland secured four year derogation from the landfill directive targets, meaning that the target years are 2010, 2013 and 2016.

[22] Member States may choose a different method than the one used by ESTAT (and referred to in this report) to calculate their recycling rates and track compliance with the 2020 target of 50% recycling of municipal waste.

(optimised scenario) compared to their 2004 levels (2.7 to 4.7% of total 2004 emissions).

Suggested action

- Introduce new policies, including economic instruments, to promote prevention, make reuse and recycling more economically attractive
- Shift reusable and recyclable waste away from incineration by gradually phasing out subsidies to incineration or introducing an incineration tax
- Focus on the effectiveness of the separate collection obligation to increase recycling rates. Undertake future review of recent collection market reforms

2. Protecting, conserving and enhancing natural capital

Nature and Biodiversity

The EU Biodiversity Strategy aims to halt the loss of biodiversity in the EU by 2020, restore ecosystems and their services in so far as feasible, and step up efforts to avert global biodiversity loss. The EU Birds and Habitats Directives aim at achieving favourable conservation status of protected species and habitats.

SDG 14 requires countries to conserve and sustainably use the oceans, seas and marine resources, while SDG 15 requires countries to protect, restore and promote the sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

The 1992 EU Habitats Directive and the 1979 Birds Directive are the cornerstone of the European legislation aimed at the conservation of the EU's wildlife. Natura 2000, the largest coordinated network of protected areas in the world, is the key instrument to achieve and implement the Directives' objectives to ensure the long-term protection, conservation and survival of Europe's most valuable and threatened species and habitats and the ecosystems they underpin.

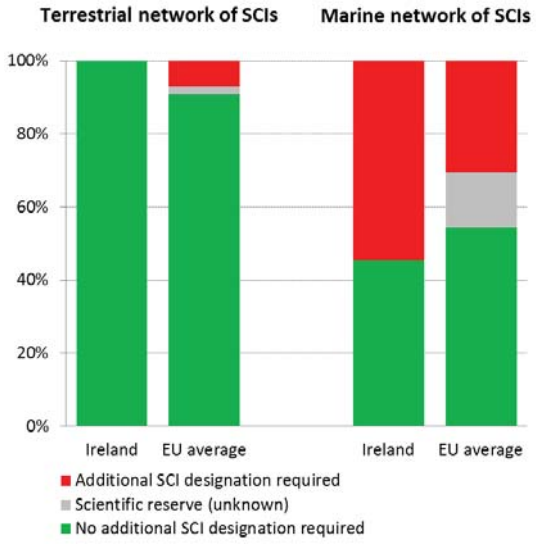
The adequate designation of protected sites as Special Ares of Conservation (SAC) under the Habitats Directive and as Special Protection Areas (SPA) under the Birds Directive is a key milestone towards meeting the objectives of the Directives. The results of Habitats Directive Article 17 and Birds Directive Article 12 reports and the progress towards adequate Sites of Community Importance (SCI)-SPA and SAC designation[23] both in land and at sea, should be the key items to measure the performance of Member States.

Ireland is entirely located in the Atlantic Biogeographical Region of the EU, with a marine territory several times larger than its terrestrial environment. Under the Habitats Directive it hosts 58 habitat types of Annex I, 14 of which are of priority status, including significant proportions of the EU resource of blanket and raised bogs, turloughs, machair. It also hosts 25 Annex II, 34 Annex IV and 19 Annex species, again including very significant contributions to overall EU populations for taxa such as Freshwater Pearl Mussel and several cetacean species. Ireland also hosts over 450 bird species and is particularly important in the EU context for seabirds and wetland species of the North-east Atlantic flyway. About 200 of these species are regular and for which the conservation status has been assessed, of which 34 are listed in Annex I, together with migratory species making a total of 80 species subject to SPA designation.

By early 2016, 13.13% of the national land area of Ireland is covered by Natura 2000 (EU average 18.1%), with Birds Directive SPAs covering 6.14% (EU average 12.3%) and Habitats Directive SCIs covering 10.19% (EU average 13.8%). There are 594 Natura 2000 sites in Ireland covering a total area of 19,455km².

Ireland was condemned by the EU court of justice for its failure to establish a complete list of SCIs under the Habitats Directive[24], although this is now considered complete for the terrestrial environment[25] (see Figure 5[26]).

Figure 5: Sufficiency assessment of SCI networks in Ireland based on the situation until December 2013 (%)[27]



[23] Sites of Community Importance (SCIs) are designated pursuant to the Habitats Directive whereas Special Areas of Protection (SPAs) are designated pursuant to the Birds Directive; figures of coverage do not add up due to the fact that some SCIs and SPAs overlap. Special Areas of Conservation (SACs) means a SCI designated by the Member States.

[24] Case C-67/99 - Commission v Ireland; ECLI:EU:C:2001:432

[25] For each Member State, the Commission, with assistance from the European Environment Agency Topic Centre for Biological Diversity, assesses whether the species and habitat types on Annexes I and II of the Habitats Directive, are sufficiently represented by the sites designated to date. This is expressed as a percentage of species and habitats for which further areas need to be designated in order to complete the network in that country. The current data, which were assessed in 2014-2015, reflect the situation up until December 2013.

[26] The percentages in Figure 5 refer to percentages of the total number of assessments (one assessment covering 1 species or 1 habitat in a given biographical region with the Member State); if a habitat type or a species occurs in more than 1 Biogeographic region within a given Member State, there will be as many individual assessments as there are Biogeographic regions with an occurrence of that species or habitat in this Member State.

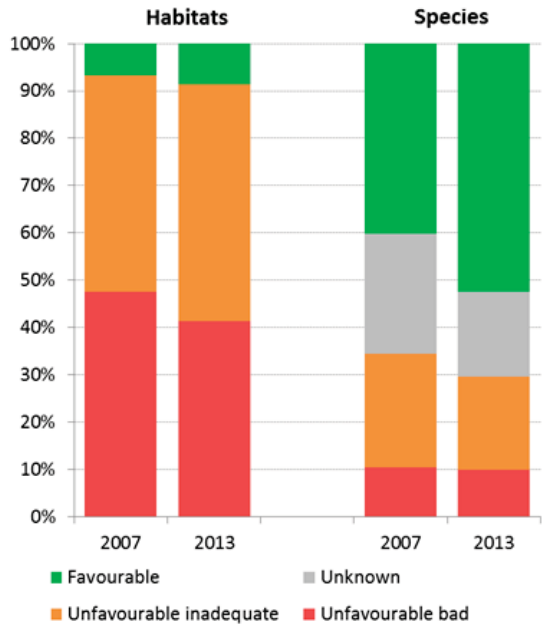
[27] European Commission, internal assessment.

Ireland was also condemned by the Court of Justice for failing to designate all the most suitable terrestrial territories as Special Protection Areas (SPAs) under the Birds Directive[28]. Whereas this appears to be largely addressed, not all SPAs have been formally subject to Irish statutory regulations. The Commission has also launched an investigation in relation to the completeness of the Natura 2000 network for the marine environment. Significant gaps remain in the marine SPA network and the completeness of the SCI marine proposal remains to be determined.

Member States had 6 years to designate Sites of Community Interest (SCIs) as Special Areas of Conservation (SACs) and establish the necessary conservation measures for the sites. There is an ongoing legal procedure against Ireland for its failure to make sufficient progress on this key objective. This concerns Ireland's failure to designate the majority of 423 SCIs as SACs within the six year deadline established by Article 4(4) of the Habitats Directive; define sites specific conservation objectives which underpin the establishment of targeted conservation measures; and put in place appropriate conservation measures, which correspond to the ecological requirements of the natural habitat types in Annex I and the species in Annex II present on the sites. By mid-2015 Ireland had designated no sites. There has been some recent progress and by end of May 2016 a total of 76 SACs had been designated by Ireland. Furthermore, the majority of sites still have only general conservation objectives and targeted conservation measures do not exist for many sites.

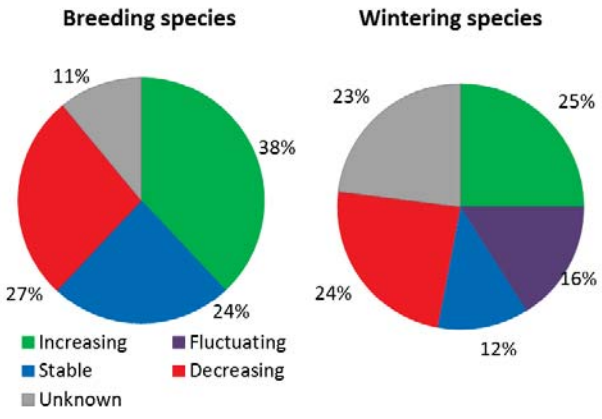
According to the latest report on the conservation status of habitats and species covered by the Habitats Directive[29], 9% of the habitats' biogeographic assessments were favourable in 2013 (EU 27: 16 %). Furthermore, 50% are considered to be unfavourable–inadequate[30] (EU27: 47%) and 41% are unfavourable – bad (EU27: 30%). As for the species, 52% of the assessments were favourable in 2013 (EU 27: 23%) 20% at unfavourable-inadequate (EU27: 42%) and 10% unfavourable-bad status (EU27: 18%). This is depicted in Figure 6[31] showing that the situation for protected habitats is worse than for protected species, with species-rich grasslands, peatlands (particularly raised bogs) and other wetlands most obviously in bad status.

Figure 6: Conservation status of habitats and species in Ireland in 2007/2013 (%)[32]



The status of aquatic species, including the Freshwater Pearl Mussel, the Salmon and other fresh-water fish species is bad. There are data gaps, particularly for marine species. With regard to bird species there are particular concerns about the large scale decline of breeding waders, with the Curlew now at risk of extinction from Ireland as a breeding species.

Figure 7: Short-term population trend of breeding and wintering bird species in Ireland in 2012 (%)[33]



[28] Case C-418/04 - Commission v Ireland; ECLI:EU:C:2007:780

[29] The core of the 'Article 17' report is the assessment of conservation status of the habitats and species targeted by the Habitats Directive.

[30] Conservation status is assessed using a standard methodology as being either 'favourable', 'unfavourable-inadequate' and 'unfavourable-bad', based on four parameters as defined in Article 1 of the Habitats Directive.

[31] Please note that a direct comparison between 2007 and 2013 data is complicated by the fact that Bulgaria and Romania were not covered by the 2007 reporting cycle, that the 'unknown' assessments have strongly diminished particularly for species, and that some reported changes are not genuine as they result from improved data / monitoring methods.

