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The EU Environmental Implementation Review
Country Report - POLAND

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

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

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Executive summary

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

Poland has significantly improved its environmental performance since joining the EU in 2004. In many cases, the incorrect or delayed full transposition of directives led to implementation gaps (for example the Environmental Impact Assessment Directive, the Urban Waste Water Treatment Directive). Therefore, as a first step, national legislation had to be changed to address the identified transposition deficiencies before the directives could be implemented correctly. Several areas remain problematic, in particular implementation of the Water Framework Directive and the Air Quality Directive. Poland is encouraged to make better use of the EU Funds to address these challenges and enhance its administrative capacity.

Main Challenges

The three main challenges to implementing EU environmental policy and law in Poland are:

- Improving the implementation of the Water Framework Directive, in particular as regards the governance and strategic planning of projects in navigation, hydropower, flood defence and of any other economic activities likely to have significant negative effects on the water environment;
- Preparing and implementing the investments required to meet the objectives and standards of the Urban Waste Water Treatment Directive;
- Improving the implementation and enforcement of air quality standards, in particular by establishing emission standards for coal-fired individual heaters.

Main Opportunities

Poland could perform better on topics where there is already a good knowledge base and good practices. This applies in particular to:

- Preparing national and regional waste management plans that would move Poland towards prevention and recycling rather than creating incineration overcapacities;
- Using new approaches such as green infrastructure to manage flood risk (e.g. restoration of floodplains, wetlands);
- Undertaking measures to foster R&D in eco-innovation and the use of green technologies by SMEs.

Points of Excellence

Where Poland is a leader on environmental implementation, innovative approaches could be shared more widely with other countries. Good examples are:

- Integrated assessment procedures under the Environmental Impact Assessment (EIA) and Habitats Directives carried out by the Regional Directorates

[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.

for Environmental Protection;

- The national network of environmental and managing authorities that works as a platform for sharing experience in integrating environmental issues into operational programmes co-financed under the EU Funds.

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 investment and bring both short and long-term benefits for the economy, environment and citizens.[5]

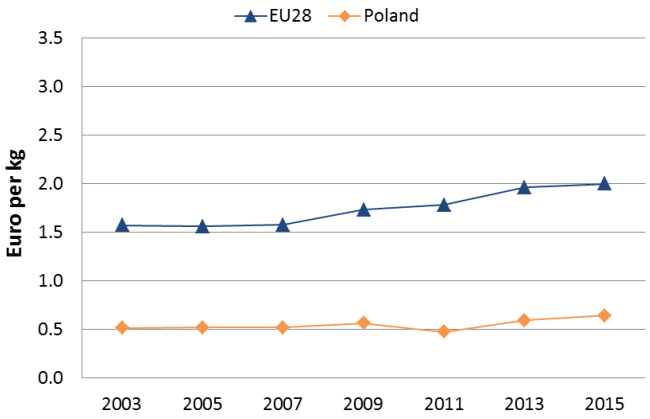
The Polish economy is among the least resource- and energy-efficient in the EU. Per capita domestic material consumption has grown since the early 2000s to reach 20.7 tonnes per capita, compared to the EU average of 14.5 tonnes, but decreased to 17.2 tonnes in 2014. These trends present both a challenge and a considerable economic opportunity for the country, which is still undergoing the process of economic modernisation. In 2015, the Minister for Economic Development established a multi-stakeholder group whose task is to develop a circular economy roadmap.

Furthermore, while Poland may expect improvements in eco-innovation investments and activities in the coming years, the overall shift towards a more resource-efficient economy will require long-term systemic innovation. Implementing eco-innovation should be seen as an economic opportunity rather than a cost – particularly for the private sector, which could be further encouraged and supported by the public authorities.

The Polish green technology and eco-innovation markets are still in the phase of development and have considerable growth potential. Environmental technologies represented an investment of 0.38 % of GDP from the public sector and 0.29 % of GDP from the private sector in 2011. This is mainly thanks to dedicated instruments funded by the National Fund for Environmental Protection and Water Management. Moreover, Poland sees investment in environmental technologies as an important area of investment of operational programmes for 2014-2020.

Poland is performing below the EU average in terms of resource productivity (i.e. how efficiently the economy uses material resources to produce wealth), with 0.64 EUR/kg in 2015 (the EU average is 1.982.0 EUR/kg).[6] As shown in Figure 1, this represents a slight but steady increase since 2011.

Figure 1: Resource productivity 2003-2015[7]



SMEs and resource efficiency

Poland SMEs scored close to or above the EU average for resource efficiency. 48 % of Poland's SMEs have invested up to 5 % of their annual turnover in their resource efficiency actions (EU28 average 50 %), 28 % of them currently offer green products and services (EU28 average 26 %), 64 % have taken measures to save energy (EU28 average 59 %), 54 % to minimise waste (EU28 average 60 %), 52 % to save water (EU28 average 44 %), and 64 % to save materials (EU28 average 54 %). From a circular economy perspective, 31 % have taken measures to recycle by reusing material or waste within the company (EU28 average 40 %), 16 % to design products

[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.

that are easier to maintain, repair or reuse (EU28 average 22 %) and 27 % were able to sell their scrap material to another company (EU28 average 25 %).[8]

The measures taken by SMEs to improve resource efficiency meant production costs were reduced in 35 % of Poland's SMEs (EU28 average 45 %).

Moreover, 34 % of the SMEs in the Poland have one or more full time employee working in a green job at least some of the time (EU28 average 35 %). Poland has an average number of 2.5 full time green employees per SME (EU28 average 1.7 %).[9]

Poland has 70 EMAS registered organisations, which is a fair share of the 4 034 organisations that hold a registration. Poland has 30 EU Ecolabel licences (total number of licences is 1 875), making it the tenth-highest achiever in terms of EU Ecolabel licences.

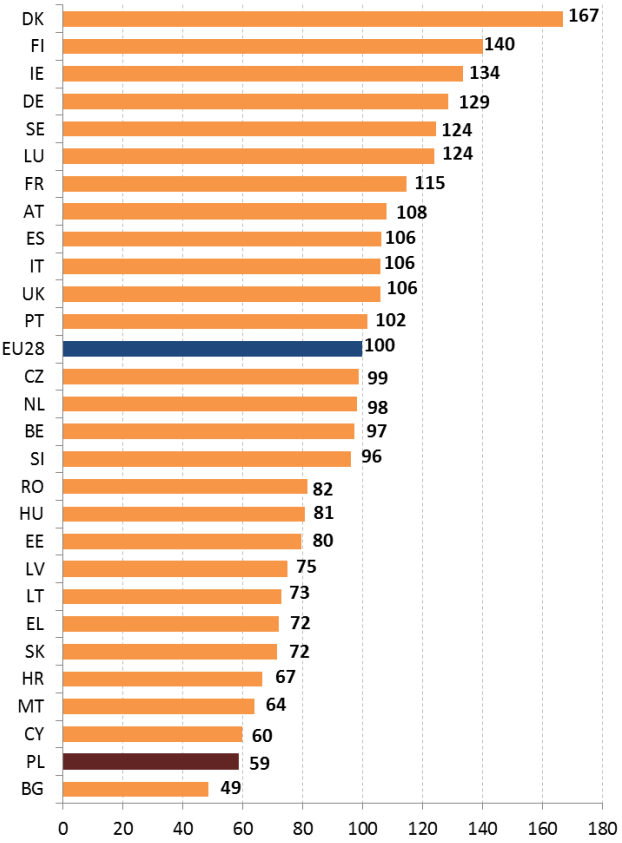
Eco-innovation

Poland is among the countries with persistently low scores in the European Eco-innovation Scoreboard since 2010. In the 2015 edition, Poland came second last among EU countries, with a score significantly below the EU average (59 out of 100) as shown in Figure 2. The overall low score in the index, especially in terms of eco-innovation inputs and activities, reflects Poland's low level of innovation in general.

Poland performs significantly below the EU average in all the scoreboard components. The country's performance is particularly weak in terms of inputs to eco-innovation activities, including R&D investments and R&D personnel and early-stage investments in green technologies. Private early-stage green investments have been among the lowest in the EU – levels similar to other countries in central and eastern Europe. Poland exceeds the EU average only in one indicator: revenues in eco-industries (as a percentage of total revenues across all companies).

The key drivers of eco-innovation for companies in Poland include high operating costs, the willingness to reduce material and energy costs, and companies' willingness to access new markets, increase competitiveness and improve company reputation (PARP, CSO 2015). The companies developing environmental technologies also pointed to the importance of customer demands, even though only a minority of customers consider environmental benefits key to their purchasing decisions.

