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**The EU Environmental Implementation Review
Country Report - LATVIA**

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 legislation¹. 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 Programme² 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 law⁴.

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

Latvia is a well organised country that benefits from a good level of environmental protection and, generally high air and water quality. It has a relatively high variety

of different ecosystems and natural areas and is one of the countries in Europe with the richest biodiversity and established nature conservation traditions. Environmental implementation in Latvia is good with low numbers of complaints and infringements. However, waste management and particularly recycling, remains amongst the challenges for Latvia requiring strong efforts in order to reach the 2020 recycling target of 50%. There is also further room for improvement in addressing resource intensity issues. Latvia could benefit from a more structured approach and political support to the circular economy, as well as from targeted eco-innovation policy.

Main Challenges

The main challenges with regards to the implementation of EU environmental policy and law in Latvia are:

- ❖ Improving waste management, particularly increasing recycling, rolling-out separate collection and reducing landfilling;
- ❖ Reducing resource intensity which would lessen the exposure of Latvian businesses to rising resource costs.

Main Opportunities

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

- ❖ Use of the opportunities provided by EIB loans and EFSI support to further promote environmental projects;
- ❖ Use of market based instruments to encourage resource efficiency, particularly in waste management and in water resources management;
- ❖ High potential for Green Infrastructure development in order to address flood and erosion risks, while improving the connectivity of natural areas.

Points of Excellence

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

- ❖ Good compliance record, having a low number of complaints and infringements.

1 European Union, Communication "Delivering the benefits of EU environmental policies through a regular Environmental Implementation Review" ([COM/2016/ 316 final](#)).

2 Decision No. 1386/2013/EU of 20 November 2013 on a General Union Environmental Action Programme to 2020 "[Living well, within the limits of our planet](#)".

3 United Nations, 2015. [The Sustainable Development Goals](#)

4 This EIR report does not cover climate change, chemicals and energy.

Part I: Thematic Areas

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

Developing a circular economy and improving resource efficiency

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

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

Measures towards a circular economy

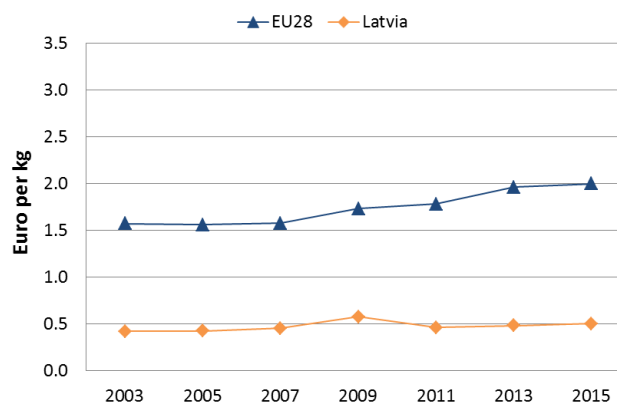
Transforming our economies from linear to circular offers an opportunity to reinvent them and make them more sustainable and competitive. This will stimulate investments and bring both short and long-term benefits for the economy, environment and citizens alike.⁵

Latvia's resource productivity⁶ (how efficiently the economy uses material resources to produce wealth), in 2014 in terms of value produced per kg of resources used is 0.5 EUR/kg, above an EU average of 2 EUR/kg⁷. Figure 1 shows that Latvia's resource productivity has remained relatively stable since 2011.

Latvia is gradually moving towards more eco-innovation but the speed depends largely on availability of financial resources. There is much scope for work in the area of public awareness and financial planning in order to foster more favourable conditions for eco-innovation development in Latvia.

In Latvia responsibility for the policies related to eco-innovation and circular economy is split among a range of institutions, primarily the Ministry of Economy, Ministry of Education and Science and Ministry of Environmental Protection and Regional Development.

Figure 1: Resource productivity 2003-15⁸



In the Sustainable Development Strategy for Latvia until 2030⁹ one of the priorities is "Nature as future capital", which aims to position Latvia as a leader in protection, promotion and sustainable use of ecosystem services. In addition, the National Development Plan 2014-2020¹⁰ integrates sustainability concerns into a number of priority areas, including economic growth, energy efficiency and energy production, growth-oriented territorial development and sustainable management of natural and cultural capital.

Targeted policy documents for promoting and utilising the principles of circular economy are in the early stages of development. The Declaration of the new Government of Latvia adopted in February 2016 highlights waste management, alternative fuels and bioeconomy as priorities.

SMEs and resource efficiency

In the Flash Eurobarometer 426 "SMEs, resource efficiency and green markets"¹¹ it is shown that 47% of Latvia's Small and Medium-sized enterprises (SMEs) have invested up to 5% of their annual turnover in their resource efficiency actions (EU28 average 50%), 17% of them are currently offering green products and services (EU28 average 26%), 61% took measures to save energy (EU28 average 59%), 38% to minimise waste (EU28 average 60%), 41% to save water (EU28 average 44%), and 58% to save materials (EU28 average 54%).

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

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

7 Eurostat, [Resource productivity](#), accessed October 2016

8 Eurostat, [Resource productivity](#), accessed October 2016

9 [Sustainable Development Strategy for Latvia until 2030](#)

10 [National Development Plan 2014-2020](#)

11 European Commission, 2015. Flash 426 Eurobarometer "[SMEs, resource efficiency and green markets](#)"

From a circular economy perspective, 16% took measures to recycle by reusing material or waste within the company (EU28 average 40%), 19% to design products that are easier to maintain, repair or reuse (EU28 average 22%) and 17% were able to sell their scrap material to another company (EU28 average 25%).

According to the Flash Eurobarometer 426, resource efficiency actions allowed the reduction of production costs in 44% of Latvian SMEs (EU28 average 45%).

The Flash Eurobarometer 426 "SMEs, resource efficiency and green markets" shows that 47% of the SMEs in Latvia have one or more full time employee working in a green job at least some of the time (EU28 average 35%). Latvia has an average number of 2.1 full time green employees per SME (EU28 average 1.7%).

Eco-Innovation

The key eco-innovation areas in Latvia have not changed markedly in recent years. Sectors that continue to develop include renewable energy and energy efficiency in residential buildings, forest-based industries and eco-cosmetics. In addition, service sectors that use Latvia's 'green image' as a key selling point – e.g. tourism, leisure and recreation and organic agriculture – maintain their activities.

Among the developing eco-innovation areas in Latvia one can highlight electromobility. In 2014 the Ministry of Transport elaborated the Electromobility Development Plan of Latvia 2014-2016. The plan has been prepared with a long-term view to fully integrate this area into transport policy as a way to decrease the use of fossil fuels, CO2 emissions and noise levels. This includes the support to new means of electromobility and the establishment of their charging infrastructure.

Through the Climate Change Financial Instrument, the Ministry of the Environmental Protection and Regional Development has provided financial support for the implementation of 102 Projects where electrical vehicles were purchased and public charging infrastructure was installed.

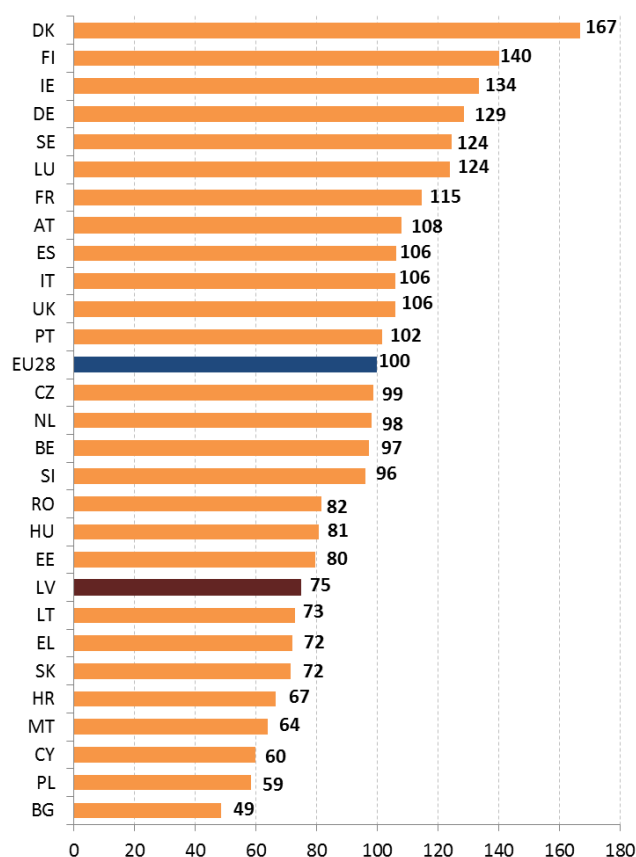
In terms of recent actions by established cleantech companies in Latvia, a stronger focus on water management and purification can be observed, as well as on technologies related to water infrastructure development and monitoring.

