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EUROPEAN
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COMMISSION STAFF WORKING DOCUMENT

Environmental Implementation Review 2022 Country Report - SLOVENIA

Accompanying the document

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

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

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Executive summary

In previous environmental implementation reviews (EIRs), the Commission identified the following main challenges for Slovenia's implementation of EU environmental policy and law:

- putting in place all conservation measures and enforcing their implementation in Natura 2000 sites;
- integrating nature-conservation measures into other sectors, by getting the support of some sectoral stakeholders, particularly in the agriculture sector;
- reducing particulate matter emissions by reducing traffic congestion and the burning of fossil fuels, as well as supporting efficient and clean district heating;
- improving urban wastewater collection and treatment through appropriate investments to meet the country's accession obligations (which expired at the end of 2015);

On the **Natura 2000** network, all sites of community importance have been designated as special areas of conservation. As a result, the Natura 2000 network on land can be considered complete. However, there is still a gap in the classification of marine special protection areas which is the subject of an EU infringement procedure. In addition, site-specific conservation objectives of sufficient quality have yet to be established for all Natura 2000 sites. There are also delays in implementing the necessary conservation measures for many sites. All conservation measures for all Natura 2000 sites need to be strengthened and fully implemented, using also the prioritised action framework. In terms of EU funding, there are practically no funds for biodiversity in the national recovery and resilience plan to cover several needs. Therefore, the shortfall needs to be made up from other EU funds (in particular, from those under the common agricultural policy and cohesion policy) and national sources.

On **integrating nature conservation measures into other sectors**, there has been no progress. This has contributed to the deterioration of the conservation status of habitats and species. On the impact of agricultural practices on grassland habitats and associated species (inside and outside Natura 2000 sites), the Commission started an infringement procedure. Adapting agricultural practices within the sites where the conservation status of habitats and/or species is declining due to agricultural

activities is a priority. The integration of nature-conservation measures into other sectors still remains a concern.

On **air quality** there has been progress. The emissions of key air pollutants have decreased significantly in Slovenia in recent years, while GDP growth continued. Slovenia expects to reach its emission-reduction commitments for all air pollutants covered by the National Emission Reduction Commitments Directive for the period 2020-2029, and for most pollutants from 2030 onwards. However, the projections do not demonstrate that they meet the emission-reduction commitments for PM_{2.5} for 2030 onwards. In terms of EU funding, almost a quarter of the national recovery and resilience plan is allocated to sustainable energy and transport which is expected to benefit air quality, including PM_{2.5}.

Despite some progress made in recent years in the **wastewater** sector, Slovenia has yet to fully achieve compliance with the Urban Waste Water Treatment Directive. Slovenia is under infringement procedure as some agglomerations with a population of over 10,000 are not compliant with the requirements of the UWWTD. The procedure may result in fines. The situation regarding smaller agglomerations (above 2,000 people.) is also unsatisfactory. Developing and modernising the necessary infrastructure for all agglomerations, as set out under the Urban Waste Water Treatment Directive, has yet to be completed.

Slovenia's environmental financing for investments came to 1.76% of GDP (EU average: 0.7%) in 2014-2020, over 80% of which originated from domestic sources. On the other hand, the country's environmental-investment needs for 2021-2027 are estimated to be at least 2.06% of GDP, **indicating an additional financing need (or gap)** of 0.3% of GDP for environmental implementation compared to the 2014-2020 period financing baseline.

On environmental harmful subsidies, Slovenia allocated more than the EU average numbers of these subsidies for fossil fuels, which is significantly higher than the subsidies allocated to renewable energy. This does not encourage greener investments.