Figure 2: Eco-Innovation Index 2015 (EU=100)[10]



The most significant barriers faced by companies that implement eco-innovation were economic: lack of funds; difficult access to capital; the relatively high cost of eco-innovative technologies; uncertain market demand and uncertain return on investment; the lack of economic and fiscal incentives; and growing competition. Companies also indicated that administrative barriers were a problem, often in relation to Poland's risk-averse public procurement practices.

Suggested action

- Raise awareness of the public and SMEs on the benefits of circular economy.

[8] European Commission, 2015. Flash 426 Eurobarometer 'SMEs, resource efficiency and green markets'.

[9] The Flash 426 Eurobarometer 'SMEs, resource efficiency and green markets' defines a '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).

[10] Eco-innovation Observatory: Eco-Innovation scoreboard 2015.

Waste management

Turning waste into a resource requires:

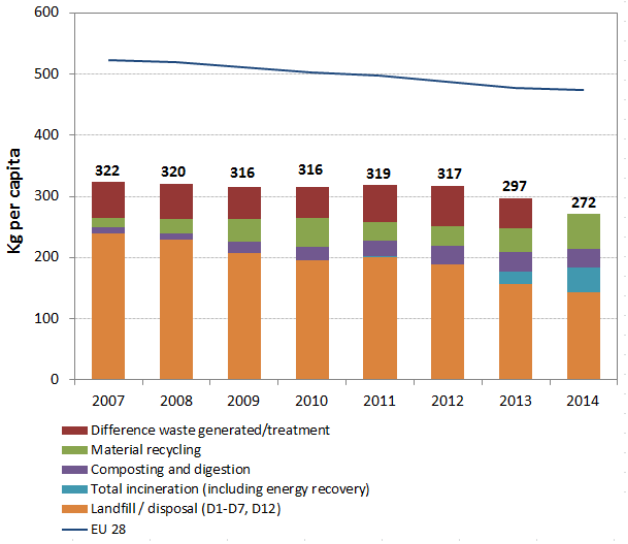
- full implementation of EU waste legislation, which includes the waste hierarchy; the need to ensure separate collection of waste; and landfill diversion targets.
- reducing per capita waste generation and waste generation in absolute terms.
- limiting energy recovery to non-recyclable materials and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

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

The EU's approach to waste management is based on the 'waste hierarchy' which sets 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 Waste Management Plans and Waste Prevention Programmes should be the key indicators when measuring Member States' performance. This section focuses on the management of municipal waste for which EU law sets mandatory recycling targets.

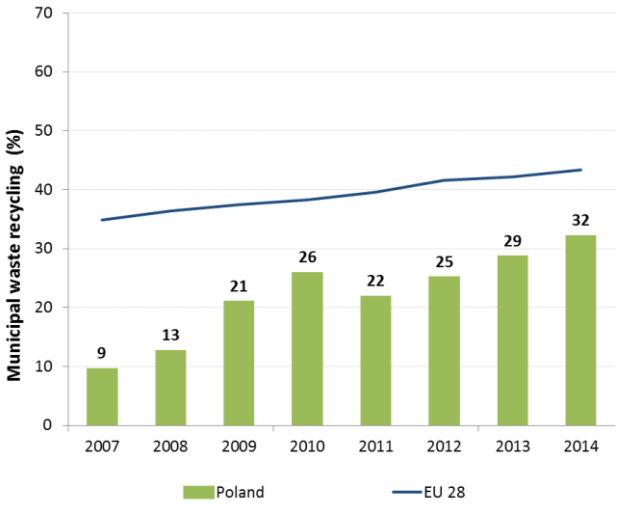
Figure 3: Municipal waste by treatment in Poland 2007-2014[11]



In 2014, Poland generated 272 kg/y/inhabitant in municipal waste; this is well below the EU average (475 kg per capita).[12] Figure 3 depicts the municipal waste by treatment in Poland in terms of kg per capita, and shows an increase in recycling and a reduction in landfilling.

As shown in Figure 4, 32 % of municipal waste is recycled (material recycling and composting). This was below the EU average (44 %) in 2014. Poland must therefore invest strongly in recycling in the coming years in order to reach the 2020 recycling target.[13]

Figure 4: Recycling rate of municipal waste 2007-2014[14]



Although Poland is taking steps to improve its waste treatment, a large part of the country's municipal waste is still being disposed of in landfills. Poland landfilled 53 % of its municipal waste in 2014, which is well above the EU average (28 %). However, Poland reported that in 2014 it had already met the 2020 target for diverting biodegradable waste from landfills (35 %).

In order to help bridge the implementation gap in Poland, the Commission has delivered a roadmap for compliance in which economic instruments play a crucial role.[15]

Illegal landfilling and dumping waste in forests is a pressing problem despite Poland's ongoing efforts to clean up the dumping sites. According to a recent report by the Supreme Audit Office,[16] this is mainly due to insufficient checks on enterprises dealing with waste

[11] Eurostat, Municipal waste, accessed October 2016.

[12] Eurostat, Municipal waste and treatment, by type of treatment method, accessed October 2016. Note: the reported quantities of waste generated and treated do not match exactly for the following reasons: estimates for the population not covered by collection schemes, weight losses due to dehydration, double counts of waste undergoing two or more treatment steps, exports and imports of waste and time lags between generation and treatment (temporary storage).

[13] 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.

[14] Eurostat, Recycling rate of municipal waste, accessed October 2016.

[15] Roadmap for Poland.

[16] Raport Najwyższej Izby Kontroli 'Wdrożenie w gminach nowego systemu gospodarki odpadami'

management and a lack of sites for treating and disposing of specific waste (e.g. electronic waste, municipal bulky waste). The municipalities are chiefly responsible for enforcing waste legislation and addressing these shortcomings, and their role requires strengthening. The updated the National Waste Management Plan and on-going update of the regional waste management plans (to be completed by the end of 2016) is encouraging, as the planned waste management infrastructure will be reviewed in order to avoid incineration overcapacities which could further compromise recycling of waste. Moreover, any EU co-financed investment is set to be aligned with those plans.

The Polish economy would benefit from a comprehensive waste management system coherent with the principles of the circular economy (via material and energy savings, jobs, reduced outlays on environment clean-up). Estimates show that full implementation of existing waste legislation could create more than 37,000 jobs in Poland and increase the annual turnover of the waste sector by over EUR 4 billion. Moving towards zero landfilling could increase this to over 44,000 additional jobs and increase the annual turnover by over EUR 4.6 bn.[17]

Suggested action

- Pursue the review of the level of landfill gate fees and consider introducing incineration fees, to more effectively divert waste towards higher ends of the waste hierarchy and to make recycling and reuse economically attractive as indicated in the new national Waste Management Plan. Use the revenues to support the separate collection and alternative infrastructure at the first steps of waste hierarchy. Avoid building excessive infrastructure for the treatment of residual waste.
- Focus on implementation of the separate collection obligation to increase recycling rates, in particular by introducing mandatory separate collection of recyclable waste by households and establishing sites for collection of specific waste (so called 'points for collection of selective waste') in each municipality.
- Extend and improve the cost-effectiveness, monitoring and transparency of existing Extended Producer Responsibility schemes and eliminate free-riding (situations where some producers do not adequately comply with their obligations under EPR).
- Strengthen the enforcement of the waste legislation, in particular the control of entities involved in management and disposal of waste, as well as set up effective sanctions for municipalities or local authorities to ensure they put more effort to curbing illegal waste dumping practices.

[17] Bio Intelligence service, 2011. Implementing EU Waste legislation for Green Growth, study for European Commission. The breakdown per country on job creation was made by the consultant at the Commission's request, but was not included in the published document.

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.

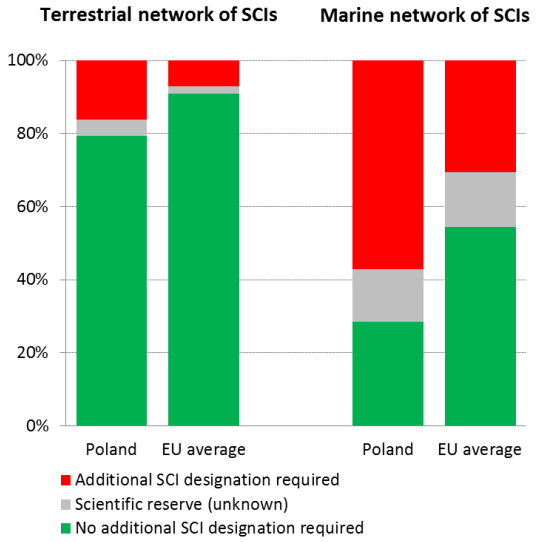
The 1992 EU Habitats Directive and the 1979 Birds Directive are the cornerstone of the European legislation aimed at conserving the EU's wildlife. Natura 2000, the largest coordinated network of protected areas in the world, is the key instrument to achieve and implement the Directives' objectives of ensuring 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[18] both on land and at sea, should be the key criteria for measuring Member States' performance.