The green technology start-up scene in Latvia sees new ideas and enterprises incubated in a wide range of sectors, including electromobility, wind energy, ecodesign, eco-innovative solutions in construction, LED lightning applications, composite materials and metalworking to develop material characteristics that are

necessary to substitute rare natural resources¹².

The overall position of Latvia in the Eco Innovation Scoreboard (Eco-IS) has improved from 24th place in 2013 (55 points) to 20th place in 2015 (74.9 points) as shown in Figure 2.

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



The main drivers for eco-innovation in Latvia are certainly the energy and resource efficiency targets of the EU's Europe 2020 strategy, which have been integrated in national policy documents and corresponding funding lines, most notably the EU Structural Funds envelope. Together with national co-financing Latvia plans to invest around EUR 550 million in research, development and innovation (RDI), EUR 565 million in transition to low-carbon economy and EUR 733 million in environmental protection and resource efficiency by 2020 (Ministry of Finance, 2014). The Latvian Smart Specialisation Strategy emphasises the focus on developing bioeconomy, smart materials and sustainable energy solutions as three out of five key areas for RDI investment. This ensures a sustained political and financial commitment for the development of the green economy – an area that previously has not been high on the political agenda in Latvia.

Equally important is the increasing support to eco-

¹² Neimanis, M., 2016, Interview.

¹³ [Eco-innovation Observatory](#): Eco-Innovation scoreboard 2015

innovation from other international funding programmes, such as the Norwegian Financial Mechanism. In 2014, with the support of the Norwegian Financial Mechanism's programme, "Green Industry Innovation", the Green technology incubator was launched in Latvia, which was the first innovation support instrument specifically dedicated to the development of eco-innovative companies and eco-innovative entrepreneurship in the country.

The richness of natural capital such as forests, soil and water can also be identified as drivers of eco-innovation. Almost half of Latvia's territory is made up of natural ecosystems. Low population density and relatively low levels of industrial pollution highlight the "green image" of the country, making it a good destination for eco-tourism and travel. Consequently, it also promotes a wide range of eco-innovation businesses and related activities.

The main barriers to eco-innovation development and diffusion in Latvia are related to the small number and size of companies active in environmental technology fields and the low innovative capacity of companies in general, especially in the medium and high-tech fields. In addition, the very limited number of large companies that have resources to divert to RDI and new technology adoption, and the low level of early-stage investments that are available for green technology development, are important hampering factors¹⁴.

NGOs have been active in initiating cultural change and positive influence from forerunner countries on societal and entrepreneurial awareness should not be underestimated. While the demand for eco-innovation products has been increasing in recent years, price is still a dominant factor in consumer and producer choice, which limits incentives for entrepreneurs to engage in eco-innovative activities.

Latvia does not have a specific green growth policy. But Sustainable Development Strategy of Latvia until 2030 has a special chapter on Innovative and eco-efficient economy. Besides, elements of eco-innovations are in chapter on Nature as capital for future, where several instruments and initiatives are suggested to maintain natural capital, for example, green budget reform, market instruments, support to firms and technologies that are eco-innovative. The Smart Specialisation Strategy aims to promote innovation capacity and the creation of a system that fosters and technological progress. Its priorities, amongst others, include support to the knowledge-based bio-economy, smart materials and smart energy. Green growth and circular economy vocabulary is being adopted gradually from EU directives,

¹⁴ Brieze, I., 2013, Latvia is the second most green country in Europe. A myth or reality? Interview with the manager of the INTERREG project Global

but their implications in the context of the national economy have to be still assessed to find the best solutions. Though, overreliance on the EU and EEA financial mechanisms create a fragmented support landscape that is not favourable to long-term green industry development.

Waste management

Turning waste into a resource requires:

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

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

The EU's approach to waste management is based on the "waste hierarchy" which sets out an order of priority when shaping waste policy and managing waste at the operational level: prevention, (preparing for) reuse, recycling, recovery and, as the least preferred option, disposal (which includes landfilling and incineration without energy recovery). The progress towards reaching recycling targets and the adoption of adequate WMP/WPP¹⁵ should be the key items to measure the performance of Member States. This section focuses on management of municipal waste¹⁶ for which EU law sets mandatory recycling targets.

The amount of municipal waste generated in Latvia amounted to 325 kg/y/inhabitant in 2014 (well below the EU average of 475 kg/y/inhabitant).¹⁷

Figure 3 depicts the municipal waste by treatment in Latvia in terms of kg per capita, which shows a decrease in recycling and an increase in landfilling.

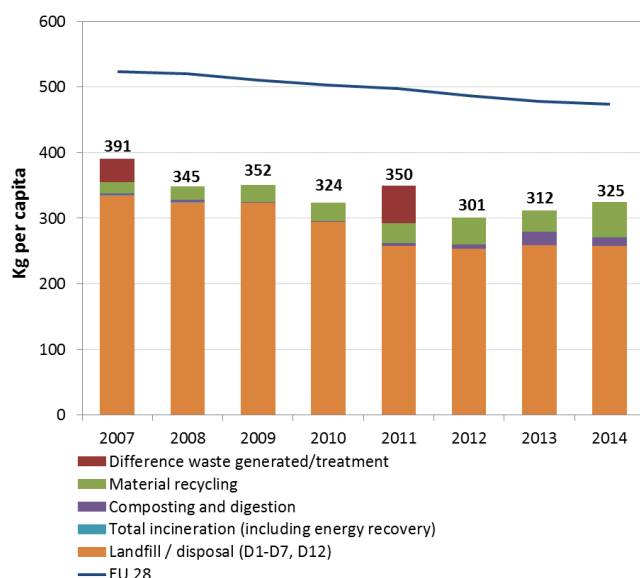
The main treatment option of municipal waste remains disposal in landfills. In 2014, Latvia landfilled a big share of municipal waste (79% in 2014, a slight drop from 83% in 2013) against the EU average of 26%. Composting is broadly stable at only 4% in 2014 (EU average 28% in 2014).

¹⁵ Waste Management Plans/Waste Prevention Programmes

¹⁶ Municipal waste consists of waste collected by or on behalf of municipal authorities, or directly by the private sector (business or private non-profit institutions) not on behalf of municipalities.

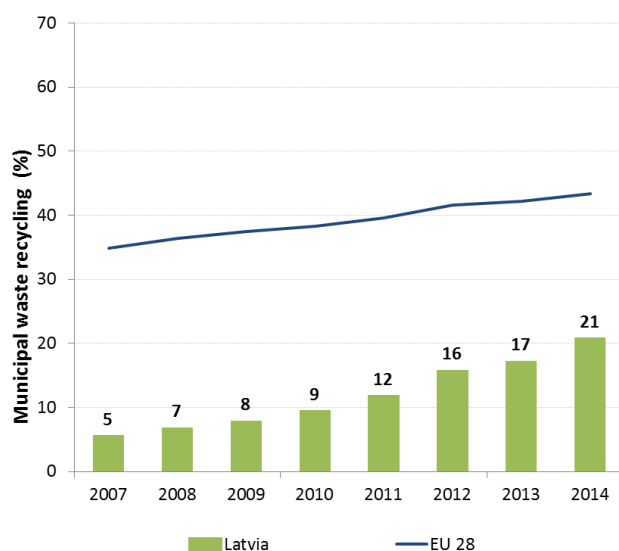
¹⁷ Eurostat, [Municipal waste and treatment, by type of treatment method](#), accessed October 2016

Figure 3: Municipal waste by treatment in Latvia 2007-14¹⁸



As shown in Figure 4, recycling of municipal waste increased only slightly from 17% in 2013 to 21% in 2014 (EU average was 44% in 2014), while composting of municipal waste in Latvia dropped from 6% in 2013 to 4% in 2014 (EU average being 16% in 2014). This means that Latvia is under an increasing risk of not meeting 50% recycling target by 2020¹⁹, and the 2020 landfill diversion targets for biodegradable waste (75%).

Figure 4: Recycling rate of municipal waste 2007-14²⁰



18 Eurostat, [Municipal waste and treatment, by type of treatment method](#), accessed October 2016

19 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.

20 Eurostat, [Recycling rate of municipal waste](#), accessed October 2016

The national Waste Management Plan 2013-2020 will be subject to a midterm review in 2016. The plan also includes Latvia's Waste Prevention Programme.