[32] These figures show the percentage of biogeographical assessments in each category of conservation status for habitats and species (one assessment covering 1 species or 1 habitat in a given biographical region with the Member State), respectively. The information is based on Article 17 of the Habitats Directive reporting - national summary of Ireland

According to the official report under Article 12 of the Birds Directive, 62% of the breeding species showed short-term increasing or stable population trends (37% for wintering species) as depicted in Figure 7.

A summary of the main reported threats to habitats and species shows that agriculture and natural system modifications represent the most significant threats. The main pressures on habitats are unsuitable grazing levels (undergrazing or overgrazing), pollution of freshwaters, drainage and cutting of peatlands and wetlands, invasive species and recreational pressures, including some building works.

Inadequate financial and human resources to support appropriate land management and conservation measures appears to be a major obstacle to achieve the objectives of the Nature Directives. Site specific conservation/management Plans or equivalent instruments for Natura 2000 sites are often lacking in Ireland[34]. This could be improved by administrative capacity building, which would also allow for stronger stakeholder engagement. There is also insufficient communication and awareness in Ireland in relation to Natura 2000 which is likely to have contributed to misunderstanding and mistrust. According to the latest 2015 Eurobarometer 83% of people had never heard about Natura 2000 and only 5% knew what it is, the fourth lowest rate of awareness in the Member States. There are excellent examples of conservation and land management in Ireland, most notably in the Burren Co. Clare, but this is not happening at a sufficient scale.

The Commission has received a series of complaints in relation to compliance with the Nature Directive. The most significant concern relates to the conservation of raised and blanket bogs, currently the subject of an infringement procedure. As turf cutting is normally incompatible with their protection the Irish government took a decision to ban turf cutting on protected SAC raised bogs in 2011. There has been progress in relation to compensating people affected by this decision but illegal activities have continued and Ireland is not yet fully in compliance, including in relation to taking the necessary action to restore raised bogs. Ireland also needs to finalise the draft National Peatlands Strategy and its draft National Raised Bog SAC Management Plan. It also needs to make much more progress on the management of blanket bogs, including in relation to assessing and ensuring the compatibility of turf cutting with the conservation of this habitat. Issues of conservation in SPAs and the wider landscape, including the decline of waders, particularly the Curlew, reconciling the protection of the Hen Harrier with forestry and wind farm development, avoiding the cutting of hedgerows as well as burning in the uplands during the nesting season of birds also need to be addressed.

Suggested action

- Complete the Natura 2000 designation process and put in place clearly defined conservation objectives and the necessary conservation measures for the sites and provide adequate resources for their implementation in order to maintain/restore species and habitats of community interest to a favourable conservation status across their natural range
- Finalise the National Raised Bog SAC Management Plan, ensuring protection and restoration of raised and blanket bog sites in consultation with affected stakeholders
- Take practical steps to address the serious decline of waders, especially the Curlew, both within Natura 2000 sites and the wider countryside

Estimating Natural Capital

The EU Biodiversity Strategy to 2020 calls on the Member States to map and asses the state of ecosystems and their services in their national territory by 2014, assess the economic value of such services, and promote the integration of these values into accounting and reporting systems at EU and national level by 2020.

A mapping and assessment exercise for an initial suite of prioritised ecosystem services is due for completion in 2016. It will develop Irish indicators for potential ecosystem services mapping, based on available national data, using methodologies developed in the UK and the EU.

Natural Capital and Ecosystem Services is one of the themes under Ireland's EPA Sustainability Research pillar for 2014 to 2020. The theme aims to support an embedding ecosystem approaches such as natural capital, ecosystem services[35] and green infrastructure into policy and practice.

[33] Article 12 of the Birds Directive reporting - national summary of Ireland

[34] Conservation plans only exist for a limited number of sites, and date from 2005

[35] Ecosystem services are benefits provided by nature such as food, clean water and pollination on which human society depends.

The Irish Forum on Natural Capital (IFNC) launched in 2015 brings together range of stakeholders interested in the development of the natural capital agenda in Ireland[36].

Suggested action

- Engage all administrative levels and continue support for the mapping and assessment of ecosystem services, their valuation and integration into natural capital accounting systems.

Green Infrastructure

The EU strategy on green infrastructure[37] promotes the incorporation of green infrastructure into related plans and programmes to help overcome fragmentation of habitats and preserve or restore ecological connectivity, enhance ecosystem resilience and thereby ensure the continued provision of ecosystem services.

Green Infrastructure provides ecological, economic and social benefits through natural solutions. It helps to understand the value of the benefits that nature provides to human society and to mobilise investments to sustain and enhance them.

The Irish Government has recently approved a draft National Landscape strategy 2014-2024. The Strategy will establish principles for protecting and enhancing the landscape while positively managing its change. It will provide a high-level policy framework to achieve balance between the management, planning and protection of the landscape and ensure fragmentation is reduced.

In 2012, the Department of Environment, Community and Local Government developed a medium to long-term framework for advancing sustainable development and the green economy in Ireland entitled "*Our Sustainable Future*". The framework aims to integrate sustainable development into key areas of policy, to put in place effective implementation mechanisms and to progress sustainable development. The framework prioritises action on the development of an integrated approach to green infrastructure into sectorial polices and the creation of green corridors to enhance biodiversity.

Soil protection

The EU Soil Thematic Strategy highlights the need to ensure a sustainable use of soils. This requires the prevention of further soil degradation and the preservation of its functions, as well as the restoration of degraded soils. The 2011 Road Map for Resource-Efficient Europe, part of Europe 2020 Strategy provides that by 2020, EU policies take into account their direct and indirect impact on land use in the EU and globally, and the rate of land take is on track with an aim to achieve no net land take by 2050.

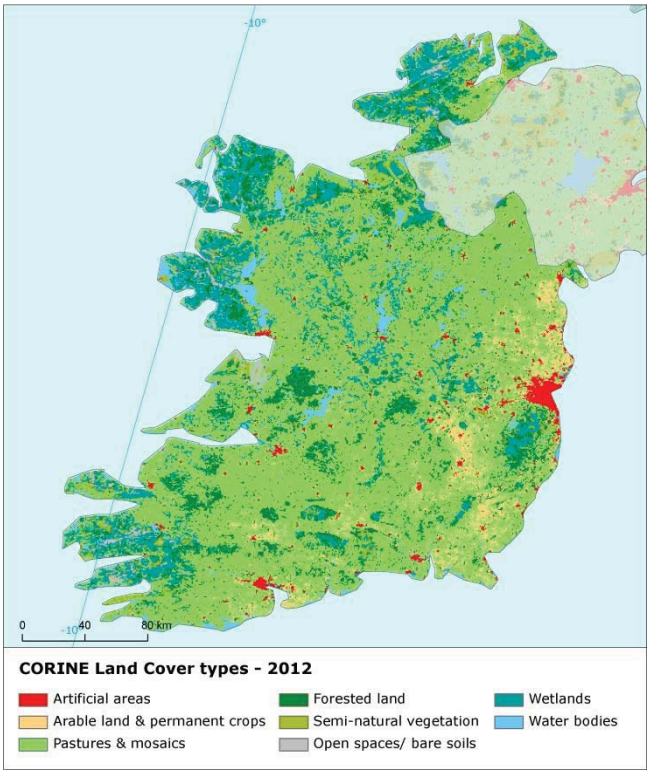
SDG 15 requires countries to combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land-degradation-neutral world by 2030.

Soil is an important resource for life and the economy. It provides key ecosystem services including the provision of food, fibre and biomass for renewable energy, carbon sequestration, water purification and flood regulation, the provision of raw and building material. Soil is a finite and extremely fragile resource and increasingly degrading in the EU. Land taken by urban development and infrastructure is highly unlikely to be reverted to its natural state; it consumes mostly agricultural land and increases fragmentation of habitats. Soil protection is indirectly addressed in existing EU policies in areas such as agriculture, water, waste, chemicals, and prevention of industrial pollution.

Artificial land cover is used for settlements, production systems and infrastructure. It may itself be split between built-up areas (buildings) and non-built-up areas (such as linear transport networks and associated areas). Figure 8 shows the different land cover types in Ireland in 2006.

Figure 8 shows the different land cover types in Ireland in 2012.

Figure 8: Land Cover types in Ireland 2012[38]



[36] Irish Forum on Natural Capital, 2016

[37] European Union, Green Infrastructure — Enhancing Europe's Natural Capital, COM/2013/0249

[38] European Environment Agency, Land cover 2006 and changes country analysis [publication forthcoming]

The annual land take rate (growth of artificial areas) as provided by CORINE Land Cover was 0.24% in Ireland over the period 2006-12, below the EU average (0.41%). It represented 416 hectares per year and was mainly driven by housing, services and recreation[39].

The percentage of built up land in 2009 was 1.67%, below the EU average (3.23%)[40].

Up to 2008, IE had one of the highest levels of construction activity in the EU but, with the economic crisis, this ended quite dramatically. The following land-use pressures are still significant: often poorly planned sprawling urban expansion; leisure and aquaculture developments along the coast; forestry programme largely based on exotic conifers; intensive agriculture; peat extraction. Spatial planning and landscape protection are improving.

The soil erosion rate in 2010 was 0.96 tonnes per ha per year, well below EU28 average (2.46 tonnes)[41].

There are still not EU-wide datasets enabling the provision of benchmark indicators for soil organic matter decline, contaminated sites, pressures on soil biology and diffuse pollution. An updated inventory and assessment of soil protection policy instruments in Ireland and other EU Member States is being performed by the EU Expert Group on Soil Protection.

Marine protection

The EU Coastal and Marine Policy and legislation require that by 2020 the impact of pressures on marine waters is reduced to achieve or maintain good environmental status and coastal zones are managed sustainably.

SDG 14 requires countries to conserve and sustainably use the oceans, seas and marine resources for sustainable development.

The Marine Strategy Framework Directive (MSFD[42]) aims to achieve Good Environmental Status (GES[43]) of the EU's marine waters by 2020 by providing an ecosystem approach to the management of human activities with impact on the marine environment. The Directive requires Member States to develop and implement a marine strategy for their marine waters, and cooperate with Member States sharing the same marine region or sub-region.

As part of their marine strategies, Member States had to make an initial assessment of their marine waters, determine GES and establish environmental targets by July 2012. They also had to establish monitoring programmes for the on-going assessment of their marine waters by July 2014. The next element of their marine strategy is to establish a Programme of Measures (2016). The Commission assesses whether these elements constitute an appropriate framework to meet the requirements of the MSFD.