In 2015, there were 987 Natura 2000 sites in Poland: 849 SCIs and 145 SPAs. In early 2016, the Natura 2000 network in Poland covered approx. 19.6 % of the land territory, with 15.5 % SPAs and 10.9 % SCIs.

As shown in Figure 5[19], although Poland has made substantial progress in recent years, the objective of complete designation of the network has not yet been fully met.

Figure 5: Sufficiency assessment of SCI networks in Poland based on the situation until December 2013 (%)[20]



There are still gaps particularly with regard to certain marine species e.g. porpoise, bats, alkaline fens and certain forest habitats.[21] Poland has designated no sites as SACs according to Article 4(4) of the Habitats Directive.

According to the latest report on the conservation status of habitats and species covered by the Habitats Directive in Poland,[22] only 20 % of the habitats' biogeographic assessments were favourable in 2013 (EU27: 16 %). Furthermore, 50 % were considered to be unfavourable-inadequate[23] (EU27: 47 %) and 20 % were unfavourable – bad (EU27: 30 %). As for the species, 33 % of the assessments were favourable in 2013 (EU27: 23 %), 37 % were unfavourable-inadequate (EU27: 42 %) and 13 %

[18] SCIs are designated pursuant to the Habitats Directive whereas SPAs are designated pursuant to the Birds Directive; figures of coverage do not add up because some SCIs and SPAs overlap. SAC means an SCI designated by the Member States.

[19] 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.

[20] European Commission, internal assessment.

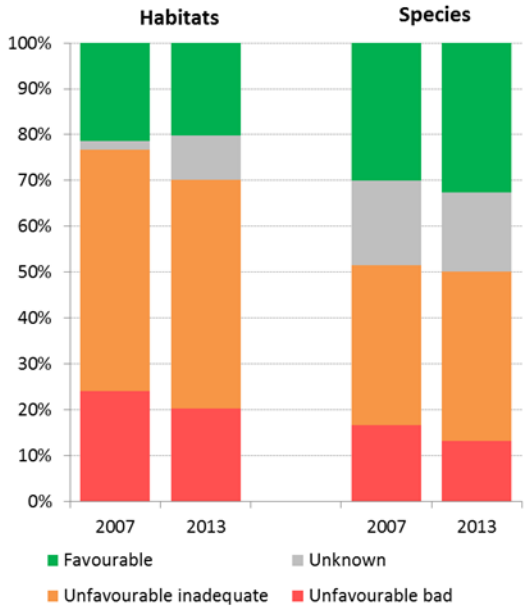
[21] For each Member State, the Commission assesses whether the species and habitat types in Annexes I and II to the Habitats Directive are sufficiently represented by the sites designated to date. This is expressed as a percentage of species and habitats for which further areas need to be designated in order to complete the network in that country. A scientific reserve is given when further research is needed to identify the most appropriate sites to be added for a species or habitat. The current data, which were assessed in 2014-2015, reflect the situation up until December 2013.

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

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

had unfavourable-bad status (EU27: 18 %). This is shown in Figure 6.[24]

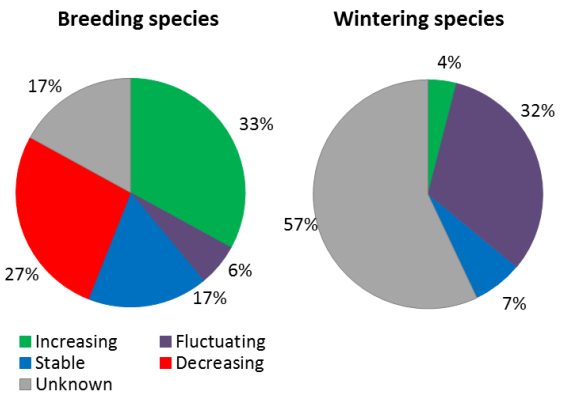
Figure 6: Conservation status of habitats and species in Poland in 2007-2013 (%)[25]



As regards birds, 50% of the breeding species showed short-term increasing or stable population trends (for wintering species this figure was 11 %), as shown in Figure 7.

Intensive agriculture and human-induced modifications of natural conditions (e.g. of water ecosystems) together with invasive alien species have been identified as the greatest threats to biodiversity in Poland.

Figure 7: Short-term population trend of breeding and wintering bird species in Poland in 2012 (%)[26]



Conservation objectives and measures for Natura 2000 sites are established in the management plans ("*Plany zadań ochronnych*" and "*Plany ochrony*"). These plans are adopted for 10 years by the Regional Directors of Environmental Protection both for SCIs and SPAs and are legally binding. In February 2016, there were 444 management plans.

The main challenges related to Natura 2000 include finalising the designation process, adopting the management plans for the remaining sites and allocating sufficient resources to the management of the sites (both for public bodies and the landowners managing the sites). In this context, it is particularly important to continue the support for extensive management of grasslands and fish ponds. The coherence of the Natura 2000 network, on the other hand, relies on ensuring that the migration corridors remain connected, especially those which are threatened by fast-developing infrastructure, such as regulation and maintenance of rivers, road transport and renewable energies.

Since the majority of the forest habitat sites designated for protection are managed by the State Forests Holding it is important that forest management plans for the forest districts overlapping with the Natura 2000 sites fully take into account the conservation objectives and measures specified for the individual sites. The State Forests Holding should also ensure that forestry operations are in line with strict species protection requirements. Management in the forests which have maintained their close-to-natural character, such as the Białowieża Forest or primeval forests in the Carpathians, should be adapted to promote natural processes, including leaving trees for dead wood and natural regeneration.

Suggested action

[24] 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.

[25] 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, see national summary of Poland.

[26] Article 12 of the Birds Directive - national summary of Poland.

- Complete the Natura 2000 designation process and put in place clearly defined conservation objectives and the necessary conservation measures for the sites in order to maintain/restore species and habitats of community interest to a favourable conservation status across their natural range.
- Provide the appropriate resources for the management of the Natura 2000 sites, including by promoting and facilitating access of landowners to agri-environmental payments.
- Continue works in scope of raising knowledge and education about Natura 2000 as to promote social acceptance and benefits from Natura 2000 network.

Estimating Natural capital

The EU Biodiversity Strategy to 2020 calls on the Member States to map and assess 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.

The work on mapping and assessing ecosystems and their services at national level (MAES) is ongoing under the National Environmental Monitoring Programme. Since February 2015, Poland has been part of ESMERALDA[27] (the EU Coordination and Support Action 'Enhancing ecosystem services mapping for policy and decision-making' within the Horizon 2020 programme). In March 2015, the Ministry of the Environment launched a project on mapping and assessing urban ecosystems, which deals with strengthening the use of ecosystem services[28] to protect and develop green infrastructure in cities.

Poland has a National Ecosystem Services Partnership Network led by the University of Poznań. A national symposium on ecosystem services in transdisciplinary approach (ECOSERV) is organised every two years. It is the only nationwide cyclical forum on ecosystem services in Poland.

Suggested action

- Continue support the mapping and assessment of ecosystems and their services, valuation and develop natural capital accounting systems.

Green Infrastructure

The EU strategy on green infrastructure[29] promotes the incorporation of green infrastructure into related plans and programmes to help overcome the 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 people understand the value of the benefits that nature provides to human society and mobilises investments to sustain and enhance them.

The key elements of Green Infrastructure in Poland are 'preserved natural wealth' and 'ecological corridors and networks'. However, there is no obligation to include ecological corridors in local plans, which are the legally binding documents used when taking decisions on investments. The absence of a well-defined binding framework means there are no uniform rules to determine corridors, and no consistent network of corridors. The degree of implementation of ecological corridors therefore varies in local plans, and the concept of green infrastructure is not fully incorporated in other policies such as climate adaptation, water management, management of floods, recreation and tourism or food security. In particular, Poland has not fully explored the potential of green infrastructure (such as natural water retention measures) to provide ecosystem services in water management for preventing floods and improving water quality. Water management is focused on traditional engineering solutions which are more expensive and often worsen the status of waters and nature.

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,

[27] ESMERALDA project

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

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

and the rate of land take is on track with an aim to achieve no net land take by 2050.