Although Latvia has achieved some progress in municipal waste management over the past couple years, significant investments are still required. These include:

- putting in place infrastructure to improve separate waste collection and increase waste recycling capacity (packaging and biodegradable waste),
- making improvements in market instruments (taxation of polluting products, extended producer responsibility), and
- adapting administrative and regulatory measures to facilitate recovery, including composting.

In order to make recycling economically viable, an incineration and MBT tax (mechanical biological treatment), whilst keeping the landfill tax higher than taxes for incineration and MBT, would be effective. In order to help bridging the implementation gap in Latvia, the Commission has delivered a roadmap²¹ for compliance in which economic instruments play a crucial role. Revenues from a landfill tax in conjunction with further refinement of the allocation of the CF (allocations should be prioritised to the first steps of the waste hierarchy) could contribute to building and operating the infrastructure required to meet EU targets.

Full implementation of the existing legislation could create more than 2.800 jobs in Latvia and increase the annual turnover of the waste sector by over EUR 304 million. Moving towards the targets of the Roadmap on resource efficiency could create over 3300 additional jobs and increase the annual turnover of the waste sector by over EUR 350 million.²²

Suggested action

- Introduce and gradually increase landfill taxes to phase-out landfilling of recyclable and recoverable waste. Use the revenues to support the separate collection and alternative infrastructure in conjunction with a better allocation of the cohesion policy funds to the first steps of waste hierarchy. Avoid building excessive infrastructure for the treatment of residual waste.
- Focus on implementation of the effective separate collection scheme to increase recycling rates. Once this is in place consider introducing PAYT (Pay As You Throw) schemes.

21 European Commission, Support to Member States in improving waste management based on assessment of Member States' performance. [Roadmap for Latvia](#)

22 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 on Commission demand 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 the conservation of the EU's wildlife. Natura 2000, the largest coordinated network of protected areas in the world, is the key instrument to achieve and implement the Directives' objectives to ensure the long-term protection, conservation and survival of Europe's most valuable and threatened species and habitats and the ecosystems they underpin.

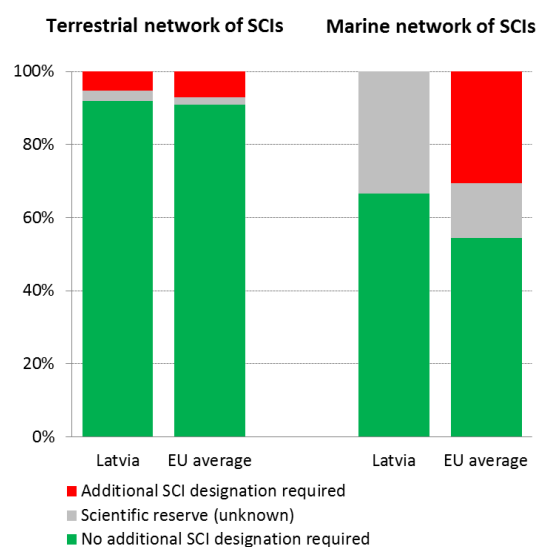
The adequate designation of protected sites as Special Areas of Conservation (SAC) under the Habitats Directive and as Special Protection Areas (SPA) under the Birds Directive is a key milestone towards meeting the objectives of the Directives. The results of Habitats Directive Article 17 and Birds Directive Article 12 reports and the progress towards adequate Sites of Community Importance (SCI)-SPA and SAC designation²³ both in land and at sea, should be the key items to measure the performance of Member States.

11.53% of the national land area of Latvia is covered by Natura 2000 (EU average 18.1%), with Birds Directive SPAs covering 10.23% (EU average 12.3%). Latvia has designated 332 Special Areas of Conservation (SACs) covering an area of 12241,37 km², from which 7877.3 km² correspond to the terrestrial part of the country's share of the Natura 2000 network, and 4364.07 km² to marine sites. Regarding Special Protection Areas (SPAs) for birds designated under the Birds Directive, Latvia has designated 102 sites covering 6609.6 km², from which 6183.9 correspond to terrestrial sites (97) and 425.7 km² to marine sites.

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

The latest assessment²⁴ of the SCIs part of the Natura 2000 network shows that there are insufficiencies in designation (see Figure 5²⁵).

Figure 5: Sufficiency assessment of SCI networks in Latvia based on the situation until December 2013 (%)²⁶



Even though Latvia is progressing towards establishing comprehensive management plans for its sites (already completed for about 60 SACs), both the scientific basis over which the network was developed as well as the actual conservation status²⁷ of some of the protected species and habitats is currently under review.

The acknowledged presence of significant gaps in the knowledge base required for a sound science based implementation of the Habitats and Birds Directives, starting from the designations carried out in 2004, is a recognized shortcoming that undermines any attempt of a more factual assessment of the actual state of the

²⁴ For each Member State, the Commission assesses whether the species and habitat types on Annexes I and II of the Habitats Directive, are sufficiently represented by the sites designated to date. This is expressed as a percentage of species and habitats for which further areas need to be designated in order to complete the network in that country. [The current data](#), which were assessed in 2014-2015, reflect the situation up until December 2013.

²⁵ 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 biogeographical region with the Member State); if a habitat type or a species occurs in more than 1 Biogeographical region within a given Member State, there will be as many individual assessments as there are Biogeographical regions with an occurrence of that species or habitat in this Member State.

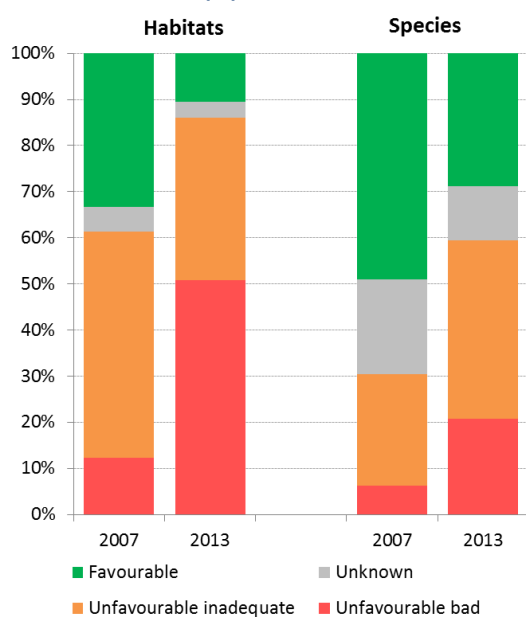
²⁶ European Commission, internal assessment.

²⁷ Conservation status is assessed using a standard methodology as being either 'favourable', 'unfavourable-inadequate' and 'unfavourable-bad', based on four parameters as defined in Article 1 of the Habitats Directive.

species and habitats requiring protection in the Latvian territory. The Latvian authorities are currently producing an updated survey of the spatial distribution of habitats and species that should help to clarify the situation and to overcome current shortages.

From the available information it is evident that those assets located in areas shared with agriculture or commercial forestry activities are under most pressure. This unfavorable situation is particularly evident in the case of the habitats based on grasslands. The current provisions for the funding of nature conservation would need to be adapted so as to make the management of the land for nature conservation objectives economically viable for commercial farmers, or foresters.

Figure 6: Conservation status of habitats and species in Latvia in 2007/2013 (%)²⁸



According to the latest report on the conservation status of habitats and species covered by the Habitats Directive²⁹, 10.53% of the habitats biogeographic assessments were favourable in 2013 (EU 27: 16%). Furthermore, 35% are considered to be unfavourable-inadequate (EU27: 47%) and 51% are unfavourable – bad (EU27: 30%). As for the species, 28.83% of the assessments were favourable in 2013, 39% at unfavourable-inadequate (EU27: 42%) and 21% unfavourable-bad status (EU27: 18%). This is depicted in

²⁸ These figures show the percentage of biogeographical assessments in each category of conservation status for habitats and species (one assessment covering 1 species or 1 habitat in a given biographical region with the Member State), respectively. The information is based on Article 17 of the Habitats Directive reporting - [national summary of Latvia](#)

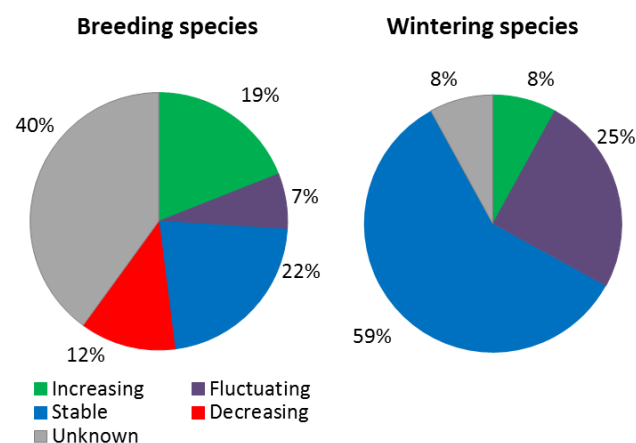
²⁹ Article 17 requires a report to be sent to the European Commission every 6 years following an agreed format. The core of the 'Article 17' report is assessment of conservation status of the habitats and species targeted by the Habitats Directive.