All of Ireland's marine waters fall within the North-East Atlantic Ocean marine region and within the Celtic Seas marine sub-region. Ireland is party to the Convention for the protection of the marine environment of the North-East Atlantic (OSPAR Convention). Potential risks to the biodiversity in the Celtic Seas arise from fishing (e.g. overfishing, bottom trawling, and fish farming (estuaries))[44].

In its implementation of the Marine Strategy Framework Directive, Ireland has set 'Good Environmental Status' for all descriptors. However, these have often been assessed as partially adequate by the Commission as not all of them are sufficiently clearly defined, and are often general, qualitative and high-level. On the positive side, Ireland has systematically used existing EU requirements and standards and places a strong emphasis on the work done by the Regional Sea Convention for the North-Eastern Atlantic, OSPAR[45].

It is therefore not possible yet to say whether Irish waters are in good status as there were weaknesses in identifying what Good Environmental Status is in the first place

Ireland established a monitoring programme of its marine waters in 2014. However is seems that its monitoring programme for all descriptors, except eutrophication and seafood contamination, needs further refinement and development to constitute an appropriate framework to monitor progress towards GES, especially since the monitoring programme will not be in place for most descriptors before 2018 and sometimes even 2020[46].

Irish marine protected areas covered 6817.8 square kilometres of its marine waters in the Celtic Sea[47].

[39] European Environment Agency Draft results of CORINE Land Cover (CLC) inventory 2012; mean annual land take 2006-12 as a % of 2006 artificial land.
[40] European Environment Agency, 2016. Imperviousness and imperviousness change
[41] Eurostat, Soil water erosion rate, Figure 2, accessed November 2016
[42] European Union, Marine Strategy Framework Directive 2008/56/EC
[43] The MSFD defines Good Environmental Status (GES) in Article 3 as: "The environmental status of marine waters where these provide ecologically diverse and dynamic oceans and seas which are clean, healthy and productive"
[44] European Environmental Agency, 2016. The North East Atlantic Ocean, p. 121
[45] Report from the Commission "The first phase of implementation of the Marine Strategy Framework Directive (2008/56/EC) - The European Commission's assessment and guidance")
[46] Commission Staff Working Document Accompanying the Commission Report assessing Member States' monitoring programmes under the Marine Strategy Framework Directive (COM(2017)3 and SWD(2017)1 final)
[47] 2012 Data provided by the European Environmental Agency the European Commission – Not published

In its reports on the implementation of the MSFD[48], the Commission provided guidance to assist Ireland in its implementation of the Marine Strategy Framework Directive.

Suggested action

- Continue work to improve the definitions of GES in particular for biodiversity descriptors, including through regional cooperation by using the work of the relevant Regional Sea Convention
- Address knowledge gaps
- Further develop approaches assessing (and quantifying) impacts from the main pressures in order to lead to improved and more conclusive assessment results for 2018 reporting
- Continue to integrate existing monitoring programmes required under other EU legislation and to implement joint monitoring programmes developed at (sub)regional level
- Enhance comparability and consistency of monitoring methods within the country's marine region.
- Ensure that its monitoring programme is implemented without delay and is appropriate to monitor progress towards its GES

[48] Report from the Commission to the Council and the European Parliament "The first phase of implementation of the Marine Strategy Framework Directive (2008/56/EC) The European Commission's assessment and guidance" COM(2014)097 and Commission Staff Working Document Accompanying the Commission Report assessing Member States' monitoring programmes under the Marine Strategy Framework Directive (COM(2017)3 and SWD(2017)1 final)

3. Ensuring citizens' health and quality of life

Air quality

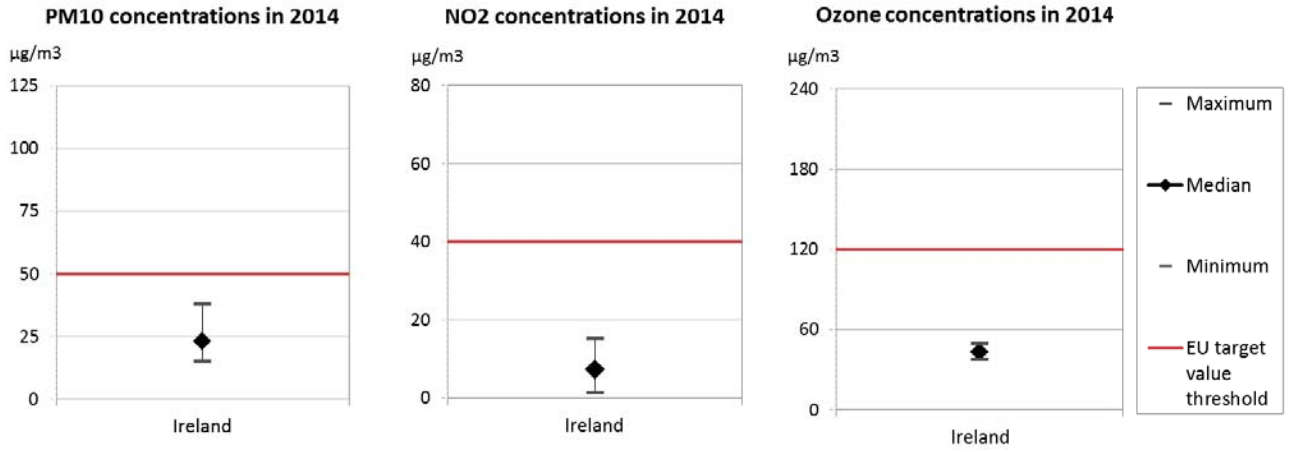
The EU Clean Air Policy and legislation require that air quality in the Union is significantly improved, moving closer to the WHO recommended levels. Air pollution and its impacts on ecosystems and biodiversity should be further reduced with the long-term aim of not exceeding critical loads and levels. This requires strengthening efforts to reach full compliance with Union air quality legislation and defining strategic targets and actions beyond 2020.

The EU has developed a comprehensive suite of air quality legislation[49], which establishes health-based standards and objectives for a number of air pollutants. As part of this, Member States are also required to ensure that up-to-date information on ambient concentrations of different air pollutants is routinely made available to the public. In addition, the National Emission Ceilings Directive provides for emission reductions at national level that should be achieved for main pollutants.

Emissions of hazardous substances to the air have decreased in Ireland[50]. Reductions between 1990 and 2014 for sulphur oxides (-89%) ensure air emissions for these pollutants are within the currently applicable national emission ceilings[51]. No reduction has been recorded for ammonia emissions. Although significant emission reductions have been recorded also for nitrogen oxides[52] (-43%) and volatile organic compounds (-36%), these are still an insufficient effort to comply with the current ceilings, surpassing these by 18% and 58%, respectively. It should be noted that the exceedance of the nitrogen oxides emission ceiling is partly due to the lack of efficiency of the Euro standards for diesel vehicles while the exceedance of the volatile organic compounds ceiling is largely the result from the recent addition of volatile organic compounds emissions from agriculture to the emission inventories which were not yet estimated or considered at the time the current ceilings were set.

Air quality in Ireland is reported to be generally good, with exceptions. For the year 2013, the European Environment Agency estimated that about 1 520 premature deaths were attributable to fine particulate matter[53] concentrations, 30 to nitrogen[54] dioxide

Figure 9: Attainment situation for PM10, NO2 and O3 in 2014



Note: *These graphs show concentrations as measured and reported by the Member State at different locations; specifically they show, (a) for PM10, the 90.4 percentile of daily mean concentration, which corresponds to the 36th highest daily mean, (b) for NO2, the annual mean concentration, and (c) for O3, the 93.2 percentile of maximum daily 8-hour mean concentration values, which corresponds to the 26th highest daily maximum. For each pollutant they depict both the lowest and highest concentration reported, as well as the median values (i.e. note that 50% of the stations report lower concentrations than the respective median value, the other 50% report higher concentrations). The air quality standards as set by EU legislation are marked by the red line.*

[49] European Commission, 2016. Air Quality Standards

[50] See EIONET Central Data Repository and Air pollutant emissions data viewer (NEC Directive)

[51] The current national emission ceilings apply since 2010 (Directive 2001/81/EC); revised ceilings for 2020 and 2030 have been set by Directive (EU) 2016/2284 on the reduction of national emissions of certain atmospheric pollutants, amending Directive 2003/35/EC and repealing Directive 2001/81/EC.

[52] 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).

[53] 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 anthropogenic sources, including combustion

[54] 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).

concentrations and 50 to ozone[55] concentrations[56].

For 2014, no exceedances above the EU air quality standards have been reported[57]. This is reflected in Figure 9, which shows that annual mean concentration values for PM_{10}, NO_2 and ozone were below EU target values[58].

It has been estimated that the health-related external costs from air pollution in Ireland are above EUR 2 billion/year (income adjusted, 2010), which include not only the intrinsic value of living a full health life but also direct costs to the economy. These direct economic costs relate to 382 thousand workdays lost each year due to sickness related to air pollution, with associated costs for employers of EUR 65 million/year (income adjusted, 2010), for healthcare of above EUR 5 million/year (income adjusted, 2010), and for agriculture (crop losses) of EUR 30 million/year (2010)[59].

Suggested action

- Reduce NMVOCs emissions to comply with currently applicable national emission ceilings[60].
- Reduce nitrogen oxide (NO_x) emissions to comply with currently applicable national emission ceilings[61] and/or to reduce nitrogen dioxide (NO_2) (and ozone concentrations), inter alia, by reducing transport related emissions - in particular in urban areas.

Noise

The Environmental Noise Directive provides for a common approach for the avoidance, prevention and reduction of harmful effects due to exposure to environmental noise.

Excessive noise is one of the main causes of health issues[62]. To alleviate this, the EU *acquis* sets out several requirements, including assessing the exposure to environmental noise through noise mapping, ensuring that information on environmental noise and its effects is made available to the public, and adopting action plans with a view to preventing and reducing environmental noise where necessary and to preserving the acoustic environment quality where it is good.

Irish authorities have fulfilled all their obligations with regards to the Environmental Noise Directive[63] for the current reporting period.

Water quality and management

The EU water policy and legislation require that the impact of pressures on transitional, coastal and fresh waters (including surface and ground waters) is significantly reduced to achieve, maintain or enhance good status of water bodies, as defined by the Water Framework Directive; that citizens throughout the Union benefit from high standards for safe drinking and bathing water; and that the nutrient cycle (nitrogen and phosphorus) is managed in a more sustainable and resource-efficient way.