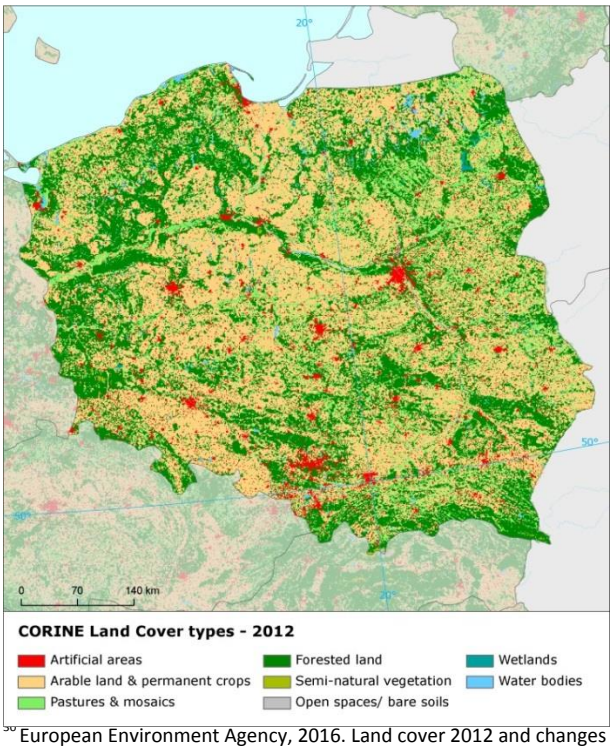
SDG 15 requires countries to combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land-degradation-neutral world by 2030.

Soil is an important resource for life and the economy. It provides key ecosystem services including food, fibre and biomass for renewable energy, carbon sequestration, water purification and flood regulation, and raw and building material. Soil is a finite and extremely fragile resource. Land taken by urban development and infrastructure is highly unlikely to be returned to its natural state; it consumes mostly agricultural land and increases the fragmentation of habitats. Soil protection is not subject to a comprehensive and coherent set of rules in the EU. Existing EU policies in areas such as agriculture, water, waste, chemicals and the prevention of industrial pollution do help protect soils, but the continuous degradation of soil suggests that this protection is insufficient.

Artificial land cover means areas used for settlements, production systems and infrastructure. It may itself be broken down into 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 Poland in 2012.

Figure 8: Land cover types in Poland 2012[30]



[30] European Environment Agency, 2016. Land cover 2012 and changes country analysis [publication forthcoming]

The annual land take rate (growth of artificial areas) as provided by CORINE Land Cover was 0.49% in Poland over the period 2006-12, just above the EU average (0.41%). It represented 8420 hectares per year and was mainly driven by housing, services and recreation, but also by mines, quarries and dump sites[31].

The soil water erosion rate in 2010 was 0.96 tonnes per hectare per year, well below the EU28 average (2.46 tonnes) [32].

The percentage of built-up land in 2009 was 2.48 %, below the EU average (3.23 %).[33]

There are still no EU-wide datasets making it possible to provide benchmark indicators for soil organic matter decline, contaminated sites, pressures on soil biology and diffuse pollution. The EU Expert Group on Soil Protection is currently making an updated inventory and assessment of soil protection policy instruments in Poland and other EU Member States.

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) [34] aims to achieve good environmental status (GES) of the EU's marine waters by 2020 by providing an ecosystem approach to the management of human activities which 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 subregion.

As part of their marine strategies, Member States had to make an initial assessment of their marine waters, determine GES[35] and establish environmental targets by July 2012. By July 2014 they also had to establish monitoring programmes for the ongoing assessment of their marine waters. The next element of their marine

[31] European Environment Agency Draft results of CORINE Land Cover (CLC) inventory 2012; mean annual land take 2006-12 as a % of 2006 artificial land.

[32] Eurostat, Soil water erosion rate, Figure 2, accessed November 2016

[33] European Environment Agency, 2016. Imperviousness and imperviousness change.

[34] European Union, Marine Strategy Framework Directive 2008/56/EC

[35] 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'.

strategy is to establish a Programme of Measures (2016). The Commission assesses whether the elements in the programme of measures are sufficient to meet the requirements of the MSFD.

Polish waters are part of the Baltic Sea marine region and Poland is a contracting party to the Convention on the Protection of the Marine Environment of the Baltic Sea (HELCOM). In the Baltic Sea, the main risks to biodiversity are eutrophication, overfishing and bycatch, pollution by contaminants and oil and the introduction of non-indigenous species.[36]

Poland did not comply with the deadline of October 2012 for reporting on the initial assessment of its marine waters, the determination of its good environmental status and its environmental targets, nor did it comply with the deadline of October 2014 for reporting on its monitoring programme for marine waters. Poland only provided this information in November 2015.

These delays mean the Commission has not yet been able to assess Poland's marine strategy. It will do so in the next assessment exercise (i.e. 2016-2017, assessment of other Member States' programmes of measures).

The late submission of Poland's reports also meant that Commission did not formulate guidance for Poland like it did for other Member States in its reports on the implementation of the MSFD.[37]

[36] European Environment Agency report on Baltic Sea.

[37] 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' COM(2014)097 and Report from the Commission assessing Member States' monitoring programmes under the Marine Strategy Framework Directive (COM(2017)3).

3. Ensuring citizens' health and quality of life

Air quality

The EU Clean Air Policy and legislation requires 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.

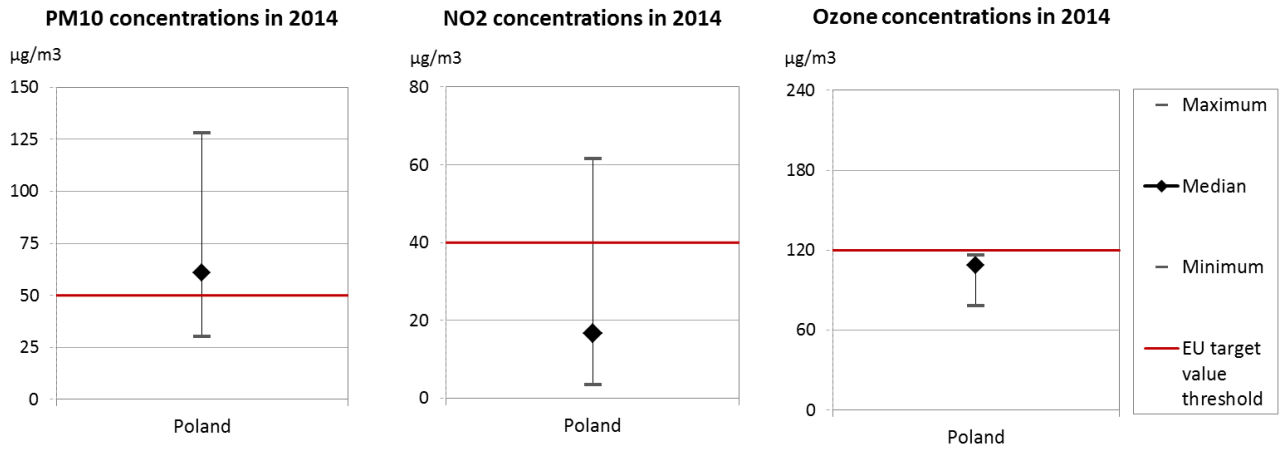
The EU has developed a comprehensive body of air quality legislation[38] which establishes health-based standards and objectives for a number of air pollutants. As part of this, Member States are also required to ensure that up-to-date information on ambient concentrations of different air pollutants is routinely made available to the public. In addition, the National Emission Ceilings Directive requires that emissions of main pollutants be reduced at national level.

Emissions of several air pollutants have decreased in Poland.[39] Reductions between 1990 and 2014 for sulphur oxides (-72 %), nitrogen oxides (-33 %) as well as ammonia (-36 %) mean that air emissions for these pollutants are within the currently applicable national emission ceilings.[40] While total emissions of volatile organic compounds increased with 11%, this pollutant is within its currently applicable national emission ceiling.

At the same time, air quality in Poland continues to give serious cause for concern. The European Environment Agency estimated that in 2013 about 48 270 premature deaths were attributable to fine particulate matter concentrations, of which 1 150 to ozone concentration[41] and over 1 610 to nitrogen dioxide concentrations.[42] This is due also to Poland exceeding the EU's air quality standards, as shown in Figure 9.[43]

In 2014, EU air quality standards for particulate matter (PM10)[44] were breached in 42 zones and for benzo[a]pyrene in all zones.[45] Often, these standards were exceeded by a very large margin. Furthermore, 24 air quality zones have indicated excessive levels of fine

Figure 9: Attainment situation for PM10, NO_2 and O_3 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.*

[38] European Commission, 2016. Air Quality Standards.

[39] European Environment Agency, 2016. Air pollutant emissions data viewer (LRTAP Convention).