Figure 6³⁰.

Only 2% and 4.5% of the unfavourable assessments respectively for habitats and species were showing a positive trend in 2013.

As shown in Figure 7, as far as birds are concerned, 41% of the breeding species showed short-term increasing or stable population trends (for wintering species this figure was 67%).

Figure 7: Short-term population trend of breeding and wintering bird species in Latvia in 2012 (%)³¹



So far, there is no involvement of Latvia in the EU initiative on Mapping and Assessment of Ecosystems and their Services (MAES).³² However, several LIFE + projects for pilot assessment of the ecosystem services can be noted.³³

Suggested action

- Complete the SAC designation process and put in place clearly defined conservation objectives and the necessary conservation measures for the sites and provide adequate resources for their implementation in order to maintain/restore species and habitats of community interest to a favourable conservation status across their natural range.
- Improve the incentives for foresters and farmers to better protect forest and grassland habitat.
- Initiate and provide government support for the work on mapping and assessment of ecosystems and their

³⁰ 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.

³¹ Article 12 of the Birds Directive reporting - [national summary of Latvia](#)

³² Ecosystem services are benefits provided by nature such as food, clean water and pollination on which human society depends.

³³ LIFE13 ENV/LV/000839 "[Assessment of ecosystems and their services for nature biodiversity conservation and management](#)"; LIFE12 BIO/LV/001130 LIFE GRASSSERVICE - Alternative use of biomass for maintenance of grassland biodiversity and ecosystem services

services, valuation and development of natural capital accounting systems.

Green Infrastructure

The EU strategy on green infrastructure³⁴ promotes the incorporation of green infrastructure into related plans and programmes to help overcome fragmentation of habitats and preserve or restore ecological connectivity, enhance ecosystem resilience and thereby ensure the continued provision of ecosystem services.

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

Latvia has a relatively high density of natural areas compared to many other EU Member States. Nevertheless, further efforts to increase connectivity between habitats would be useful³⁵.



Challenges relate e.g. to the lack of general strategic policy framework for Green Infrastructure development; lack of know-how and awareness (especially at the municipal level) and lack of public participation.

Nine border municipalities in Latvia and Lithuania are cooperating under the motto "Let's make our cities greener" in order to restore urban parks and green infrastructure; improve the wellbeing, awareness and engagement of citizens to maintain green areas in their neighbourhood; and enable city planners to integrate green infrastructure in urban space.

The operational programme "Growth and Employment" envisages the green infrastructure solutions as a priority where they are technically and economically possible and efficient, including eco-system based approaches³⁶ for the activities reducing flood and erosion risks in affected ecosystems - grasslands, wetlands, dunes and forests. Priorities for restoration will be set within the framework

³⁴ European Union, Green Infrastructure — Enhancing Europe's Natural Capital, [COM/2013/0249](#)

³⁵ Service Contract "[Supporting the implementation of Green Infrastructure](#)" (2015), Green Infrastructure in Latvia Factsheet

of a LIFE+ funded project³⁶.

Soil protection

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

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

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

Artificial land cover is used for settlements, production systems and infrastructure. It may itself be split between built-up areas (buildings) and non-built-up areas (such as linear transport networks and associated areas).

The annual land take rate (growth of artificial areas) as provided by CORINE Land Cover was 0.38% in Latvia over the period 2006-12, below the EU average (0.41%). It represented 475 hectares per year and was mainly driven by housing, services and recreation as well as industrial and commercial sites³⁷. The percentage of built up land in 2009 was 1.11%, well below the EU average (3.23%)³⁸.

The soil water erosion rate in 2010 was 0.32 tonnes per ha per year, well below EU28 average (2.46 tonnes)³⁹.

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

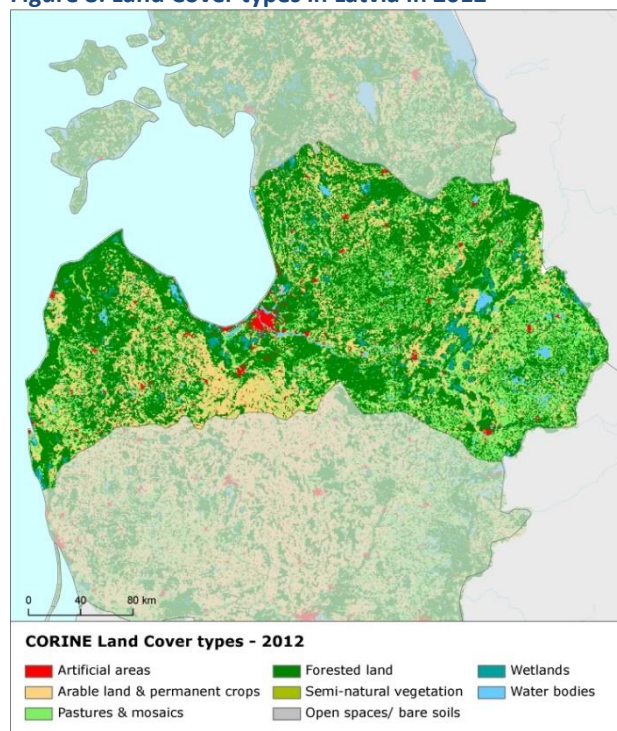
³⁶ LIFE, [NAT-PROGRAMME - National Conservation and Management Programme for Natura 2000 Sites in Latvia](#)

³⁷ European Environment Agency [Draft results of CORINE Land Cover \(CLC\) inventory 2012](#); mean annual land take 2006-12 as a % of 2006 artificial land.

³⁸ European Environment Agency, 2016. [Imperviousness and imperviousness change](#)

³⁹ Eurostat, [Soil water erosion rate](#), accessed June 2016

Figure 8: Land Cover types in Latvia in 2012⁴⁰



There are still no EU-wide datasets enabling the provision of benchmark indicators for soil organic matter decline, contaminated sites, pressures on soil biology and diffuse pollution. An updated inventory and assessment of soil protection policy instruments in Latvia and other EU Member States is being performed by the EU Expert Group on Soil Protection.

Marine protection

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

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

The Marine Strategy Framework Directive (MSFD)⁴¹ 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 with impact on the marine environment. The Directive requires Member States to develop and implement a marine strategy for their marine waters, and cooperate with Member States sharing the same marine region or subregion.

As part of their marine strategies, Member States had to make an initial assessment of their marine waters,

determine GES⁴² and establish environmental targets by July 2012. They also had to establish monitoring programmes for the on-going assessment of their marine waters by July 2014. The next element of their marine strategy is to establish a Programme of Measures (2016). The Commission assesses whether these elements constitute an appropriate framework to meet the requirements of the MSFD.

Latvian marine waters are part of the Baltic Sea and Latvia is a party to the Convention on the Protection of the Marine Environment of the Baltic Sea (HELCOM). In the Baltic Sea, main risks for biodiversity relate to eutrophication, overfishing and bycatch, pollution by contaminants and oil and introduction of non-indigenous species⁴³.

In its implementation of the Marine Strategy Framework Directive (MSFD), Latvia did not determine good environmental status for all the 11 MSFD descriptors.⁴⁴ Latvia also reported that the current level of impacts is 'good' when assessing the state of its marine waters. It however provided no justification for this assessment.

It is therefore too early to say whether Latvian waters are in good status as there were weaknesses in identifying what a *good environmental status* is in the first place.

Latvia established a monitoring programme of its marine waters in 2014. However, its monitoring programmes for all descriptors need further refinement and development to constitute an appropriate framework to monitor progress towards achieving Good Environmental Status, especially since gaps are still prevalent and the monitoring programmes will not be in place before 2018 for most descriptors, when the next assessment of marine waters is due⁴⁵.

In 2012, Latvian marine protected areas covered 4382,8 square kilometers of its marine waters in the Baltic Sea⁴⁶.