Part I: Thematic Areas

1. Circular Economy and waste management

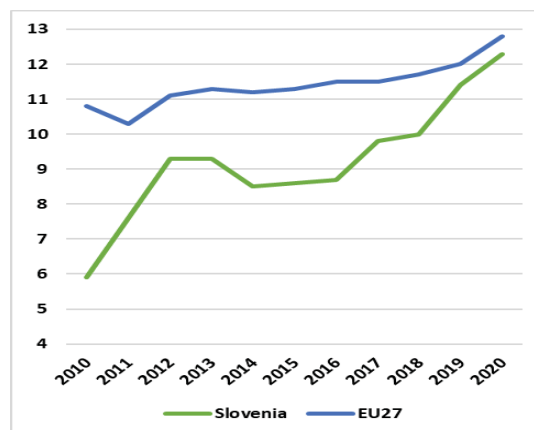
Measures towards a circular economy

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

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

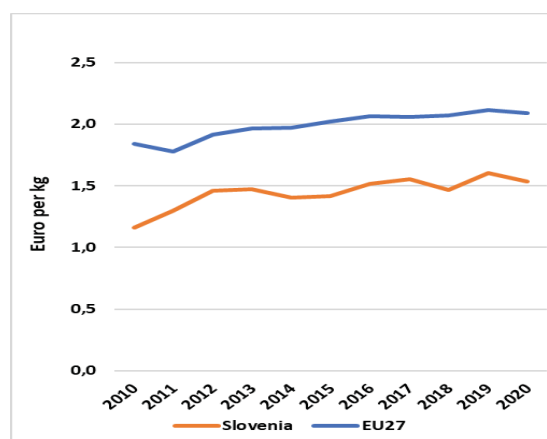
The rate of Slovenia's circular (secondary) use of material rose from 8.5% in 2016 to 12.3% in 2020, coming close to the EU average of 12.8%, and showing a strong and positive dynamic.

Figure 1: Circular material use rate (%), 2010-2020¹



Resource productivity expresses how efficiently the economy uses material resources to produce wealth. Improving resource productivity can help to minimise negative impacts on the environment and reduce dependency on volatile raw material markets. As shown in Figure 2, Slovenia generated EUR 1.54 per kg of material consumed in 2020. This puts resource productivity in Slovenia considerably below the EU average of EUR 2.09 per kg.

Figure 2: Resource productivity, 2010-2020²



¹ Eurostat, [Circular Economy Monitoring Framework](#).

² Eurostat, [Resource productivity](#).

Circular economy strategies

The Commission encourages Member States to adopt and implement national/regional circular economy strategies covering the whole life cycle of products. This is because such strategies are one of the most effective ways to progress towards a more circular economy at Member State level. Since the launch of the online Circular Economy Stakeholder Platform in 2017³, national, regional or local authorities have used the platform to share their strategies and roadmaps.

In May 2018, the 'Roadmap towards the Circular Economy in Slovenia' was published. It sets out the path for Slovenia to become a front runner for the circular economy in the region. The roadmap identifies four priority sectors, gives recommendations to the government and identifies best practice. In November 2012, the Slovenian Government adopted an Implementation plan for an European Institute of Innovation & Technology (EIT) Climate-KIC-led project called 'A Deep Demonstration of a Circular, Regenerative and Low-Carbon Economy in Slovenia'. The initiative is one of eight deep demonstrations⁴ launched by EIT Climate-KIC, which together offer a test bed environment for the ambitious, 1.5-degree-consistent systems.

Slovenia's plan centres on driving circularity in five main areas: (i) forestry; (ii) built environment; (iii) manufacturing; (iv) food; and (v) mobility. It focuses on the three pillars of: (i) smart and circular communities, (ii) circular green development and (iv) circular policy design and science.

Slovenia does not have in place a sectoral strategy for plastics, textiles or construction. However, the proposal on 'Deep Demonstration of a Circular, Regenerative and Low-Carbon Economy in Slovenia' includes initiatives targeting these sectors.

In addition, as part of the national recovery and resilience plan, Slovenia will establish a strategic and legal framework for the transition to a circular economy. It will also work on extending producer responsibility, promoting the integration of recycled material into new products, integrating the principle of circular economy in the green public procurement system, and establishing a one-stop shop to support businesses.