[40] 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.

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

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

[43] Based on European Environment Agency, 2016. Air Quality in Europe – 2016 Report. (Figures 4.1, 6.1 and 7.1).

[44] 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.

[45] See EIONET The Air Quality Portal.

particulate matter (PM2.5), for which the limit value only became binding in 2015. Nitrogen dioxide (NO_2)[46] limits are also exceeded (in four agglomerations). The target values and long-term objectives regarding ozone concentrations were not met in several air quality zones in 2014, including three zones in which the related target values were also exceeded. In addition, target values for annual mean concentrations of arsenic were exceeded in two air quality zones.

The European Commission is launching infringement procedures covering all the Member States concerned, including Poland, to follow up persistent breaches of air quality requirements (for PM10 and NO_2), which have severe negative effects on health and the environment. The aim is to put in place adequate measures to bring all zones into compliance.

Moreover, Poland does not take sufficient measures to limit the exceedances of other substances. The main source of PM10 and benzo[a]pyrene pollution is 'low stack emission' (heating of individual houses). NO_2 exceedances are caused by the transport sector.

In particular, it is striking that, given such a grave air pollution problem, Poland is the only EU Member State with no standards for solid fuels sold on the market. Additionally, Poland has no emission standards for new boilers. The prevalence of sub-standard boilers combined with the availability of poor quality coal are major factors impacting air quality in most zones in Poland. Without appropriate, tailored measures to reduce the pollution coming from major contributing sectors, it is very unlikely that the continuous and severe breaches of EU air quality standards will end.

It is estimated that the health-related external costs from air pollution in Poland are above EUR 26 –billion/year (income adjusted, 2010), which include not only the intrinsic value of living a full healthy life but also the direct costs to the economy. These direct economic costs include the 19 million workdays lost each year due to sickness related to air pollution, with associated costs for employers of EUR 1 500 million/year (income adjusted, 2010); healthcare costs above EUR 88 million/year (income adjusted, 2010); and costs to agriculture (crop losses) of EUR 272 million/year (2010).[47]

Suggested action

- Maintain downward emissions trends of air pollutants in order to achieve full compliance with air quality limit values and reduce adverse air pollution impacts on health, environment and economy. In particular, facilitate and support actions at regional and local level that aim to improve air quality in the zones affected by poor air quality.
- Reduce nitrogen oxide (NOx) emissions to comply with currently applicable national emission ceilings[1] and/or to reduce nitrogen dioxide (NO2) (and ozone concentrations), inter alia, by reducing transport related emissions - in particular in urban areas.
- Reduce PM10 emission and concentration, inter alia, by reducing emissions related to energy and heat generation using solid fuels, to transport and to agriculture.
- Enhance legal instruments to improve the implementation and enforcement of air quality standards, in particular by establishing emission standards for new solid-fuel boilers as well as quality standards for solid fuels placed on the market, in order to effectively tackle low stack emissions of PM10 and benzo[a]pyrene. In addition, promote the use of financial incentives to accelerate phasing out of substandard boilers.

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.[48] To address this, the EU *acquis* sets out several noise-reduction 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 to prevent and reduce environmental noise and preserve good acoustic environment quality.

Poland's implementation of the Environmental Noise Directive[49] is significantly delayed. The noise mapping for the most recent reporting round (2011) is mostly complete. However, action plans for noise management have been adopted for only 56 % of agglomerations and 13 % of major roads. Action plans have been adopted for major railways and the major airport in Warsaw.

[46] 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 (NO_2).

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

[1] Under the revised National Emission Ceilings Directive Member States 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.

[48] 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.

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

Regarding the missing action plans, the Commission initiated bilateral contacts with Poland to clarify the situation.

Suggested action

- Accelerate the completion of action plans for noise management.

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*[50] seeks to ensure good status of all water bodies across Europe by addressing pollution sources (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.

Poland has provided information to the Commission from its second cycle of RBMPs. However, as the Commission has not yet been able to validate this information for all Member States, it is not reported on here.

In the first cycle of RBMPs adopted in 2009, Poland reported the status of 4 586 rivers, 1 038 lakes, 9 transitional, 10 coastal and 161 groundwater bodies. Only 3 % of natural surface water bodies achieve a good or high ecological status[51] (while the status of 83 % is unknown) and 3 % of heavily modified or artificial water bodies[52] achieve a good or high ecological potential (70 % unknown). Furthermore, good chemical status[53] is achieved by only 3 % of surface water bodies (94 % unknown), 6 % of heavily modified and artificial water bodies (89 % unknown) and 93 % of groundwater bodies. Moreover, 82 % of groundwater bodies are in good quantitative status.[54]

The main pressure on Polish surface water bodies is flow regulation and morphological alterations that affect 52 % of water bodies. Point sources of pollution affect 33 % and water abstraction 12 % of water bodies. Diffuse sources of pollution only affect 3 % of water bodies. This pressure distribution is influenced by the two biggest river basin districts of the rivers Vistula and Oder. In other smaller districts on the border with neighbour countries the distribution of pressures is significantly different.

The 2009 RBMPs have a number of deficiencies that result in uncertainties about the status, pressures and effectiveness of the Programmes of Measures. In particular there are weaknesses in monitoring, the methods for designating heavily modified bodies and the methods for assessing and classifying their status. As a result, a very high proportion of water bodies has unknown status. A high number of exemptions were applied without transparent justification. Furthermore, additional measures are needed to address the impact of agriculture. New infrastructure for agriculture and for hydropower needs to be fully assessed against Article 4.7.[55]

These deficiencies caused the Commission to launch an infringement procedure regarding implementation of the WFD. They had also implications for suspending EU funding for 2014-2020 of projects which entail hydromorphological modifications to water bodies and fall under exemptions of Article 4(7) of the WFD until Poland demonstrates compliance with the WFD in the second cycle of RBMPs due at the end of 2015.[56] The

[50] 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)

[51] Good ecological status is defined in the WFD and refers to the quality of the biological community, the hydrological characteristics and the chemical characteristics.

[52] 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.

[53] Good chemical status is defined in the WFD and refers to compliance with all the quality standards established for chemical substances at European level.

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

[55] For more information on the implementation status and more specific recommendations, see the Water Framework Directive Implementation Reports.

[56] For more details, please refer to section 5 on the use of EU financial

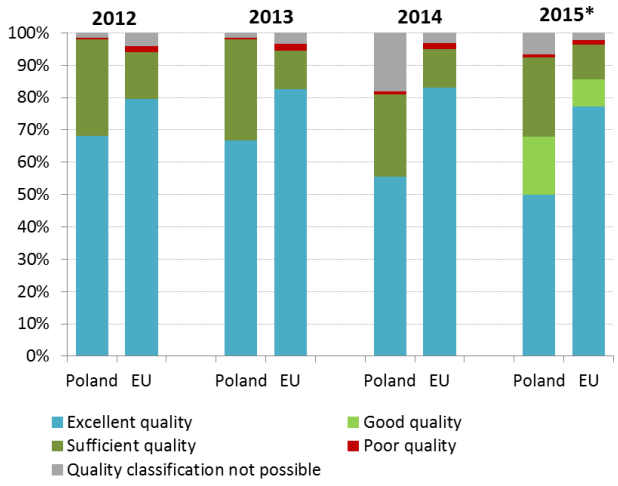
Commission expects Poland to address these deficiencies in the second-cycle RBMPs.

Almost all of the surface water flowing across Poland drains into the Baltic Sea, which is suffering from excess levels of nutrients. Poland's contribution to the overall nitrogen load in the Baltic Sea is significant,[57] and a large part of it comes from agriculture.

A CJEU ruling (C-356/13)[58] highlighted that Poland is not complying with the Nitrates Directive. The Court held that the designation of nitrates vulnerable zones is not appropriate and does not take into account the criteria set out in the Directive (e.g. the eutrophication of the Baltic Sea). The Court also found that the action programmes established by Poland are insufficient.

As regards drinking water, Poland reaches very high compliance rates of 100 % for the microbiological, chemical and indicator parameters laid down in the Drinking Water Directive.[59]

Figure 10: Bathing water quality 2012-2015[60]



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

As shown in Figure 10, in 2015, 60.9 % of Poland's 197 bathing waters were of excellent quality, 21.8 % were of good quality and 8.1 % were of sufficient quality. Two bathing waters were of poor quality or non-compliant while it was not possible to assess the remaining 16 bathing waters.[61] These figures are a slight improvement on 2014. There are major issues regarding implementation of the Urban Waste Water Treatment Directive in Poland. These centre around delays in achieving compliance with the Directive, reporting and the use of EU funds to achieve compliance.