Suggested action

- Continue work to improve the definitions of GES in particular for biodiversity descriptors, including through regional cooperation by using the work of the relevant Regional Sea Convention.

42 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"

43 European Environment, 2016, [The Baltic Sea](#)

44 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](#)

45 Commission Staff Working Document Accompanying the Commission Report assessing Member States' monitoring programmes under the Marine Strategy Framework Directive (COM(2017)3 and SWD(2017)1 final)

46 2012 Data provided by the European Environmental Agency to the European Commission– Not published

40 European Environment Agency, Land cover 2012 and changes country analysis [publication forthcoming]

41 European Union, [Marine Strategy Framework Directive 2008/56/EC](#)

- Identify and address knowledge gaps.
- Further develop approaches assessing (and quantifying) impacts from the main pressures in order to lead to improved and more conclusive assessment results for 2018 reporting.
- Continue integrating monitoring programmes already existing under relevant EU legislation and to implement, where they exist, joint monitoring programmes developed at (sub)regional level, for instance by HELCOM.
- Enhance comparability and consistency of monitoring methods within the country's marine region.
- Ensure that its monitoring programme is implemented without delay, addresses all descriptors and is appropriate to monitor progress towards its GES.

3. Ensuring citizens' health and quality of life

Air quality

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

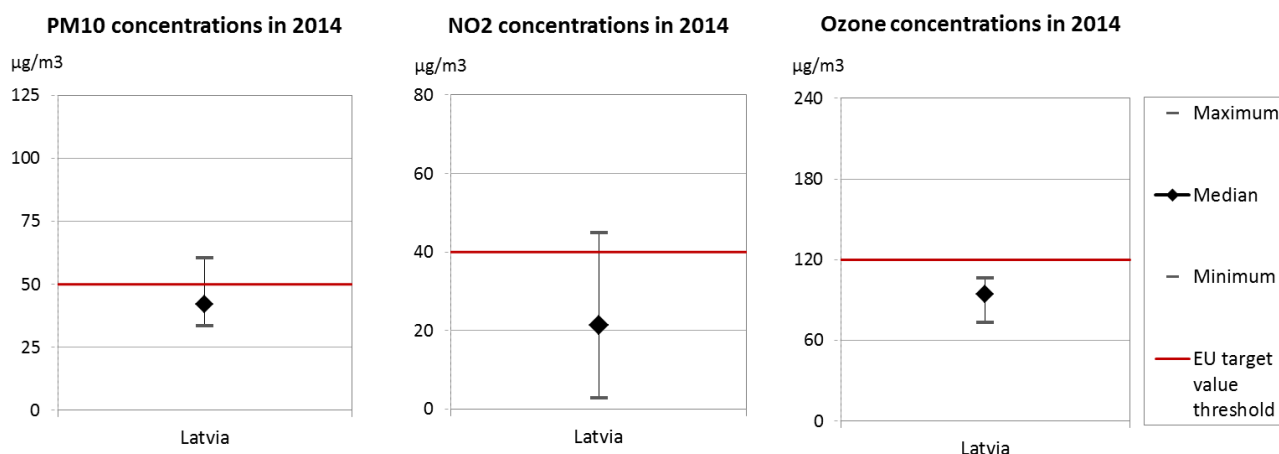
The EU has developed a comprehensive suite of air quality legislation⁴⁸, which establishes health-based standards and objectives for a number of air pollutants. As part of this, Member States are also required to

within the currently applicable national emission ceilings⁵⁰.

Air quality in Latvia is reported to be generally good, with exceptions. Nevertheless, for the year 2013, the European Environment Agency estimated that about 2 080 premature deaths were attributable to fine particulate matter⁵¹ concentrations, 60 to ozone concentration⁵² and over 110 to nitrogen dioxide⁵³ concentrations⁵⁴. This is due also to exceedances above the EU air quality standards such as shown in Figure 9⁵⁵.

Until 2013, Latvia reported exceedances of particulate matter (PM10) in one air quality zone (Riga); however, for 2014 compliance has been reported. For 2014, exceedances above the EU air quality standards have

Figure 9: Attainment situation for PM10, NO2 and O3 in 2014⁴⁷



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.

ensure that up-to-date information on ambient concentrations of different air pollutants is routinely made available to the public. In addition, the National Emission Ceilings Directive provides for emission reductions at national level that should be achieved for main pollutants.

The emission of several air pollutants has decreased significantly in Latvia⁴⁹. Reductions between 1990 and 2014 for sulphur oxides (-96%), nitrogen oxides (-63%), ammonia (-61%) as well as volatile organic compounds (-46%) ensure air emissions for these pollutants are

47 European Environment Agency, Attainment situation for PM10, NO_x and O₃ in 2014 [publication forthcoming]

48 European Commission, 2016. [Air Quality Standards](#)

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

50 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.

51 Particulate matter (PM) is a mixture of aerosol particles (solid and liquid) covering a wide range of sizes and chemical compositions. PM10 (PM_{2.5}) refers to particles with a diameter of 10 (2.5) micrometres or less. PM is emitted from many anthropogenic sources, including combustion.

52 Low level ozone is produced by photochemical action on pollution and it is also a greenhouse gas

53 NO_x is emitted during fuel combustion e.g. from industrial facilities and the road transport sector. NO_x is a group of gases comprising nitrogen monoxide (NO) and nitrogen dioxide (NO₂).

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

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

been only been registered related to the long-term objectives regarding ozone concentration in two air quality zones⁵⁶.

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

It is estimated that the health-related external costs from air pollution in Latvia are above EUR 748 million/year (income adjusted, 2010), which include not only the intrinsic value of living a full health life but also direct costs to the economy. These direct economic costs relate to 325 thousand workdays lost each year due to sickness related to air pollution, with associated costs for employers of EUR 22 million/year (income adjusted, 2010), for healthcare of above EUR 2 million/year (income adjusted, 2010), and for agriculture (crop losses) of EUR 11 million/year (2010)⁵⁷.

Suggested action

- Reduce PM₁₀ emission and concentration, inter alia, by reducing emissions related to energy and heat generation using solid fuels, to transport and to agriculture.

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 issues⁵⁸. To alleviate this, the EU *acquis* sets out several requirements, including assessing the exposure to environmental noise through noise mapping, ensuring that information on environmental noise and its effects is made available to the public, and adopting action plans with a view to preventing and reducing environmental noise where necessary and to preserving the acoustic environment quality where it is good.

Latvia's implementation of the Environmental Noise Directive⁵⁹ is delayed. The noise mapping for the most

recent reporting round, for the reference year 2011, is complete for agglomerations, major airports and major roads, but incomplete major railways. Action plans for noise management in the current period have been adopted for agglomerations, major roads and airports, but not for major railways.

Suggested action

- Complete noise mapping and 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*⁶⁰ seeks to ensure good status of all water bodies across Europe by addressing pollution sources (from e.g. agriculture, urban areas and industrial activities), physical and hydrological modifications to water bodies) and the management of risks of flooding.

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

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

In its first generation of RBMPs Latvia reported 53% of surface water bodies and almost all groundwater bodies classified as having good or high ecological status⁶¹ and

56 See [The EEA/Eionet Air Quality Portal](#) and the related Central Data Repository

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

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

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

60 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 \(2007/60/EC\)](#)

61 Good ecological status is defined in the Water Framework Directive

all groundwater bodies⁶² classified as having good groundwater status.

The main pressures are point sources from urban (and to a lesser extent industrial) wastewater, diffuse sources from agriculture and hydromorphological alterations.

There are certain deficiencies in RBMPs. In particular the methods to assess the status of water bodies are not fully developed. A high number of exemptions were applied. The Programmes of Measures are expected to result in improvement of the ecological and chemical status⁶³ of natural surface water bodies by 24% and 5% respectively. The planned measures are expected to result in improvement of ecological potential of artificial and heavily modified water bodies by 17% and chemical status of these bodies by 8%.



As regards water pollution from agricultural sources, nitrate levels have been slightly decreasing in the period 2008-2011. However, eutrophication of the Baltic Sea remains an issue. In 2008-2011, a slight expansion of the agricultural area took place and mineral fertilizer use increased as compared to the period 2004-2007. At the same time, the pressure from livestock decreased, due to a reduction in the number of animals. Following an infringement procedure on the implementation of the nitrates directive, Latvia has improved its action programme measures.

As regards drinking water, Latvia reaches very high compliance rates of 99-100% for microbiological and chemical parameters, and also shows a 98.7%

referring to the quality of the biological community, the hydrological characteristics and the chemical characteristics.