SDG 6 encourages countries to ensure availability and sustainable management of water and sanitation for all.

The main overall objective of EU water policy and legislation is to ensure access to good quality water in sufficient quantity for all Europeans. The EU water *acquis*[64] seeks to ensure good status of all water bodies across Europe by addressing pollution sources (from e.g. agriculture, urban areas and industrial activities), physical and hydrological modifications to water bodies) and the management of risks of flooding.

River Basin Management Plans (RBMPs) are a requirement of the Water Framework Directive and a means of achieving the protection, improvement and sustainable use of the water environment across Europe. This includes surface freshwaters such as lakes and rivers, groundwater, estuaries and coastal waters up to one nautical mile.

In its first generation of RBMPs under the WFD Ireland reported the status of 4565 rivers, 807 lakes, 190 transitional, 111 coastal and 756 groundwater bodies. 54% of natural surface water bodies achieve a good or high ecological status[65] and only 39% of heavily modified

[55] Low level ozone is produced by photochemical action on pollution and it is also a greenhouse gas.

[56] European Environment Agency, 2016 Air Quality in Europe – 2016 Report (Table 10.2, please see details in this report as regards the underpinning methodology)

[57] See The EEA/Eionet Air Quality Portal and the related Central Data Repository

[58] Based on European Environment Agency, 2016. Air Quality in Europe – 2016 Report. (Figures 4.1, 5.1 and 6.1)

[59] These figures are based on the Impact Assessment for the European Commission Integrated Clean Air Package (2013)

[60] Under the provisions of the revised National Emission Ceilings Directive, Member States now may apply for emission inventory adjustments. Pending evaluation of any adjustment application, Member States should keep emissions under close control with a view to further reductions.

[61] Ibid.

[62] WHO/JRC, 2011, Burden of disease from environmental noise, Fritschi, L., Brown, A.L., Kim, R., Schwela, D., Kephalopoulos, S. (eds), World Health Organization, Regional Office for Europe, Copenhagen, Denmark

[63] The Noise Directive requires Member States to prepare and publish, every 5 years, noise maps and noise management action plans for agglomerations with more than 100,000 inhabitants, and for major roads, railways and airports.

[64] This includes the Bathing Waters Directive (2006/7/EC); the Urban Waste Water Treatment Directive (91/271/EEC) concerning discharges of municipal and some industrial waste waters; the Drinking Water Directive (98/83/EC) concerning potable water quality; the Water Framework Directive (2000/60/EC) concerning water resources management; the Nitrates Directive (91/676/EEC) and the Floods Directive (2007/60/EC)

[65] Good ecological status is defined in the Water Framework Directive referring to the quality of the biological community, the hydrological characteristics and the chemical characteristics.

or artificial water bodies[66] achieve a good or high ecological potential. Only 28% of surface water bodies (70% unknown), 4% of heavily modified and artificial water bodies (85% unknown) and 85% of groundwater bodies achieve good chemical status[67]. Almost 100% of groundwater bodies are in good quantitative status[68].

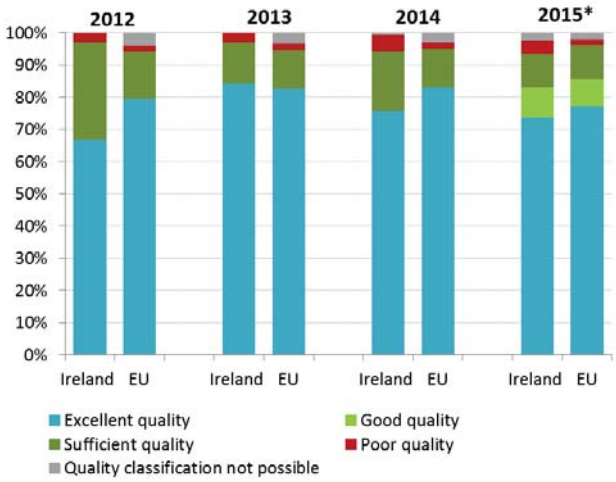
A number of pressures affect water bodies in Ireland – in the case of surface waters 56% are affected by diffuse source of pollution[69] 49% by point sources of pollution, 24% by river management, 9% by abstraction and 8% by flow regulation and morphological changes. There are significant regional differences and in some river basin districts these pressures affect much higher proportion of water bodies, e.g. diffuse sources affect 92% and 84% of surface water bodies in the Eastern and South Eastern river basin districts respectively. Also point sources of pollution affect 92% and 82% in these districts. In the Eastern district river management, flow regulation and morphological alterations with 90% of water bodies affected and water abstraction with 50% of water bodies affected are also significant pressures.

The IE RBMPs[70] have a number of deficiencies that result in uncertainties about the status, pressures and effectiveness of Programmes of Measures. Ireland applied a high number of exemptions without transparent justification. The planned measures are expected to result in improvement of the ecological status of natural water bodies by 14% and the ecological potential of artificial and heavily modified bodies by 38%. The chemical status should improve by 13% for groundwater and 8% for artificial and heavily modified bodies but only slightly for natural water bodies. Nitrate levels from agricultural sources have been decreasing in the 2008-2011 period, with absence of monitoring points exceeding 50 mg/l nitrates in groundwater. However agriculture remains a significant pressure and some intensification of the agricultural sector is planned (according to the agricultural sectoral roadmap "Food harvest 2020"). For instance, milk yields are planned to be increased by 50% to 2020. This envisaged expansion will represent an additional challenge, especially in agriculturally intensive regions. The situation in Ireland as to pricing of water for domestic use is also not clear.

The adoption of the second generation of IE RBMPs has been significantly delayed. A draft second cycle RBMP consultation, led by the Local Authorities at regional level, is now underway and will be completed by June 2017.

Figure 10 shows that in 2015, in Ireland out of 137 bathing waters, 73.7 % were of excellent quality, 9.5 % of good quality and 10.2 % of sufficient quality. 6 bathing waters were of poor quality or non-compliant while it was not possible to assess the remaining 3 bathing waters[71].

Figure 10: Bathing water quality 2012 – 2015[72]



**The category 'good' was introduced in the 2015 bathing water report*

As regards drinking water, Ireland reaches very high compliance rates of 99-100 % for microbiological, chemical and indicator parameters laid down in the Drinking Water Directive[73]. However, the Commission is aware of sporadic non-compliance with certain parameters (e.g. trialomethanes) in some water supply zones. The Commission is currently following-up on those issues.

There are substantial implementation issues in Ireland when it comes to the Urban Waste Water Treatment Directive. In 2012, Ireland reported 170 agglomerations with an overall generated load of 5,164,016 population equivalent (p.e.). However, in 47 of these, secondary treatment is not ensured meaning that untreated waste water is directly discharged. Regarding more stringent treatment, and the Commission recorded in its report that only 0.7% of the waste water load with more stringent obligation is subject to such treatment (in accordance with Article 5 of the Urban Waste Water Treatment Directive). Following completion of that

[66] Many European river basins and waters have been altered by human activities, such as land drainage, flood protection, and, building of dams to create reservoirs.

[67] Good chemical status is defined in the Water Framework Directive referring to compliance with all the quality standards established for chemical substances at European level.

[68] For groundwater, a precautionary approach has been taken that comprises a prohibition on direct discharges to groundwater, and a requirement to monitor groundwater bodies.

[69] Diffuse pollution comes from widespread activities with no one discrete source, e.g. acid rain, pesticides, urban run-off, etc.

[70] Information contained in this report is based on an assessment of the 1st RBMP, finalised in 2009.

[71] European Environment Agency, 2016. European bathing water quality in 2015, p. 26

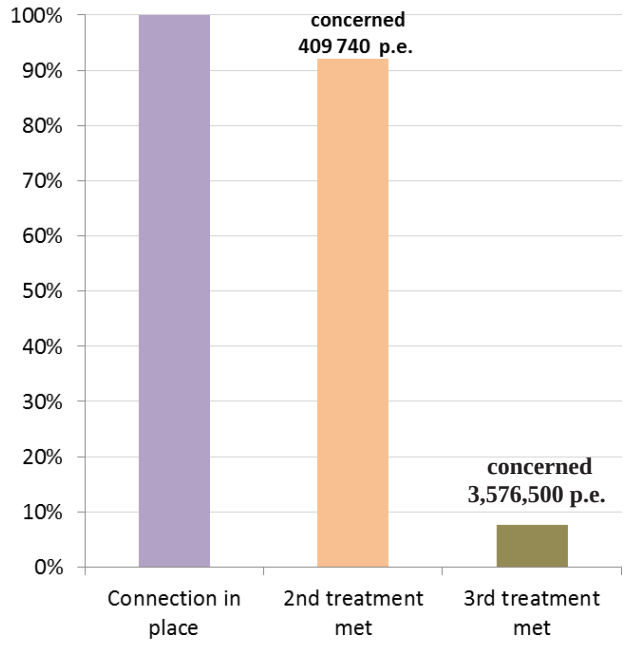
[72] European Environment Agency, State of bathing water, 2016

[73] Commission's Synthesis Report on the Quality of Drinking Water in the Union examining Member States' reports for the 2011-2013 period, foreseen under Article 13(5) of Directive 98/83/EC; COM(2016)666

compliance assessment Ireland reported that compliance had been under-estimated in that report due to some errors in the designation of sensitive zones (sensitive to phosphorus and/or nitrogen). Ireland reported that fifteen agglomerations, instead of one (amounting to 0.7%), should have been considered compliant. The next reporting exercise should give Ireland an opportunity to rectify this reporting and designation issues. In any case, Ireland demonstrates low compliance rates with the Urban Waste Treatment Directive and the Commission is following-up on the non-compliances. The Commission has an ongoing infringement relating to Ireland's failure to fully comply with the Directive. The investment needs to reach full compliance with the Directive have been estimated by Ireland (under Article 17 of the Urban Waste Water Treatment Directive) to be of EUR 443 million[74].

Figure 11 below shows the total generated load at Member State level (in population equivalent and regardless of agglomerations) and the load that remains to be addressed by Ireland.

Figure 11: Urban waste water Irish situation 2012 – Final deadline 2005[75]



In 2012 IE introduced a system of registration of individual waste water treatment systems (septic tanks) in the countryside with a view to their better control (implementation of judgment C-188/08). Water scarcity is emerging as an issue in the heavily urbanised greater Dublin area – one of the factors behind a move towards domestic water pricing.