The final deadline for Poland to comply with the requirements of the Urban Waste Water Treatment Directive was 31 December 2015. Poland did not report on the implementation of the Urban Waste Water Treatment Directive in the last reporting exercise for the reference year 2012, so the Commission was not able to assess compliance with earlier transitional deadlines. The Commission is now following up on the issues of non-reporting and non-compliance.

Poland participates in the EU coordinated pilot project on Structured Information and Implementation Framework (SIIF). From the unofficial data available under SIIF, it appears that Poland had 1 567 agglomerations of more than 2 000 population equivalent (p.e.) in 2013. These agglomerations generated a total load of 42 574 501 p.e., where 69 % of this load is connected to collecting systems.

At the Commission's request, Poland prepared a master plan for the implementation of the Urban Waste Water Treatment Directive which prioritised investments in agglomerations above 100 000 p.e.[62]

Suggested action

- Address all gaps identified regarding the implementation of the Water Framework Directive in the second cycle of the RBMPs, in particular by carrying out more detailed assessment of pressures, improving monitoring of the status of water bodies and designing effective Programmes of Measures that address all the main pressures identified.
- Ensure that exemptions granted fulfil all conditions for applying them and are supported by evidence, in particular regarding the assessment of significantly better environmental option.
- Align water management with the objectives of the WFD in particular as regards the planning of investments in navigation, flood defence and hydropower sectors.
- Increase efforts in implementation of infrastructure to comply with the UWWTD as soon as possible and improve the national reporting system under the UWWTD.
- Extend designation of nitrates vulnerable zones and reinforce measures in the action programmes.

Enhancing the sustainability of cities

The EU Policy on the urban environment encourages cities to implement policies for sustainable urban

instruments.

[57] Website of Helcom Convention

[58] Judgment - Case C-356/13

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

[60] European Environment Agency, State of bathing water, 2016.

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

[62] For more details please refer to section 5 on use of EU financial instruments

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 lives in urban areas.[63] The urban environment poses particular challenges for the environment and human health, while 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[64].

The European Commission will launch a new EU benchmark system in 2017[65].

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. Warsaw is among seven applicants for the 2018 EU Green Capital Award.

International agreements

The EU Treaties require that the Union policy on the environment promotes measures at 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, Poland 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 Nagoya Protocol.[66] It has neither signed nor ratified the African-Eurasian Migratory Waterbird Agreement.

[63] European Environment Agency, Urban environment.

[64] http://urbanagendaforthe.eu/

[65] 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.

[66] 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

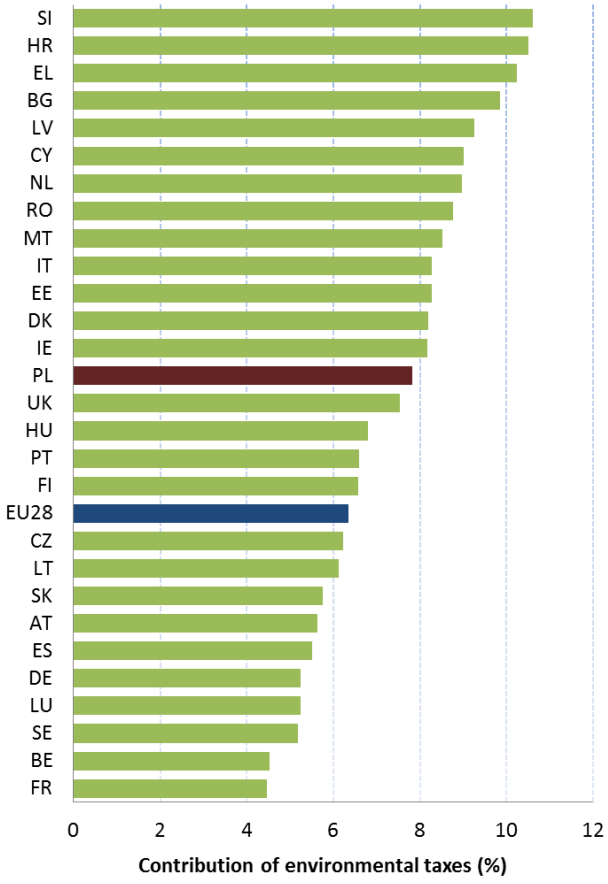
The Circular Economy Action Plan encourages the use of financial incentives and economic instruments, such as taxation to ensure that product prices better reflect environmental costs. The phasing out of environmentally harmful subsidies is monitored in the context of the European Semester and in national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

Taxing pollution and resource use can generate increased revenue and brings significant social and environmental benefits.

In 2014, Poland's revenue from environmental taxes accounted for 2.51 % of GDP (against an EU average of 2.46 %). This is a significant increase from 2000, when they only made up 2.15 % of GDP. Energy taxes amounted to 2.13 % of GDP, much above the EU average of 1.88 %. Taxes on pollution and resources (all ring-fenced for Poland's national, regional and local environmental funds) raised the equivalent of 0.10% of GDP, a sharp drop from 0.19 % the previous year, while taxes on transport (excluding transport fuels) accounted for 0.19 % of GDP. Car registration taxes are not based on emission levels but on engine capacity and on the car's value, which generally equals the cost of acquisition/sale of the car. As shown in Figure 11, in 2014 environmental tax revenues accounted for 7.8 % (up from 7.5 %) of total revenues from taxes and social-security contributions (EU-28 average: 6.35 %).

A 2016 study[67] suggests that there is considerable potential for shifting from labour taxes to environmental taxes in Poland. Under a good practice scenario[68], the amount could be as much as PLN 15.26 billion in 2018 (EUR 3.64 billion), rising to PLN 29.77 billion in 2030 (EUR 7.1 billion) (both in real 2015 terms). This is equivalent to an additional 0.75 % and 0.98 % of GDP in 2018 and 2030 respectively. The largest potential source of revenue could come from vehicle taxes by aligning them with emission levels. This would also be beneficial for air quality and overall efficiency of the car fleet. Changes could amount to PLN 9.4 billion in 2030 (EUR 2.24 billion) (real 2015 terms), equivalent to 0.31 % of GDP.

Figure 11: Environmental tax revenues as a share of total revenues from taxes and social contributions (excluding imputed social contributions) in 2014[69]



[67] 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.

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

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

Green Public Procurement

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 that have 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 is equivalent to approximately 14 % of GDP.[70] A substantial part of this money is spent on sectors with high environmental impact such as construction or transport, so GPP can help significantly lower the impact of public spending and foster sustainable innovative businesses. The Commission has proposed EU GPP criteria[71].

Poland has in place a national action plan on sustainable procurement procedure for the period 2013-2016.[72]

Green procurement procedure criteria have not been drawn up at national level. However, the Public Procurement Office (PPO) promotes their overall voluntary application on the basis of EU GPP criteria.[73]

The current target is to reach 20 % of GPP by the end of 2016 (measured by the PPO as the inclusion of all environmental aspects in contract award procedures). Some additional targets include:

- increasing awareness of GPP measured by the number of newly trained procurement officials (600 beneficiaries of dedicated training and conferences);
- increasing the number of entities that have a verified environmental management system;
- increasing the number of EU Ecolabel certified products and national eco-labels, Type I ISO standards;
- increasing by 20 % the number of users of the section on 'Green public procurement' on the website of the PPO.[74]

[70] European Commission, 2015. Public procurement

[71] 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.

[72] National Action Plan on Sustainable Procurement Procedure

[73] European Commission, 2015. Documentation on National GPP Action Plans

[74] PwC, 2015. Final report. Strategic use of public procurement in promoting green, social and innovative policies

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 in these areas.

Making good use of the ESIF[75] is essential to achieve the environmental goals and integrate these into other policy areas. Other programmes and funds such as Horizon 2020, the LIFE programme and the EFSI[76] may also support implementation and the spread of best practice.

Poland stands to be the biggest beneficiary of Cohesion Policy funds in the period 2014-2020, with the allocation of EUR 77 billion. In addition to significant investments in climate change mitigation and adaptation, the planned spending for the specific environment-related categories is 7.9 % (EUR 6.08 billion, see Figure 12). Out of this, the largest allocation of EUR 2.5 billion is intended for the water and wastewater sector, followed by EUR 1.3 billion for waste management, EUR 434 million for nature & biodiversity and EUR 428 million for air quality measures. The mentioned environmental priorities are supported under the national Operational Programme for Infrastructure & Environment and under 16 Regional Operational Programmes. It is too early to draw conclusions on the use and results of ESIF for the period 2014-2020, as the relevant programmes are still in an early stage of implementation.