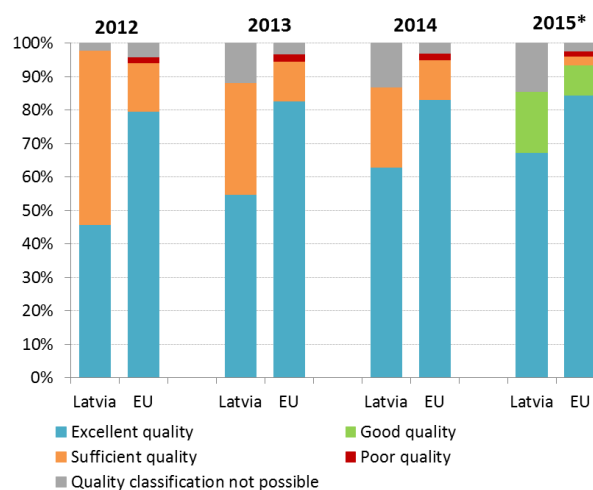
62 For groundwater, a precautionary approach has been taken that comprises a prohibition on direct discharges to groundwater, and a requirement to monitor groundwater bodies.

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

compliance rate with indicator parameters laid down in the Drinking Water Directive⁶⁴.

As shown in Figure 10, in 2015, in Latvia out of 55 bathing waters, 67.3% were of excellent quality, 18.2% of good quality while it was not possible to assess the remaining 8 bathing waters as they were just recently identified and did not have data about 4 last bathing seasons, necessary for the assessment⁶⁵.

Figure 10: Bathing water quality 2012–15⁶⁶



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

With regard to the implementation of the Urban Waste Water Treatment Directive, Latvia reaches overall high compliance rates: 100% of its waste water load is collected, and 98.7% is submitted to secondary treatment⁶⁷. The final deadline to fully comply with the Urban Waste Water Treatment Directive (UWWTD) in Latvia was the end of 2015. All the Latvian territory is considered as sensitive area, meaning that all agglomerations whose size is above 10,000 p.e. should be subject to more stringent treatment. Commission's latest report on the implementation of the Urban Waste Water Treatment Directive indicates that, in 2012, 0% of the waste water load collected was subject to more stringent treatment in accordance with Article 5 of the WWTD. However, Latvia has since then explained that this was due to a reporting mistake and only 3 agglomerations remain, overall, non-compliant with the Urban Waste Water Treatment Directive. Despite these overall good results, it should be noted that 10.9% of the waste water

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

65 European Environment Agency, 2016. [European bathing water quality in 2015](#), p. 26

66 European Environment Agency, [State of bathing water](#), 2016

67 Eighth Report on the Implementation Status and the Programmes for Implementation (as required by Article 17) of Council Directive 91/271/EEC concerning Urban Waste Water treatment Directive ([COM \(2016\)105 final](#)) and Commission Staff Working Document accompanying the report ([SWD\(2016\)45 final](#)).

load in Latvia is addressed via individual or other systems whose appropriateness to protect the environment might be questionable.

Finally, it is necessary to improve the situation of the physical connections to the waste water collection systems.

The estimated investment needs (reported by Latvia under Article 17 of the Urban Waste Water Treatment Directive) to reach full compliance with the Directive are of EUR 107 million⁶⁸.

Suggested action

- The RBMP of Measures should address all relevant pressures and implementation gaps in particular measures addressing agricultural pollution.
- Review and improve its measures to reduce the hydromorphological pressure in its river basins.
- Measures to rationalise water and wastewater management structures and services could also be considered together with incentives for increasing the level of physical connections to the networks.

Enhancing the sustainability of cities

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

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

Europe is a Union of cities and towns; around 75% of the EU population are living in urban areas.⁶⁹ The urban environment poses particular challenges for the environment and human health, whilst also providing opportunities and efficiency gains in the use of resources.

The Member States, European institutions, cities and stakeholders have prepared a new Urban Agenda for the EU (incorporating the Smart Cities initiative) to tackle these issues in a comprehensive way, including their connections with social and economic challenges. At the heart of this Urban Agenda will be the development of twelve partnerships on the identified urban challenges, including air quality and housing⁷⁰.

The European Commission will launch a new EU

benchmark system in 2017.⁷¹

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.



A number of initiatives are covered under the Union of the Baltic Cities Sustainable Cities Commission, which is a voluntary network of its member cities of the Baltic Sea Region addressing a number of issues, including environmentally sustainable development. This includes such initiatives as integrated management systems and spatial management, urban water management, maritime activities and sustainable urban mobility. For example, the project PRESTO, which is aimed at improving quality of local waters and the Baltic Sea by reducing nutrient load.

Under the project PURE, aimed at promote advanced phosphorus removal and sustainable sludge management in the Baltic Sea region, phosphorus removal equipment was installed in Riga and Jūrmala waste water treatment plants.

Furthermore, Riga City Council is amongst the partners of the Baltic Urban Lab project, which aims at identifying and promoting best practices on brown field regeneration.

Under the Covenant of Mayors for Climate and Energy⁷² 20 Latvian cities have set GHG reduction targets for a period until 2020. Valka has also committed to develop municipality wide adaptation strategy and action plan.

Riga City has implemented a flood management project

68 Latvia reports that according to a survey carried out by MoERDF in 2014, the investment needs for the development of waste water systems incl. waste water treatment plants, extension and renovation of waste water pipelines in agglomerations whose size is above 2,000 p.e. amounts to 445 million EUR

69 European Environment Agency, [Urban environment](#)
70 <http://urbanagendaforthe.eu/>

71 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. EUROCIITIES, ICLEI, CEMR, Committee of the Regions, Covenant of Mayors and others.

72 [Covenant of Mayors for Climate and Energy](#)

"Hydro Climate Strategy Riga"⁷³ that produced maps, models and guidance to help Riga City Council plan measures for safeguarding the Latvian capital against the increased risk of flooding predicted by climate change scenarios.

15 municipalities have published their climate related actions in the UNFCCC Non-state Actor Zone for Climate Action (NAZCA), emphasizing their commitment and climate friendly forward-looking development.

The OP Growth and Employment will provide ESIF support for revitalisation measures in the city of Riga and for environmentally friendly public transport measures in other major Latvian cities.

International agreements

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

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

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

Latvia has signed and ratified almost all MEAs. It has signed but not yet ratified the International Convention for the Regulation of Whaling and the Nagoya Protocol⁷⁴.

⁷³[Hydro Climate Strategy Riga](#)

⁷⁴ Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity.

Part II: Enabling Framework: Implementation Tools

4. Market based instruments and investment

Green taxation and environmentally harmful subsidies

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

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

Environmental taxation has been strengthened but there is further scope for a growth-friendly tax shift.

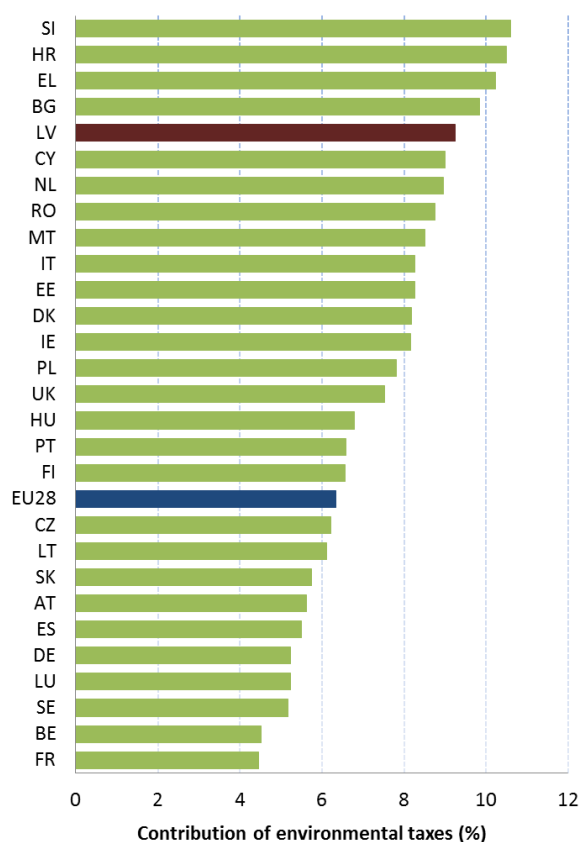
In 2014, the ratio of tax revenues to GDP in Latvia slightly exceeded the EU average (2.67% vs 2.46% of GDP)⁷⁵. In the same year environmental tax revenues accounted for 9.26% of total revenues from taxes and social-security contributions (EU28 average: 6.35%) as shown in Figure 11. Most of the revenue of environmental taxes still comes from energy taxes (74% of environmental taxes in 2014), while the share of transport was 18% of total environmental taxes in 2014. Pollution/resource and transport taxes (excluding transport fuels) have produced smallest revenue streams – 4%. Additional revenue from environment related taxes could therefore alleviate budgetary pressures and provide the necessary source for funding contributing to the green economy.⁷⁶

Further increasing taxes on the use of natural resources and decrease of environmentally harmful subsidies would contribute to achieving environmental goals; improve resource and energy efficiency that would lead to higher levels of output and employment at the same time providing room for a shift away from taxation of labour.