The Commission initiated the infringement on compliance with the Water Framework Directive against Ireland in 2007. Within the framework of this case, the Commission is examining Ireland's compliance with a number of key provisions of the Directive, including in particular the definition of water services, water pricing and controls over the abstraction of fresh surface water and groundwater and the impoundment of fresh surface water.

Further to the EU/IMF memorandum of understanding, a national water utility (Irish Water) was created and took over the water sector in Ireland as of 1 January 2014. It replaces the former 34 water utilities and has established a strategic plan to solve, inter alia, the issues linked to the implementation of the Drinking Water Directive and the Urban Waste Water Treatment Directive. Water charges were introduced in 2013 and extended to domestic users in 2014. However, the charges were capped and the new Government has promised to suspend them.

The proposed Capital Investment Plan (CIP) 2014-2016 requires EUR 1.77 billion to meet the objectives identified by Irish Water and previous programmes of the Department of the Environment, Community and Local Government (DECLG). However, it is expected that much more investments in infrastructure will be needed after 2016 to become compliant with the Water Framework Directive, the Drinking Water Directive and the Urban Waste Water Treatment Directives.

According to Irish Water's own estimates, EUR 5.5 billion needs to be invested in the period 2014 to 2021 to bring water services in Ireland up to an "acceptable" level. Irish Water estimates that EUR 13 billion is needed overall to be able to ensure a "good" infrastructure and service standard. It is vital that these investments are maintained.

The estimated investment needs (reported by Ireland under Article 17 of the Urban Waste Water Treatment Directive) to reach full compliance with the Directive are of EUR 443 million[76].

Flood risk areas have already been identified and mapped in Ireland[77]. Ireland is hit regularly by flooding incidents with serious economic damage costs. Records of flooding from rivers are the most common in Ireland.

[74] Eighth Report on the Implementation Status and the Programmes for Implementation (as required by Article 17) of Council Directive 91/271/EEC concerning urban waste water treatment (COM (2016)105 final) and Commission Staff Working Document accompanying the report (SWD(2016)45 final)

[75] European Commission, 2016. Urban waste water, 8th implementation reports

[76] Eighth Report on the Implementation Status and the Programmes for Implementation (as required by Article 17) of Council Directive 91/271/EEC concerning urban waste water treatment (COM (2016)105 final) and Commission Staff Working Document accompanying the report (SWD(2016)45 final)

[77] European Commission, 2015. The Water Framework Directive and the Floods Directive: Actions towards the 'good status' of EU water and to reduce flood risks, page 55

Between 2002 and 2013, for the 16 floods recorded the total direct costs were EUR 1500 million. The average cost per flood was EUR 92 million.

A national flood hazard mapping website was launched in 2006. A close cooperation between Ireland and the UK do exist to share information on cross boarder flood risk management.

Suggested action

- Improve monitoring and status assessment with regard to the RBMP[78].
- Base the Programme of Measures with regard to the RBMP on reliable status assessment and address all the relevant pressures and implementation gaps. Measures should be properly financed and the water pricing policy for domestic consumption clarified.
- Ensure that the registered improvement of water quality as regards nitrate pollution is not undermined by the planned agricultural expansion, through a full implementation of the nitrate action programme and any strengthened measures if necessary.
- Ensure compliance with the Urban Waste Water Treatment Directive by ending direct discharges and ensuring that waste water is collected and appropriately treated throughout the country.

Enhancing the sustainability of cities

The EU Policy on the urban environment encourages cities to implement policies for sustainable urban planning and design, including innovative approaches for urban public transport and mobility, sustainable buildings, energy efficiency and urban biodiversity conservation.

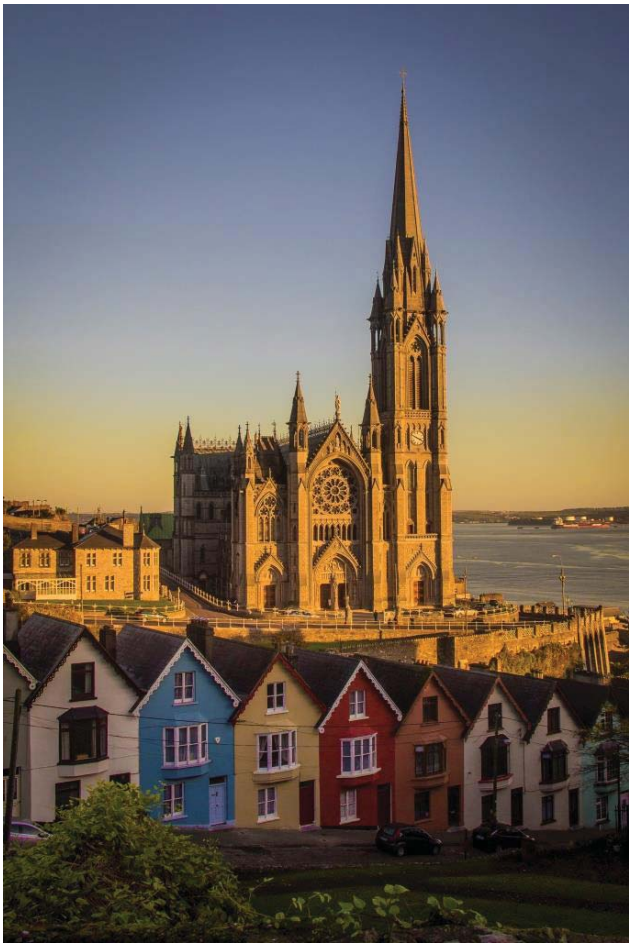
SDG11 aims at making cities and human settlements inclusive, safe, resilient and sustainable.

Europe is a Union of cities and towns; around 75% of the EU population are living in urban areas.[79] The urban environment poses particular challenges for the environment and human health, whilst also providing opportunities and efficiency gains in the use of resources.

The Member States, European institutions, cities and stakeholders have prepared a new Urban Agenda for the EU (incorporating the Smart Cities initiative) to tackle these issues in a comprehensive way, including their connections with social and economic challenges. At the heart of this Urban Agenda will be the development of twelve partnerships on the identified urban challenges, including air quality and housing[80].

The European Commission will launch a new EU benchmark system in 2017[81].

The EU stimulates green cities through awards and funding, such as the EU Green Capital Award aimed at cities with more than 100,000 inhabitants and the EU Green Leaf initiative aimed at cities and towns, with between 20,000 and 100,000 inhabitants.



For the 2014-2020 EU-funding period Ireland set up Designated Urban Centres Grants Scheme[82]. Funding under the Scheme will enable project investments in Irish urban centres of EUR 127 million of which EUR 40 million will be funded from the European Regional Development Fund (ERDF) with matching funding from the relevant local authorities. The scheme seeks specifically to improve the urban environment and revitalise urban areas. Projects in designated urban centres have to fit with integrated strategies to tackle the social, economic, environmental, climate and demographic challenges.

[78] Information on the implementation status and more specific recommendations: Water Framework Directive Implementation Reports

[79] European Environment Agency, Urban environment

[80] http://urbanagendaforthe.eu/

[81] The Commission is developing an Urban Benchmarking and Monitoring ('UBaM') tool to be launched in 2017. Best practices emerge and these will be better disseminated via the app featuring the UBaM tool, and increasingly via e.g. EUROCITIES, ICLEI, CEMR, Committee of the Regions, Covenant of Mayors and others.

[82] Department of the Environment, Community and Local Government, 2016. Announcement of ERDF grant assistance to local authority capital works under the Designated Urban Centres Grants Scheme 2014-2020

International agreements

The EU Treaties require that the Union policy on the environment promotes measures at the international level to deal with regional or worldwide environmental problems.

Most environmental problems have a transboundary nature and often a global scope and they can only be addressed effectively through international co-operation. International environmental agreements concluded by the Union are binding upon the institutions of the Union and on its Member States. This requires the EU and the Member States to sign, ratify and effectively implement all relevant multilateral environmental agreements (MEAs) in a timely manner. This will also be an important contribution towards the achievement of the SDGs, which Member States committed to in 2015 and include many commitments contained already in legally binding agreements.

The fact that some Member States did not sign and/or ratify a number of MEAs compromises environmental implementation, including within the Union, as well as the Union's credibility in related negotiations and international meetings where supporting the participation of third countries to such agreements is an established EU policy objective. In agreements where voting takes place it has a direct impact on the number of votes to be cast by the EU.

Currently, Ireland has signed but not yet ratified three agreements under the Convention on Long-range Transboundary Air Pollution: the Gothenburg Protocol to Abate Acidification, Eutrophication and Ground-level Ozone, the Persistent Organic Pollutions Protocol and the Heavy Metals Protocol. The same applies to the Protocol on Strategic Environmental Assessment to the Espoo Convention and the Nagoya Protocol[83]. Ireland has neither signed nor ratified the Helsinki Convention on Industrial Accidents and the Helsinki Convention on Watercourses and Lakes.

Suggested action

- Increase efforts to be party to relevant multilateral environmental agreements, by signing and ratifying the remaining agreements.

[83] Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity.

Part II: Enabling Framework: Implementation Tools

4. Market based instruments and investment

Green taxation and environmentally harmful subsidies

The Circular Economy Action Plan encourages the use of financial incentives and economic instruments, such as taxation to ensure that product prices better reflect environmental costs. The phasing out of environmentally harmful subsidies is monitored in the context of the European Semester and in national reform programmes submitted by Member States.