On waste management, the following results can be expected by the end of this budgetary period:

- support for 526 sorted municipal waste collection points;
- support for 85 waste management plants;
- at least 3.4 million people offered sorted waste collection;
- at least 643.5 thousand tonnes per year of additional waste recycling capacity.

For wastewater management and water supply, the following results are expected to be achieved:

- building of 10 583 km of sanitary sewage systems and supporting at least 247 municipal waste water plants;

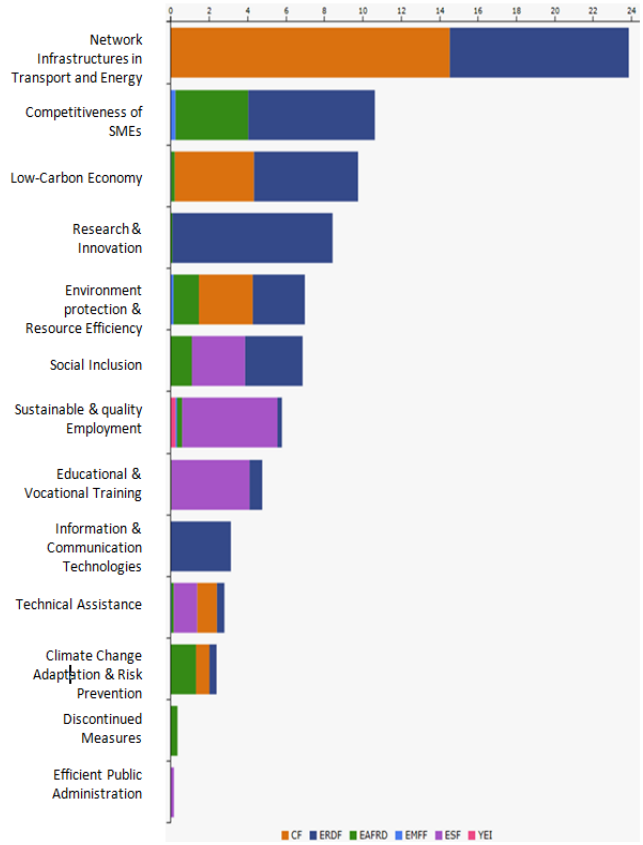
75 ESIF comprises five funds – the European Regional Development Funds (ERDF), the Cohesion Fund (CF), the European Social Fund (ESF), the European Agricultural Fund for Rural Development (EAFRD), and the European Maritime and Fisheries Fund (EMFF). The ERDF, the CF and the ESF together form the Cohesion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

76 European Investment Bank, 2016 European Fund for Strategic Investments

– connection of additional population to the wastewater collecting system and improvement of wastewater treatment for existing users – in total 2 586 115 users.

Current data suggest that the EU funds for the 2007-2013 period were almost fully spent.[77]

Figure 12: European Structural and Investment Funds 2014-2020: Budget Poland by theme, EUR billion[78]



The *ex ante* conditionalities under Thematic Objective 6 on water and waste have been partially fulfilled. Therefore relevant action plans for each sector have been prepared. Most notably for the waste sector, national and 16 voivedeship waste management plans are to be reviewed, in particular regarding legislative and financial measures and on the infrastructure needed to implement the Waste Directives. For the *ex ante* conditionality on water, Poland committed itself to two main actions:

i. amending the Water Act so that strategic infrastructure planning complies with the Water Framework Directive (WFD);
ii. adoption of second-cycle river basin management plans that address the deficiencies in the first RBMPs and which are compliant with the WFD.

Moreover, in addition to the *ex ante* conditionality mentioned above, due to shortcomings with the implementation of the WFD, another special conditionality clause was imposed for the EU co-financing of projects which trigger use of the Article 4(7) exemption under the WFD. The EU co-financing of such projects is suspended until the Commission confirms the compliance of the second RBMPs for the Vistula and the Oder with the WFD.

Despite significant amounts of EU funds being devoted to implementing the Urban Wastewater Treatment Directive in 2000-2013 (approx. EUR 10 billion), the objective of full compliance is far from being reached. Therefore, for the 2014–2020 programming period, the Commission asked Poland to assess how far it had implemented the Directive and to prioritise specific agglomerations and investments in order to direct EU funding to the projects which bring the biggest contribution to narrowing the implementation gap.

Since 2010 Poland has in place a national network of managing and environmental authorities entitled 'Partnership: Environment for Development', co-funded by EU Cohesion Policy. The network brings together national and regional authorities and provides them with a platform for exchanging knowledge and building capacity on environmental matters related to the implementation of Cohesion Policy. The working groups established within the network address issues on implementing the EU environmental *acquis* which are causing particular difficulties in the preparation of project pipelines. The contributions from the working groups often supported the initiation of important legislative proposals such as the Anti-Smog Act in 2015 and the national waste prevention programme.

On the integration of environmental concerns into the common agricultural policy (CAP), the two key areas for Poland are:

i. using rural development funds to pay for environmental land management and other environmental measures, while avoiding financing measures which could damage the environment;
ii. ensuring effective implementation of the first pillar of the CAP on cross compliance and first pillar 'greening'.

The approved national rural development programme (under the EAFRD) amounts overall to EUR 8.598 billion. The allocation for the ecosystem priority (priority 4) is EUR 2.647 billion, which represents 30.8 % of the total budget. However only EUR 1.198 billion, representing 8.8 % of the total budget, is dedicated to agri-environment/climate measures. The current budget will

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

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

be insufficient to cover the increasing Polish environmental needs. A strong concern remains for the funds allocated to priority 4, as all funds dedicated to Natural Constraint are counted as funds contributing for the environment, whereas in fact there will not be any environmental enhancement. This leads to an overestimation of the funds allocated to environmental protection. Improvements to the rural development programme are needed to target the areas identified under the programme of measures under the second-cycle River Basin Management Plans due at the end of 2015 and to reflect the priorities of the Prioritized Action Framework for Natura 2000.

The direct payment envelope of Poland for the period 2015-2020 is EUR 17.067 billion, 30 % of which (EUR 5.12 billion) is allocated to greening practices beneficial for the environment. An environmentally ambitious implementation of first pillar greening would clearly help to improve the environmental situation in areas not covered by rural development, including intensive area, and if appropriate Poland could review its implementation of this.

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[79]. 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 environmental 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.

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

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 cooperate and coordinate effectively with each other, within a system of multi-level governance.

Poland uses regulatory instruments such as laws, orders, etc. to address policy areas (including projects of public interest) issued by all level of government. However, regulatory impact assessments are not used systematically for all regulatory proposals or are completed late in the decision-making process, often after the proposal has been prepared. Therefore Poland could improve its decision-making process to make better use of regulatory impact assessment and to make better use of evidence in the choice of options in order to ensure that only the right solutions to address the problem are selected.

Environmental policy developments in Poland are mainly driven by EU regulations and directives. An important part of the implementation challenge is timely transposition of EU environmental law by national authorities into national legislation. Poland sometimes transposes environmental directives belatedly and legislation is often incorrectly transposed. However, when instances of non-conformity occur, the country has cooperated and amended its legislation accordingly. Most of the current transposition problems relate to the Water Protection Directives, but also to access to justice (e.g. on the possibility for the public concerned to ask a court to order interim measures, or on the failure to provide for an effective review procedure before a court for certain projects falling under the scope of the EIA Directive).

Implementation remains, however, the real challenge, as indicated by the fact that Poland is among the countries with the highest number of environmental infringements and complaints, mainly in the areas of water (e.g.

implementation of the WFD), air pollution (e.g. exceedances of PM_{10} limit values) and nature protection.

Coordination and integration

Poland does not have a sustainable development strategy. The existing planning documents on the environment (such as the Air Protection Programme) are declarative and have a non-binding character.

The Minister of the Environment is responsible for environmental and climate change policies, in particular on air, waste, geology and geological concessions, water management, forest management and environmental education. The Minister supervises the state forests, the General Inspectorate for Environmental Protection, the General Director for Environmental Protection, the President of the Water Management Board and the President of the State Nuclear Agency.

The Minister of the Environment also has powers to initiate legislative procedure: the Minister can adopt executive acts and submit proposals to Parliament, including laws transposing EU directives. The Minister also oversees the implementation of legislation, either directly for areas within his/her portfolio or by supervising the General Director for Environmental Protection and the President of the Water Management Board.

Environmental competences are often shared between different levels of Poland's territorial administration (i.e. voivedeship, poviat and municipalities).

Some weaknesses have been observed over the management of water bodies. Control over water uses and activities which may affect the status of water bodies is dispersed among authorities at central, regional, poviat and municipal level without sufficient coordination. Moreover, the Regional Water Management Boards have conflicting roles as both investors in projects and as authorities responsible for protecting water: this situation seems to undermine the effective implementation of certain provisions of the Water Framework Directive.