A 2016 study shows there is considerable potential for shifting taxes from labour to environment⁷⁷. Under a

good practice scenario⁷⁸, these taxes could generate an additional EUR 0.22 billion by 2018, rising to EUR 0.43 billion by 2030 (both in real 2015 terms). This is equivalent to an increase by 0.79% and 1.05% of GDP in 2018 and 2030, respectively.

Figure 11: Environmental tax revenues as a share of total revenues from taxes and social contributions (excluding imputed social contributions) in 2014⁷⁹



In Latvia, the Natural resource tax since its introduction in 2006 has increased from 0.6 EUR per CO₂ tonne to 3.50 EUR per CO₂ tonne in 2015. Possibilities of the increase of the Natural resources tax (NRT) rate per tonne of CO₂ are being evaluated and to promote implementation of greenhouse gas emission reduction measures further raise of the CO₂ rates is feasible in the near future. However, it is to be done in the context of the processes taking place in the EU allowances market.

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.

⁷⁸ The good practice scenario means benchmarking to a successful taxation practice in another Member State.

⁷⁹ Eurostat, [Environmental tax revenues](#), accessed October 2016

⁷⁵ Eurostat, [Environmental tax revenues](#), accessed June 2016

⁷⁶ Taxation trends in the EU (Eurostat, 2014); Tax Reforms in EU Member States 2014 (TAXUD)

⁷⁷ 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

NRT for waste landfill has increased from 1.07 EUR per tonne in 2002 to 12.00 EUR per tonne in 2014. Since the NRT rate has not been effective enough for diverting waste from landfill to recycling, Latvia has plans for further increase in NRT rate for waste landfill.

Green Public Procurement

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

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

The purchasing power of public procurement in the EU equals to approximately 14% of GDP⁸⁰. A substantial part of this money is spent on sectors with high environmental impact such as construction or transport, so GPP can help to significantly lower the impact of public spending and foster sustainable innovative businesses. The Commission has proposed EU GPP criteria⁸¹.

In Latvia, a national strategy on Green Public Procurement (GPP) is included in the “Green Procurement support plan for 2015 – 2017”⁸², which was elaborated by the Ministry of Environmental Protection and Regional Development in cooperation with stakeholders. The plan has been approved by the Cabinet of Ministers on 17th of February 2015.⁸³

GPP criteria have been developed at the national level through this plan for 21 products. In addition to the product groups, the GPP Support Plan for 2015-2017 defines the GPP targets of 15% for 2015, 20% for 2016, and 30% for 2017 to be met each year for national and local authorities.⁸⁴

Green procurement support plan 2015-2017 is intended to ensure that procurement planned from the state and local government budgets to which GP applies in financial terms reaches at least 15% of the total volume of procurement made by state and local government institutions starting from 2015, 20% in 2016, and 30% in

2017, and that GP and “Green Procurement support plan 2015-2017” requirements are applied and integrated in the implementation process of the EU Structural Funds and of the Cohesion Fund.⁸⁵

There is no data available as regards the uptake of GPP.

Investments: the contribution of EU funds

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

Making good use of the European Structural and Investment Funds (ESIF)⁸⁶ is essential to achieve the environmental goals and integrate these into other policy areas. Other instruments such as the Horizon 2020, the LIFE programme and the EFSI⁸⁷ may also support implementation and spread of best practice.

Latvia, through 3 national programmes, benefits the ESIF funding of EUR 5.6 billion over the period 2014-2020⁸⁸.

The biggest share – EUR 2.4 billion (42.6%) of funding is coming from the European Fund for Regional Development (ERDF).

EUR 1.3 billion (24%) - from the Cohesion Fund (CF).

EUR 1.1 billion (19.1%) – from the European Agricultural Fund for Rural Development (EAFRD).

EUR 639 million (11.3%) - from the European Social Fund (ESF).

EUR 140 million (2.5%) from the European Maritime and Fisheries Fund (EMFF) in intensification of aquaculture (43% of pond fish farming activities located in Natura 2000 areas).

In total, EUR 783 million are dedicated to the Thematic objective (TO)6 Environment Protection and Resource efficiency, EUR 368 through the ERDF, EUR 190 million through the CF, EUR 202 million through the EAFRD programme, EUR 190 million through the CF, EUR 24.4 million through the EMFF. In addition, EUR 520 million is foreseen for TO4 Low Carbon Economy (ERDF, CF and EAFRD) and EUR 268 million for TO5 Climate Change

80 European Commission, 2015. [Public procurement](#)

81 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.

82 [Green Procurement support plan for 2015 – 2017](#)

83 European Commission, 2015. [Documentation on National GPP Action Plans](#)

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

85 European Commission, 2015. [Documentation on National GPP Action Plans](#)

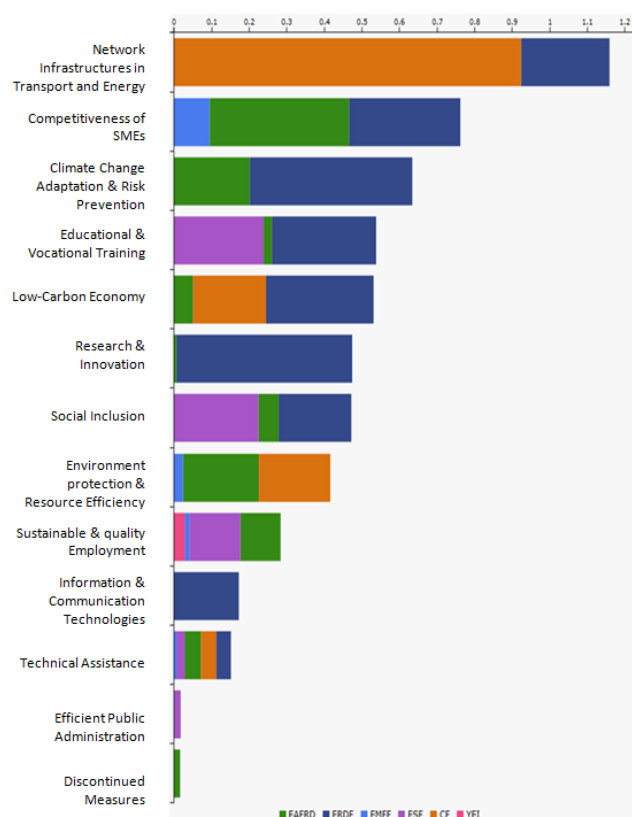
86 ESIF comprises five funds – the European Regional Development Funds (ERDF), the Cohesion Fund (CF), the European Social Fund (ESF), the European Agricultural Fund for Rural Development (EAFRD), and the European Maritime and Fisheries Fund (EMFF). The ERDF, the CF and the ESF together form the Cohesion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

87 European Investment Bank, 2016 [European Fund for Strategic Investments](#)

88 European Commission: European Structural and Investment Funds [Country Data for Latvia](#)

Adoption and Risk Prevention (EAFRD and ERDF) (see Figure 12).

Figure 12: European Structural and Investment Funds 2014-2020: Budget Latvia by theme, EUR billion⁸⁹



It is too early to draw conclusions as regards the use and results of ESIF funds for the period 2014-2020, as the relevant operational programmes are still in an early stage of their implementation.

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

The National Rural Development Program (RDP) of Latvia, its EAFRD part, amounts to around EUR 1.1 billion (after the 1st modification).

Budget for agri-environmental-climate measure represents 7.05% of the total EAFRD budget. The measure on natural constraints takes up 18.9% of the total EAFRD (and does not need to present its link to biodiversity conservation). Around 1.5% is allocated to measure on compensation of the restrictions posed by Natura 2000.

In the currently proposed modification the sub-measure on high-nature value grassland plans to incorporate some elements from the successful LIFE project, which is appreciated.