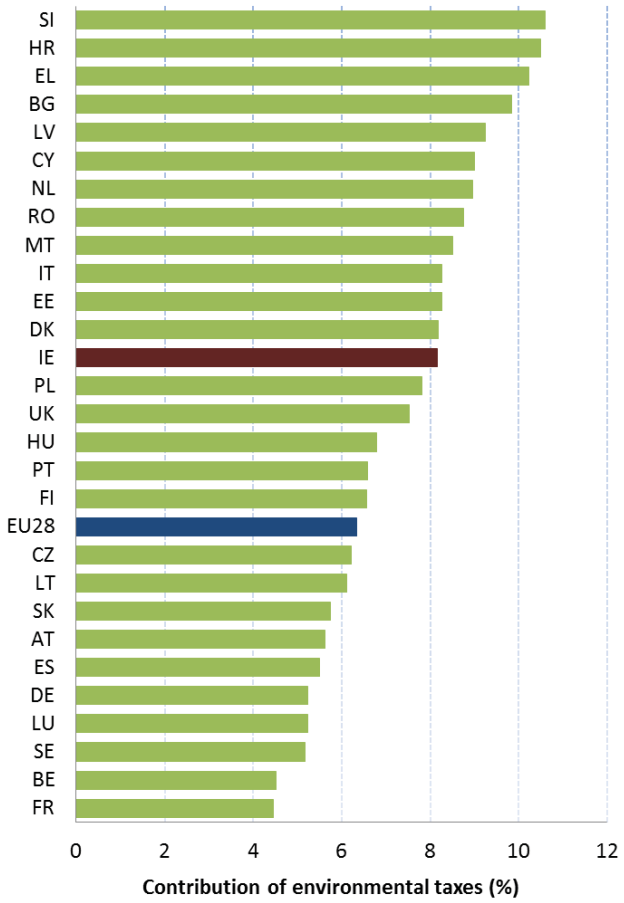
Taxing pollution and resource use can generate increased revenue and bring important social and environmental benefits.

The revenue derived from environmental taxes in Ireland, expressed as a percentage share of the country's GDP, was in 2014 with 2.43% slightly below the EU28 average (2.45%)[84], having fluctuated over the past years, but is currently similar to the share seen in 2004 (2.45%). Revenues from energy taxes, as a proportion of GDP, were below the EU28 average of 1.88%, but the percentage share derived from transport (excluding fuel) taxes was well above the European average of 0.49% GDP. In terms of the percentage share of GDP coming from environmental taxation, Ireland ranked 16th in the EU28 in 2014. In the same year environmental tax revenues accounted for 8.17% of total revenues from taxes and social-security contributions[85] (EU28 average: 6.35%).

The role of environmentally related fiscal measures in government budgets has been strengthened over the last five years. In line with the National Climate Change Strategy 2007-12, the rates for calculating the VRT and the motor tax were increased and revised in 2008 to reflect CO2 emissions, and have since been linked to a new mandatory labelling system.

A 2016 study shows for Ireland that there is considerable potential for shifting taxes from labour to environmental taxes[86]. Under a good practice scenario[87], the amount could be as much as EUR 0.96 billion in 2018, rising to EUR 2.15 billion in 2030 (both in real 2015 terms). This is equivalent to an additional 0.43% and 0.64% of GDP in 2018 and 2030, respectively.

Figure 12: Environmental tax revenues as a share of total revenues from taxes and social contributions (excluding imputed social contributions) in 2014[88]



The largest potential source of revenue comes from the suggested increase in vehicle taxes. This accounts for EUR 1.13 billion in 2030 (real 2015 terms), equivalent to 0.34% of GDP. The next largest contribution to revenue comes from the proposed amendments to the taxes on transport fuels. This accounts for EUR 0.36 billion in 2030 (real 2015 terms), equivalent to 0.11% of GDP.

A Government-appointed Commission on Taxation

[84] Eurostat, Environmental tax revenues, accessed June 2016

[85] Excluding imputed social contributions

[86] Eunomia Research and Consulting, IEEP, Aarhus University, ENT, 2016. Study on Assessing the Environmental Fiscal Reform Potential for the EU28 N.B. National governments are responsible for setting tax rates within the EU Single Market rules and this report is not suggesting concrete changes as to the level of environmental taxation. It merely presents the findings of the 2016 study by Eunomia *et al* on the potential benefits various environmental taxes could bring. It is then for the national authorities to assess this study and their concrete impacts in the national context. A first step in this respect, already done by a number of Member States, is to set up expert groups to assess these and make specific proposals.

[87] The good practice scenario means benchmarking to a successful taxation practice in another Member State.

[88] Eurostat, Environmental tax revenues, accessed October 2016

reviewed, in 2009, the structure and efficiency of the Irish taxation system, including fiscal measures to protect the environment. The Commission recommended that a tax on the CO2 content of energy products for non-ETS sectors be introduced (excluding agriculture) and that efforts be made to strengthen local government financing through property taxes and waste and water charges. The report stated that these environmental fiscal measures were important tools for pursuing Ireland's green economy goals. The CO2 tax was subsequently introduced and has gradually been extended, whilst property taxes are also slowly being phased in.

The existing reduction of motor tax for commercial vehicles over 4000kg could have detrimental environmental effects. Peat uses for electricity generation is exempt from the carbon tax, but the extraction remains subsidises. Reduced value-added tax rates on energy products (at 13.5%) also conflict with overall energy and climate policy objectives as the decree the incentive to reduce energy consumption or improve energy efficiency.

Green Public Procurement

The EU green public procurement policies encourage Member States to take further steps to reach the target of applying green procurement criteria to at least 50% of public tenders.

Green Public Procurement (GPP) is a process whereby public authorities seek to procure goods, services and works with a reduced environmental impact throughout their life-cycle when compared to goods, services and works with the same primary function that would otherwise be procured.

The purchasing power of public procurement equals to approximately 14% of GDP[89]. A substantial part of this money is spent on sectors with high environmental impact such as construction or transport, so GPP can help to significantly lower the impact of public spending and foster sustainable innovative businesses. The Commission has proposed EU GPP criteria[90].

The National Action Plan – 'Green Tenders' was published by the Department of the Environment in January 2012 and constitutes the lead role in "greening" procurement across the Irish public sector. The aim is that GPP is used for 50% of procurement by value or 50% by volume[91].

For the following products specific criteria[92] are recommended: construction, transport, energy, food and catering, textiles, cleaning products, paper and IT equipment.

There is no information available regarding the uptake of GPP.

Investments: the contribution of EU funds

European Structural and Investment Funds Regulations provide that Member States promote environment and climate objectives in their funding strategies and programmes for economic, social and territorial cohesion, rural development and maritime policy, and reinforce the capacity of implementing bodies to deliver cost-effective and sustainable investments in these areas.

Making good use of the European Structural and Investment Funds (ESIF)[93] is essential to achieve the environmental goals and integrate these into other policy areas. Other instruments such as the Horizon 2020, the LIFE programme and the EFSI may also support implementation and spread of best practice.

The total contribution to Ireland across ESIF for the 2014-2020 period amounts to over EUR 3.4 billion (see Figure 13). In 2014-2020 Ireland is allocated around EUR 1.19 billion for Cohesion Policy (European Regional Development Fund (ERDF) EUR 409.2 million (12.2 %) and European Social Fund (ESF) EUR 542.4 million (16.2 %)) including EUR 68.1 million for the Youth Employment Initiative and EUR 168.9 million for European territorial cooperation. An additional EUR 2.19 billion (65.2 %) will be devoted to development of the agricultural sector and rural areas from the European Agricultural Fund for Rural Development (EAFRD). The allocation from the European Maritime and Fisheries Fund (EMFF) amount to EUR 147.6 million (4.4 %).

Concentration of funds on a limited number of strategic priorities is one of the main principles of the reformed cohesion policy. More than 20% of the ERDF allocation will make a contribution to climate change mitigation and adoption measures. At least 5% of the ERDF allocation will be invested in sustainable urban development actions implemented in Ireland. More than 80% of the EAFRD allocation is dedicated to environment and climate related actions.

[89] European Commission, 2015. Public procurement

[90] In the Communication "Public procurement for a better environment" (COM /2008/400) the Commission recommended the creation of a process for setting common GPP criteria. The basic concept of GPP relies on having clear, verifiable, justifiable and ambitious environmental criteria for products and services, based on a life-cycle approach and scientific evidence base.

[91] European Commission (October 2015), Documentation on National GPP Action Plans

[92] In the Communication "Public procurement for a better environment" (COM (2008) 400) the Commission recommended the creation of a process for setting common GPP criteria. The basic concept of GPP relies on having clear, verifiable, justifiable and ambitious environmental criteria for products and services, based on a life-cycle approach and scientific evidence base.

[93] ESIF comprises five funds – the European Regional Development Funds (ERDF), the Cohesion Fund (CF), the European Social Fund (ESF), the European Agricultural Fund for Rural Development (EAFRD), and the European Maritime and Fisheries Fund (EMFF). The ERDF, the CF and the ESF together form the Cohesion Policy funds.

In total, EUR 921.2 million is dedicated to the Thematic objective 6 (TO6) *Environment Protection and Resource efficiency*, EUR 784.6 million through the different EAFRD programmes, EUR 37.0 m through the ERDF programmes and EUR 99.6 million through the EMFF programme. In addition, EUR 311.4 million is foreseen for TO4 *Low Carbon Economy* and EUR 784.6 million for TO5 *Climate Change Adoption and Risk Prevention*.

The two ERDF regional OPs for Ireland (Southern & Eastern and Border, Midland and Western) have a strategic focus on the development of commercial research excellence and innovation capacity with active company engagement (1/3 of the overall allocation). Due to the new ERDF strategy and fund size for Ireland, investments related to environment focus on measures on sustainable integrated urban development to which the ERDF contribution within the two regional OPs is EUR 40 million. Under this theme, local authorities for the designated growth centres in the regions were invited to submit projects which fit with their integrated strategies to tackle social, economic, environmental, climate and demographic challenges affecting the urban centres. Sustainable urban development aims at improving the urban environment, reducing air pollution, promoting noise reduction and sustainable multi-modal urban mobility measures.

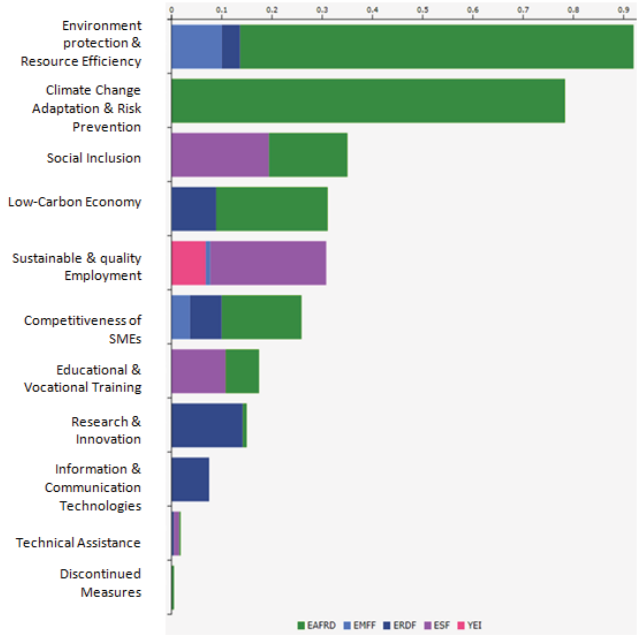
The Rural Development Program of Ireland, its EAFRD part, amounts to EUR 2190.6 million in its approved version (also after the negotiated 1st modification). The budget for agri-environmental-climate measures represents 42% of the total EAFRD budget for Ireland.