Similarly, the objective of biodiversity conservation should be fully integrated with the responsibilities on State Forests set out in the Act on Forests. More than half of the area designated as Natura 2000 sites in Poland is state-owned forest. This requires transparent and participative forest governance that can accommodate specific conservation requirements for each Natura 2000 site, which may consist in minimising human intervention and facilitating natural processes.

The 'Partnership: Environment for Development' national network of managing and environmental authorities is a good example of the integration of environmental policy into the programming cycle of EU funds. Under the steering of the General Directorate for Environmental Protection, the Regional Directorates for Environmental Protection cooperate on environmental matters with the managing authorities of operational programmes co-financed from EU funds.[80]

Impact assessments are important tools to ensure environmental integration in all government policies.[81]

16 Regional directors for environmental protection supervised by the General Director for Environmental Protection are responsible for nature protection and participate in development consent procedures for projects which require environmental impact assessments. In some cases, such as for motorways and express roads, the regional director conducts the EIA procedure and issues the environmental decision. For others, the regional directors are consulted before granting the environmental decision and construction permits. Since their creation in 2008, the regional directorates have significantly improved the quality of the EIA procedure, and Poland now has one of the most comprehensive procedures in the EU-28. Polish law streamlines and integrates requirements under other environmental directives, in particular the Habitats and Birds Directives, into one EIA procedure. The regional directorates have the necessary capacity to ensure high quality in the integrated EIA procedures.

The Commission has issued a guidance document in 2016[82] on the setting up of coordinated and/or joint procedures that are simultaneously subject to assessments under the EIA Directive, Habitats Directive, Water Framework Directive and the Industrial Emissions Directive.

Suggested action

- Use EU Funds to build necessary capacities and know-how at all levels of administration involved in implementation and enforcement.
- Strengthen governance of EU environmental legislation and policies, in particular in nature conservation and water management (e.g. adapt the structure and tasks of the water authorities to better perform the tasks related to the implementation of the Water Framework Directive and involve them in the permitting process).
- Improve enforcement in case of failures to implement mitigation and compensatory measures imposed on

[80] For more information please see section 5 on the use of EU financial instruments

[81] Article 11 of the TFEU provides that 'Environmental protection requirements must be integrated into the definition and implementation of the Union's policies and activities, in particular with a view to promoting sustainable development.'

[82] 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).

project developers in environmental decisions and construction permits.

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[83] 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 13.

Figure 13: 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, such as *IMPEL*[84]*, EUFJE*[85]*, ENPE*[86] *and EnviCrimeNet*[87], 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)[88] 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[89].

Over the last decade, Poland has made significant efforts to improve the effectiveness of environmental inspections. Depending on the types of risks to be addressed, different kinds of inspection are foreseen, in particular comprehensive inspections (audit) and campaign-, problem- and investment- related inspections. In addition, different types of checklists are being used to support inspection processes.[90] As Chapter 1 shows, Poland's Supreme Audit Office has played a valuable role in analysing systemic compliance problems. Poland has established bilateral cooperation with the Norwegian Government, which has led to introduction of a new set of procedures on planning, performance, documentation and follow-up to inspections[91] and greater use of electronic tools to improve the efficiency of inspection work. While a risk-based approach to organising industrial installations is now in place, there is room for further refinement and improvement[92].

[83] European Union, Environmental Crime Directive 2008/99/EC

[84] European Union Network for the Implementation and Enforcement of Environmental Law

[85] European Union Forum of judges for the environment

[86] The European Network of Prosecutors for the Environment

[87] European Union, Environmental Crime Directive 2008/99/EC

[88] European Union, Environmental Liability Directive 2004/35/CE

[89] 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;
- tools to support its implementation, such as guidance, training and ELD registers;
- financial security to be available in case events or incidents generate remediation costs.

[90] For details see IMPEL IRI Poland, p. 35-37.

[91] Detailed information about the relevant projects is available here.

[92] IMPEL IRI Poland, p. 28-31. The current system is insufficiently flexible to allow differentiation within activity types and the risk criteria are not always aligned with environmental objectives to be achieved and

Annual activities reports of individual inspection authorities are published online. Some performance monitoring is undertaken, using some basic input and output indicators, but outcome indicators are not in use, which hampers the assessment of the effectiveness of inspection work.

Although the added value of cooperation and coordination between Polish authorities with relevant functions is recognized, there are no structured mechanisms established and exchange of personnel and joint inspections are rare[93]. Poland is active within the EUFJE[94] and some of the IMPEL Expert Teams[95].

Up-to-date information would be valuable in relation to the following:

- data-collection arrangements to track the use and effectiveness of different compliance assurance interventions;
- the extent to which risk-based methods are used to direct compliance assurance at the strategic level and in relation to specific problem-areas highlighted elsewhere in this Country Report, i.e. illegal waste disposal, the threats to protected habitat types and species, air quality breaches, the pressures on water quality from diffuse pollution and the serious deficit in urban wastewater treatment infrastructure.

Poland makes impressive use of the Environmental Liability Directive to address environmental incidents, recording 506 cases between 2007 and 2013. As regards financial security (to cover remediation costs where operators cannot), evidence indicates that there is an active engagement of the insurance sector in the implementation of the Directive.

Suggested action

- Improve transparency on the organisation and functioning of compliance assurance and on how significant risks are addressed, as outlined above.
- Step up efforts in the implementation of the Environmental Liability Directive (ELD) with proactive initiatives, in particular by drafting national guidance. It should moreover take further steps to ensure an effective system of financial security for environmental liabilities (so that operators not only have insurance cover available to them but actually take it up).

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.

Poland has a well-established system of access to justice in administrative matters. However, the system of administrative appeal and judicial review in the environmental area is not based on a clear set of rules that ensures legal certainty for all potential litigants. Furthermore, in a number of substantive laws the possibility to challenge individual decisions generally granted to persons having legal interests is limited in relation to environmentally important decisions. The members of the public concerned are not parties to certain administrative procedures, including water permit and building permit procedures. As a result, in those cases they cannot ask the national courts to order interim measures. Also there is no effective review procedure for what are called 'special acts' in Poland, which apply for example to road investment projects, airport projects or rail transport projects. Polish law also does not provide the possibility to challenge some administrative decisions which may have a negative impact on nature protection (e.g. the forest management plan). These issues are the subject of a pending infringement procedure.

The public is also not granted the legal standing to challenge plans and programmes based on EU

do not cover all relevant environmental policy subject areas.

[93] IMPEL IRI Poland, p. 40 and 49.

[94] Poland hosted the 2011 EUFJE Annual Conference

[95] In particular the 'Industry and Air' and the 'Waste and TFS' expert teams. Poland hosted in 2013 an IMPEL IRI project.

environmental law.[96]

Suggested action

- Take the necessary measures to ensure standing of environmental NGOs to challenge acts or omissions of a public authority in all sectoral EU environmental laws, in full compliance with 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[97], the Access to Environmental Information Directive[98] and the INSPIRE Directive[99] 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[100]. 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.[101]

Poland's performance on the implementation of the INSPIRE Directive as enabling framework to actively disseminate environmental information to the public is good, but leaves room for improvement.

Poland has indicated in the 3-yearly INSPIRE implementation report[102] 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. Poland has no common licensing model for data sharing and is not planning to introduce such a model. Existing regulations define who are entitled to receive data free of charge and to what extent. Poland does not foresee to collect fees for access to INSPIRE spatial data sets via discovery and view services.

Assessments of monitoring reports[103] issued by Poland and the spatial information that Poland has published on the INSPIRE geoportal[104] indicate that not all spatial information needed for the evaluation and implementation of EU environmental law has been made available or is accessible. While it is true that the larger part of this missing spatial information is the environmental data required to be made available under the existing reporting and monitoring regulations of EU environmental law, Poland has taken steps to centralise information about the data (metadata) using the national geoportal (geoportal.gov.pl) and reforming the public environmental data policy, aiming for a higher level of transparency.

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.

[96] Study on access to justice in environmental matters 2012/2013

[97] UNECE, 1998. Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters

[98] European Union, Directive 2003/4/EC on public access to environmental information

[99] European Union, INSPIRE Directive 2007/2/EC

[100] European Union, EU eGovernment Action Plan 2016-2020 - Accelerating the digital transformation of government COM(2016) 179 final.

[101] At the Commission's request, most Member States provided an INSPIRE Action Plan addressing implementation issues. These plans are currently being assessed by the Commission.

[102] European Commission, INSPIRE reports

[103] Inspire indicator trends

[104] Inspire Resources Summary Report