With regard to the integration of environmental concerns into the Common Agricultural Policy (CAP), the two key areas for Latvia (as for all Member States) are, first, using Rural Development funds to pay for environmental land management and other environmental measures, while avoiding financing measures which could damage the environment; and secondly, ensuring an effective implementation of the first pillar of the CAP with regard to cross compliance and 1st pillar 'greening'. 30% of direct payment envelope (out of total EUR 1.45 billion for 2015-2020⁹⁰) is allocated to greening practices beneficial for the environment. An environmentally ambitious implementation of 1st pillar greening would clearly help to improve the environmental situation in areas not covered by rural development, including intensive areas, and if appropriate Latvia could review its implementation of the sectorial policy.

⁸⁹ European Commission, [European Structural and Investment Funds Data By Country](#)

⁹⁰ Commission delegated regulation (EU) 2015/851)

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 skills⁹¹. Successful implementation depends, to a large extent, on central, regional and local government fulfilling key legislative and administrative tasks, notably adoption of sound implementing legislation, co-ordinated action to meet environmental objectives and correct decision-making on matters such as industrial permits. Beyond fulfilment of these tasks, government must intervene to ensure day-to-day compliance by economic operators, utilities and individuals ("compliance assurance"). Civil society also has a role to play, including through legal action. To underpin the roles of all actors, it is crucial to collect and share knowledge and evidence on the state of the environment and on environmental pressures, drivers and impacts.

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

Effective governance within central, regional and local government

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

Capacity to implement rules

In the Programming Period 2014-2020 an investment of

EUR 18 million is foreseen in promoting Latvian institutional capacity of public institutions and stakeholders and an efficient public administration, particularly, in professional development of public administration for development of better legal regulation in the fields of support to small and medium-sized enterprises, anti-corruption and mitigation of the shadow economy, as well as in improving the competence of the staff of courts and law enforcement authorities promote improvement of business environment.⁹²

In 2011, as part of a reform programme put in place to recover from the financial crisis the Latvian Ministry of the Environment merged with the Ministry of Regional Development and Local Government. This merger also resulted in financial cuts (at around 19%). It is essential that sufficient capacity and funds for the successful implementation of environmental legislation as well as the achievement of environmental objectives are retained.

Latvia aims to transpose new directives into the national legislation respecting the established timelines and the number of non-communication cases opened for non-communication of national legislation transposing new directives are low.

Latvia has a low number of complaints. Cases often focus on transposition of EU law into national law and these are resolved quickly.



Coordination and integration

In 2010 Latvia adopted its Sustainable Development Strategy until 2030⁹³.

Implementation is carried out by subordinate administrations and agencies, among those State Environment Service (compliance enforcement, licensing), Nature Conservation Agency (competent

⁹¹ The Commission has work ongoing to improve the country-specific knowledge about quality and functioning of the administrative systems of Member States.

⁹² Latvian Operational Programme "Operational programme "Growth and Employment" for 2014-2020

⁹³ [Sustainable Development Strategy for Latvia until 2030](#)

nature conservation authority), Latvian Environmental, Geological and Meteorological Agency (management of databases, environmental monitoring), Environment State Bureau (impact assessment, EMAS, licensing) and the Latvian Institute of Aquatic Ecology (monitoring of aquatic ecology), State Regional Development Agency (structural funds). The 2009 public sector structural reforms had a considerable impact on the environmental authorities. In comparison to 2007, they operate with significant staff and financial cuts that inevitably have implications on their monitoring, implementation and enforcement capacities.

The Commission encourages the streamlining of the environmental assessments to avoid overlaps in environmental assessments and accelerate decision-making, without compromising the quality of the environmental assessment procedure. The Commission has issued a guidance document in 2016⁹⁴ regarding 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.

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 law⁹⁵ 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

94 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).
95 Directive 2008/99/EC of The European Parliament and of the Council of 19 November 2008 on the protection of the environment through criminal law.

of these interventions represent "compliance assurance" as shown in Figure 13.

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*⁹⁶, *EUFJE*⁹⁷, *ENPE*⁹⁸ and *EnviCrimeNet*⁹⁹, is a valuable tool for sharing experience and good practices.

Figure 13: Environmental compliance assurance



Currently, there exist a number of sectoral obligations on inspections and the EU directive on environmental liability (ELD)¹⁰⁰ 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 evaluation¹⁰¹.

Latvia has developed some risk assessment tools for

96 [European Union Network for the Implementation and Enforcement of Environmental Law](#)

97 [European Union Forum of judges for the environment](#)

98 [The European Network of Prosecutors for the Environment](#)

99 [EnviCrimeNet](#)

100 European Union, [Environmental Liability Directive 2004/35/CE](#)

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

inspections of industrial installations. Challenges have included budget constraints that have led to a decrease in the staff of inspection authorities by about 40%¹⁰².

Up-to-date information is lacking in relation to the following:

- data-collection arrangements to track the use and effectiveness of different compliance assurance interventions¹⁰³;
- the extent to which risk-based methods are used to direct compliance assurance at the strategic level and in relation to critical activities outside of industrial installations¹⁰⁴;
- how the Latvian authorities ensure a targeted and proportionate response to different types of non-compliant behaviour¹⁰⁵.

In 2011, Latvia hosted an IMPEL IRI but is otherwise not very active within IMPEL and the other EU level environmental enforcement networks.

For the period between 2007 and 2013, Latvia reported thirteen confirmed and three pending instances of environmental damage which were treated under the Environmental Liability Directive. Evidence points to good cooperation between the competent authorities and stakeholders and NGOs. Latvia has not established mandatory financial security (to pay for remediation costs if an operator cannot) and does not intend to do so. However, it is not evident that the market is offering such security or that there is any take-up.

Suggested action

- Improve transparency on organisation and functioning of compliance assurance system and on how significant risks are addressed, as outlined above.
- Encourage greater participation of competent authorities in the activities of ENPE, EUFJE and EnviCrimeNet.
- 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

102 Impact Assessment study into possible options for revising recommendation 2001/331/EC providing for minimum criteria for environmental inspections (RMCEI), p. 48; IMPEL IRI Latvia, p. 32 and 47.

103 The Latvian State Environmental Service publishes online monthly reports with some basic statistical data on industrial inspections. These include data on numbers of inspections carried-out per region, per inspector and per category of installation. See IMPEL IRI Latvia, p. 38-39.

104 According to the IMPEL IRI, the risk-based approach and related data collection for industrial installations do not seem to be applied to the same extent for inspections in other environmental policy areas, see p. 27-29 and 44

105 A national inspector's manual and some guidance are in place which however do not cover important compliance assurance elements, such as for instance criteria for determination of sanctions level, see IMPEL IRI Latvia, p. 31-33.

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.

Latvia grants the public, notably individuals and NGOs, a very broad access to justice in environmental cases (*actio popularis*). The costs for bringing a case to a court are also not considered as being prohibitively high. This guarantees that members of the public are provided with good conditions for asking for a judicial review in environmental matters. However, the court procedures, including environmental cases, in Latvia are rather long¹⁰⁶.

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

106 European Commission, [2012/2013 access to justice in environmental matters](#)

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 Convention¹⁰⁷, the Access to Environmental Information Directive¹⁰⁸ and the INSPIRE Directive¹⁰⁹ 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 Plan¹¹⁰. 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 reviewed¹¹¹.

Latvia's performance on the implementation of the INSPIRE Directive as enabling framework to actively disseminate environmental information to the public leaves room for improvement. Latvia has indicated in the 3-yearly INSPIRE implementation report¹¹² 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. Data-sharing in Latvia is implemented through global or bilateral cooperation agreements between public authorities. The cooperation model in place is not specific to spatial information, but is used for all kind of information. The licences used for spatial information are standardized.

Assessments of monitoring reports¹¹³ issued by Latvia and the spatial information that Latvia has published on

the INSPIRE geoportal¹¹⁴ indicate that not all spatial information needed for the evaluation and implementation of EU environmental law has been made available or is accessible. The larger part of this missing spatial information consists of the environmental data required to be made available under the existing reporting and monitoring regulations of EU environmental law.

Suggested action

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

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

108 European Union, [Directive 2003/4/EC on public access to environmental information](#)

109 European Union, [INSPIRE Directive 2007/2/EC](#)

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

111 Upon request by the Commission, most Member States provided an INSPIRE Action Plan addressing implementation issues. These plans are currently being assessed by the Commission.

112 European Commission, [INSPIRE reports](#)

113 [Inspire indicator trends](#)

114 [Inspire Resources Summary Report](#)