The agri-environmental measure offers targeted support for Natura 2000 sites hosting some priority bird species, other protected bird species. As well it aims to support via commonage sub-measure common land and provide proper management for these extensively managed areas, including such those which are not eligible for Pillar I of the CAP. This is a good example which MS could follow, if the EC and MS are to show that the CAP is promoting and supporting extensive and high nature value practices (as insisted in the EP Resolution on the mid-term review of the EU BS 2020). Support is channelled also to the intensive arable farmers with simpler schemes to improve the farming practice.

Commitment of IE is to include in the RDP locally-led environmental schemes, including Burren scheme (previous LIFE), and on restoration of peatlands on agricultural land. This is undergoing preparation currently.

Figure 13 depicts the 2014-2020 EU Structural and Investment Funds budget allocation for Ireland.

Figure 13: European Structural & Investment Funds 2014-2020: Budget Ireland by theme, EUR billion[94]



With regard to the integration of environmental concerns into the Common Agricultural Policy (CAP), the two key areas for Ireland (as for all Member States) are, first, using Rural Development funds to pay for environmental land management and other environmental measures, while avoiding financing measures which could damage the environment; and secondly, ensuring an effective implementation of the first pillar of the CAP with regard to cross compliance and 1st pillar 'greening'. 30 % of direct payment envelope (out of total EUR 6.062.920.000 for 2015-2020) is allocated to greening practices beneficial for the environment. An environmentally ambitious implementation of 1st pillar greening would clearly help to improve the environmental situation in areas not covered by rural development, including intensive area, and if appropriate Ireland could review its implementation of this.

For the year 2015 Ireland made it possible to use 11 elements laid down by the regulation as EFA (out of possible 19 elements). For the catch crops/green cover IE requests EFA to stay in place till the 1/12 and therefore not protecting the soil during winter rainy season. For the short rotation coppice, fertilisers are not allowed and pesticides are allowed with exception of 2 years (for which still derogation can be given). 2% of Natura 2000 grasslands were designated as environmentally sensitive, 0 ha designated outside Natura 2000, which is, after Portugal and Estonia (1%), the lowest relative number and represents a lost opportunity for strengthening the contribution of the CAP to protect high natural values.

[94] European Commission, European Structural and Investment Funds Data By Country

It is too early to draw any meaningful conclusions as regards the use and results of ESIF funds for the period 2014-2020, as the relevant programmes are still in an early stage of their implementation. The current data suggest that the EU funds for the period 2007-2013 were almost spent[95].

In addition one Irish project, *the Water utility schemes*, is under assessment for financing under the European Fund for Strategic Investments (EFSI).

[95] Final data for the period 2007-2013 will only be available at the end of 2017.

5. Effective governance and knowledge

SDG 16 aims at providing access to justice and building effective, accountable and inclusive institutions at all levels. SDG 17 aims at better implementation, improving policy coordination and policy coherence, stimulating science, technology and innovation, establishing partnerships and developing measurements of progress.

Effective governance of EU environmental legislation and policies requires having an appropriate institutional framework, policy coherence and coordination, applying legal and non-legal instruments, engaging with non-governmental stakeholders, and having adequate levels of knowledge and skills[96]. Successful implementation depends, to a large extent, on central, regional and local government fulfilling key legislative and administrative tasks, notably adoption of sound implementing legislation, co-ordinated action to meet environmental objectives and correct decision-making on matters such as industrial permits. Beyond fulfilment of these tasks, government must intervene to ensure day-to-day compliance by economic operators, utilities and individuals ("compliance assurance"). Civil society also has a role to play, including through legal action. To underpin the roles of all actors, it is crucial to collect and share knowledge and evidence on the state of the environment and on environmental pressures, drivers and impacts.

Equally, effective governance of EU environmental legislation and policies benefits from a dialogue within Member States and between Member States and the Commission on whether the current EU environmental legislation is fit for purpose. Legislation can only be properly implemented when it takes into account experiences at Member State level with putting EU commitments into effect. The Make it Work initiative, a Member State driven project, established in 2014, organizes a discussion on how the clarity, coherence and structure of EU environmental legislation can be improved without lowering existing protection standards.

Effective governance within central, regional and local government

Those involved in implementing environment legislation at Union, national, regional and local levels need to be equipped with the knowledge, tools and capacity to improve the delivery of benefits from that legislation, and the governance of the enforcement process.

Capacity to implement rules

It is crucial that central, regional and local administrations have the necessary capacities and skills and training to carry out their own tasks and co-operate and co-ordinate effectively with each other, within a system of multi-level governance.

The 2013 European Quality of Government Index puts Ireland in place 10 out of the 28 Member States[97].

Much responsibility for compliance and enforcement lies with approximately 30 small local authorities. The Environmental Protection Agency (EPA) is responsible for licensing and controlling major industrial and waste facilities and for co-ordinating environmental monitoring. Since 2003, the EPA includes an Office of Environmental Enforcemen[98]t, responsible for pushing local authorities to, inter alia, better enforce waste rules. Since 2014, Irish Water has full responsibility over water services (drinking, waste water) in the country (before 34 local authorities).

The transposition of the revised EIA Directive[99] will be an opportunity to streamline the regulatory framework on environmental assessments. The Commission encourages the streamlining of the environmental assessments because this approach reduces duplication and avoids unnecessary overlaps in environmental assessments applicable for a particular project. Moreover, streamlining helps reducing unnecessary administrative burden and accelerates decision-making, without compromising the quality of the environmental assessment procedure. The Commission has issued a guidance document in 2016[100] regarding the setting up of coordinated and/or joint procedures that are simultaneously subject to assessments under the EIA

[96] The Commission has work ongoing to improve the country-specific knowledge about quality and functioning of the administrative systems of Member States.

[97] European Quality of Government Index, 2016.

[98] The Irish authorities informed the Commission that, in 2015, three waste Enforcement Regional Lead Authorities (WERLAs) were announced, which are tasked with driving further performance improvements by individual local authorities.

[99] The transposition of Directive 2014/52/EU is due in May 2017

[100] European Commission, 2016. Commission notice — Commission guidance document on streamlining environmental assessments conducted under Article 2(3) of the Environmental Impact Assessment Directive (Directive 2011/92/EU of the European Parliament and of the Council, as amended by Directive 2014/52/EU).

Directive, Habitats Directive, Water Framework Directive, and the Industrial Emissions Directive.

The implementation of this new Directive is also an opportunity that the Irish authorities should use to ensure that previous practices of granting development consent and allowing construction to go ahead before all environmental permitting processes are completed are not repeated in future.

The Commission has some concerns with respect to the transposition of the Strategic Environmental Assessment (SEA) Directive. There have been quite a number of complaints that the Directive is not properly applied in the area of energy infrastructure, particularly with respect to wind farm development. The SEA Directive provides a key opportunity for the environmental impacts of alternatives to a proposed project to be fully assessed and for the public to comment.

In general Ireland has a very good record for communicating new implementing legislation on time.

Compliance performance in Ireland is reasonable. However, there is a regular inflow of complaints (around 40 in total) concerning, inter alia, the planning and nature sectors. In the past years Ireland has focused on decreasing the number of infringements and implementing a number of Court judgments. There are currently infringements in the following areas:

- Five Article 258 TFEU Infringements: 2010/2161 (protection of Natura 2000 peat bogs), 2013/2056 (UWWT 91/271/EEC, small agglomerations), 2015/2006 (SAC designation), 2007/2238 (Water Framework Directive 2000/60/EC) and 2012/4028 (access to justice 2003/35/EC, inter alia on costs);
- Two Article 260 TFEU Infringements: 1998/2290 (nature 2009/147/EC, Programme of Measures in place on SPA designation, aquaculture licensing, and transposition of AA requirements), and 2000/4384 (EIA 2011/92/EC, enforcement of illegal peat extraction, Derrybrien windfarm).
- To comply with the ruling by the Court of Justice in case C-494/01, Ireland implemented a major reform of its waste sector, closed illegal landfills and financed costly clean-up and remediation works. The reforms were carried out in close cooperation with the Commission, resulting in a system that ensures a high level of compliance with EU waste legislation. The new legislation transformed the waste sector in Ireland. This offers useful lessons to other countries.
- The Irish authorities have cooperated closely with the Commission and taken a proactive approach towards managing complaints referred back to it in the environmental sector. This has allowed certain cases to be solved successfully at national level without close involvement of the Commission

Compliance assurance

EU law generally and specific provisions on inspections, other checks, penalties and environmental liability help lay the basis for the systems Member States need to have in place to secure compliance with EU environmental rules.

Public authorities help ensure accountability of duty-holders by monitoring and promoting compliance and by taking credible follow-up action (i.e. enforcement) when breaches occur or liabilities arise. Compliance monitoring can be done both on the initiative of authorities themselves and in response to citizen complaints. It can involve using various kinds of checks, including inspections for permitted activities, surveillance for possible illegal activities, investigations for crimes and audits for systemic weaknesses. Similarly, there is a range of means to promote compliance, including awareness-raising campaigns and use of guidance documents and online information tools. Follow-up to breaches and liabilities can include administrative action (e.g. withdrawal of a permit), use of criminal law[101] and action under liability law (e.g. required remediation after damage from an accident using liability rules) and contractual law (e.g. measures to require compliance with nature conservation contracts). Taken together, all of these interventions represent "compliance assurance" as shown in Figure 14.

Figure 14: Environmental compliance assurance

Best practice has moved towards a risk-based approach at strategic and operational levels in which the best mix of compliance monitoring, promotion and enforcement is directed at the most serious problems. Best practice also recognises the need for coordination and cooperation between different authorities to ensure consistency, avoid duplication of work and reduce administrative burden. Active participation in established pan-European networks of inspectors, police, prosecutors and judges,

[101] European Union, Directive 2008/99/EC of The European Parliament and of the Council of 19 November 2008 on the protection of the environment through criminal law.

such as *IMPEL*[102], *EUFJE*[103], *ENPE*[104] *and EnviCrimeNet*[105], is a valuable tool for sharing experience and good practices.

Currently, there exist a number of sectoral obligations on inspections and the EU directive on environmental liability (ELD) [106] provides a means of ensuring that the "polluter-pays principle" is applied when there are accidents and incidents that harm the environment. There is also publically available information giving insights into existing strengths and weaknesses in each Member State.

For each Member State, the following were therefore reviewed: use of risk-based compliance assurance; coordination and co-operation between authorities and participation in pan-European networks; and key aspects of implementation of the ELD based on the Commission's recently published implementation report and REFIT evaluation.[107]

Over the last decade, Ireland has taken important steps to improve the effectiveness of its environmental compliance assurance system. An evolution towards more strategic planning and risk- and outcome-based approaches is exemplified by the following:

- Compliance promotion is an integral part of compliance assurance in several important areas, e.g. in 2013, Ireland's first national inspection plan for domestic waste-water treatment systems included a national public awareness campaign to promote best practice relating to the operation and maintenance of the country's 400,000 septic tanks[108]. This plan also involved a risk-based approach focused on risks such as threats to drinking water supplies[109].
- Inspection planning is well developed in Ireland, going beyond planning of classic industrial inspections[110].
- Ireland's Environmental Protection Agency (EPA) has spearheaded the use of peer reviews at national level to help ensure the quality and consistency of the inspection and enforcement plans prepared by Irish local authorities[111]and has also introduced a system of performance review of these authorities[112].
- The EPA has developed a Licencing, Monitoring and Assessment system (LEMA) which allows effective data collection and analysis, risk assessment and targeting of compliance assurance work for industrial installations that are overseen by the EPA itself.
- The court of justice imposed fines on Ireland for non-compliance with EU law provisions in the field of waste, and penalty payments remaining due as long as the judgements of the court are not fully executed by the Member State[113]. At the same time, Ireland is also developing administrative-law approaches to dealing with non-compliance.

Ireland has sought to improve co-ordination and consistency amongst its local authorities and other compliance assurance authorities through a Network for Ireland's Environmental Compliance and Enforcement ('NIECE') coordinated by the Office of Environmental Enforcement in the EPA[114]. As regards trans-boundary co-operation and coordination with the United Kingdom on waste, a working group was set up to deal with illegal waste movements. This has used the combined skills of

[102] European Union Network for the Implementation and Enforcement of Environmental Law, 2016

[103] European Union Forum of judges for the environment, 2016

[104] European Network of Prosecutors for the Environment, 2016

[105] EnviCrimeNet, 2016

[106] European Union, Directive 2004/35/CE of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage (OJ L 143, 30.4.2004, p.56)

[107] COM(2016) 204 final and COM(2016) 121 final of 14.4.2016. This highlighted the need for better evidence on how the directive is used in practice; for tools to support its implementation, such as guidance, training and ELD registers; and for financial security to be available in case events or incidents generate remediation costs.

[108] The campaign aimed to communicate key messages via a series of channels e.g. web based, videos, animations, FAQs workshops, presentations, TV, local radio interviews etc. and inform DWWTS owners of the role they can play to protect their health, that of their neighbours and the environment. Owners were to be made aware of the simple steps they can take to properly operate and maintain their system as well as raising awareness as to the health implications in the case of a non-compliant DWWTS. Source: Study on 'Information collection and impact assessment of possible requirements for environmental inspections in the area of EU legislation on water, nature protection and trade in certain environmentally sensitive goods', Institute for European Environmental Policy, 2013, p. 135,

[109] Preparation of the plan involved the expertise and experience of national and international experts, who provided ideas, information, and comments, including a peer-review of the risk methodology that underpins the inspection plan. Further, an international symposium on domestic waste water treatment systems was held in Trinity College Dublin. This event was attended by over 250 researchers, policy makers, local authority staff and practitioners. The symposium provided a forum for debate and discussion between national and international delegates.

[110] The Environmental Enforcement Network has developed catchment-level enforcement plans in the area of water enforcement. See for details 'Comparative Study of Pressures and Measures in the Major River Basin Management Plans, Task 1c Enforcement systems', Milieu 2013, p. 14-16 and Annex III 'Quantitative information on enforcement activities'.

[111] Source: http://www.epa.ie/enforcement/network/

[112] The EPA's performance report on the 31 local authorities is available at http://www.epa.ie/enforcement/pa/performanceframework/. There are summary results for each individual local authority and combined results to give a picture of local government enforcement.

[113] Following a prosecution on behalf of the Irish Environmental Protection Agency, in October 2015 the Dublin Circuit Court fined a landfill operator EUR 20 million for nuisance odours and pollution offences.

[114] Information about the NIECE members and the network's functions is available here.

local authorities, the EPA, government departments, An Garda Síochána, the National Bureau of Criminal Investigations, and the authorities in Northern Ireland to identify the issues that need to be tackled and to work together towards better enforcement[115]. Ireland actively contributes to the work of IMPEL (in particular the IMPEL Waste and TFS Expert Team) and ENPE.

Additional up-to-date information would be useful in relation to the following:

– The extent to which risk-based methods are used to direct compliance assurance in specific problem-areas highlighted elsewhere in this Country Report, i.e. the threats to protected habitat types and species[116], and the pressures on water quality from diffuse water pollution and lack of waste-water treatment.

For the years between 2007 and 2013, Ireland reported several pending and dismissed cases involving environmental liability, but not one confirmed environmental damage incident that resulted in remediation under Irish legislation giving effect to the Environmental Liability Directive. While Ireland has not introduced mandatory financial security, it has provided guidance and the authorities have to assess the financial viability of operators when granting or updating permits. The Irish EPA is currently focusing on improving financial provision[117] for key facilities[118]. However, it is not evident that the market is providing insurance covering liabilities under the Directive.

Suggested action

- Improve transparency on the organisation and functioning of compliance assurance and on how significant risks are addressed, as outlined above.
- Continue the current work aimed at improving financial provision, and take further steps to ensure an effective system of financial security for environmental liabilities under the ELD (so that operators not only have insurance cover available to them but actually take it up).

[115] This includes joint enforcement action, such a co-ordinated action in Ireland, Northern Ireland and Scotland. The impacts of this co-operation is to ensure criminals do not use borders to escape detection and, therefore, to increase markedly the efficiency of compliance enforcement.

[116] For example, poisoning of rare raptors is a problem, with no evidence of any successful prosecutions, see Bio Intelligence 2011 Report, p. 22 and BirdLife, 2011.

[117] This can cover secured fund, on-demand performance bond, parent company guarantee, charge on property and environmental impairment liability insurance.

[118] See http://www.epa.ie/enforcement/financialprovisionforenvironmentalliabilities/

Public participation and access to justice

The Aarhus Convention, related EU legislation on public participation and environmental impact assessment, and the case-law of the Court of Justice require that citizens and their associations should be able to participate in decision-making on projects and plans and should enjoy effective environmental access to justice.

Citizens can more effectively protect the environment if they can rely on the three "pillars" of the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters ("the Aarhus Convention"). Public participation in the administrative decision making process is an important element to ensure that the authority takes its decision on the best possible basis. The Commission intends to examine compliance with mandatory public participation requirements more systematically at a later stage.

Access to justice in environmental matters is a set of guarantees that allows citizens and their associations to challenge acts or omissions of the public administration before a court. It is a tool for decentralised implementation of EU environmental law.

For each Member State, two crucial elements for effective access to justice have been systematically reviewed: the legal standing for the public, including NGOs and the extent to which prohibitive costs represent a barrier.

In Ireland, the rights of standing for environmental NGOs to bring legal actions have been largely enshrined in law, although some smaller gaps remain with regard to bringing challenges related to forestry and dumping of waste at sea. Whilst rules on costs have also been amended, the high costs still facing environmental litigants remains a concern as it prevents the public from bringing environmental cases to the national courts.

Suggested action

- Ensure that the costs of legal challenges by the public against decisions or omissions of public authorities involving EU environmental law are not prohibitively expensive, and in line with the requirements of EU law as well as the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention).

Access to information, knowledge and evidence

The Aarhus Convention and related EU legislation on access to information and the sharing of spatial data require that the public has access to clear information on the environment, including on how Union environmental law is being implemented.

It is of crucial importance to public authorities, the public and business that environmental information is shared in an efficient and effective way. This covers reporting by businesses and public authorities and active dissemination to the public, increasingly through electronic means.

The Aarhus Convention[119], the Access to Environmental Information Directive[120] and the INSPIRE Directive[121] together create a legal foundation for the sharing of environmental information between public authorities and with the public. They also represent the green part of the ongoing EU e-Government Action Plan[122]. The first two instruments create obligations to provide information to the public, both on request and actively. The INSPIRE Directive is a pioneering instrument for electronic data-sharing between public authorities who can vary in their data-sharing policies, e.g. on whether access to data is for free. The INSPIRE Directive sets up a geoportal which indicates the level of shared spatial data in each Member State – i.e. data related to specific locations, such as air quality monitoring data. Amongst other benefits it facilitates the public authorities' reporting obligations.

For each Member State, the accessibility of environmental data (based on what the INSPIRE Directive envisages) as well as data-sharing policies ('open data') have been systematically reviewed.

Ireland's performance on the implementation of the INSPIRE Directive as enabling framework to actively disseminate environmental information to the public is lagging behind. Ireland has indicated in the 3-yearly INSPIRE implementation report[123] that the necessary data-sharing policies allowing access and use of spatial data by national administrations, other Member States' administrations and EU institutions without procedural obstacles are available and implemented. Open data policy is one of the cornerstones of IE policies. The existing INSPIRE licence shall be superseded by open data policy in 2016.

Assessments of monitoring reports[124] issued by Ireland and the spatial information that Ireland has published on the INSPIRE geoportal[125] indicate that not all spatial information needed for the evaluation and implementation of EU environmental law has been made available or is accessible. The larger part of this missing spatial information consists of the environmental data required to be made available under the existing reporting and monitoring regulations of EU environmental law.

Suggested action

- Identify and document all spatial data sets required for the implementation of environmental law, and make the data and documentation at least accessible 'as is' to other public authorities and the public through the digital services foreseen in the INSPIRE Directive

[119] European Commission, 2016. Aarhus Convention
[120] European Union, Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC
[121] European Commission. 2016. INSPIRE
[122] European Union, EU eGovernment Action Plan 2016-2020 Accelerating the digital transformation of government COM(2016) 179 final
[123] European Commission, 2016. INSPIRE: Monitoring and Reporting
[124] Inspire indicator trends
[125] Inspire Resources Summary Report