³ [Circular Economy Stakeholder Platform](#)

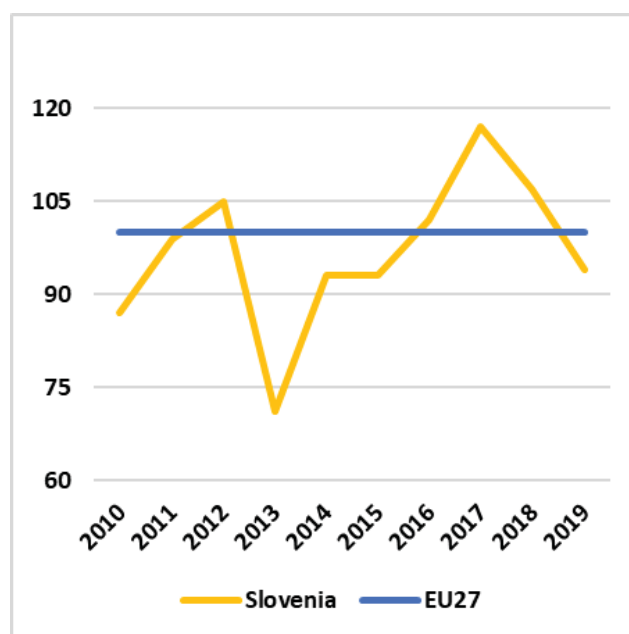
⁴ Deep demonstrations are large-scale projects through which EIT Climate-KIC offers its 'systems innovation as a service' model to Europe's most ambitious challenge owners – i.e. the mayors, government ministries, industries and community leaders, and funders who have the means and mandate to tackle climate change challenges.

Eco-innovation

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

In 2021, Slovenia ranked 13th on the 2021 Eco-Innovation Index, with a total score of 113, resulting in an average eco-innovation performance. In one out of five components (eco-innovation inputs), Slovenia performed above the EU average. However, its performance is below the average for eco-innovation activities, eco-innovation outputs, resource-efficiency outcomes and socio-economic outflows.

Figure 3: Eco-innovation performance, 2010-2019⁵



Green public procurement (GPP)

Public procurement accounts for a large proportion of European consumption, with public authorities' purchasing power representing around 14% of EU GDP. Although GPP is a voluntary instrument, it has a key role to play in the EU's efforts to become a more resource-efficient and sustainable economy. The European Commission is helping to increase the use of GPP or

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

green purchasing. Thus, EU GPP criteria are set up for many sectors⁶.

A Green Public Procurement Regulation has been in force since 2012, renewed in 2018 and 2021. In January 2020, minor changes in some articles were introduced. The regulation is mandatory for 22 groups of products and services. According to the data from the annual statistical reports on the award of public contracting authorities, the GPP system is gradually expanding.

Since 2019, the GPP team at the Ministry of the Environment and Spatial Planning has been offering substantive promotion and support. The team has built its capacity and human resources mainly through LIFE IP project 'Care 4 Climate'.

EU ecolabel and the eco-management and audit scheme (EMAS)

The number of EU ecolabel products and EMAS-licensed⁷ organisations in a given country provides some indication of the extent to which the private sector and national stakeholders in that country are actively engaged in the transition to a circular economy. It also shows how committed public authorities are to supporting instruments designed to promote the circular economy.

As of September 2021, Slovenia had 110 products out of 83 590, and 35 licences out of 2 057 registered in the EU ecolabel scheme. This shows a low take-up of the products and licences⁸. Moreover, 16 sites belonging to 10 organizations in Slovenia are currently registered in EMAS⁹. Since the last report in 2019, there have been 38 new registrations of EU ecolabel products and 5 licence registrations, as well as 5 new organisations registered with EMAS in Slovenia.

In 2019, one of the priority actions recommended for Slovenia was to continue efforts to get all economic sectors to accelerate their uptake of the circular economy. In view of Slovenia's good progress and its commitment, this action has not been recommended this time.

Waste management

Turning waste into a resource is supported by:

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

This section focuses on the management of municipal waste¹⁰, for which EU law sets mandatory recycling targets.

Preventing products and materials from becoming waste for as long as possible is the most efficient way to improve resource efficiency and to reduce the environmental impact of waste. Waste prevention and reuse are the most preferred options, and are therefore at the top of the waste hierarchy. The amount of municipal waste generated is a good indicator of the effectiveness of waste-prevention measures.

After a downward trend, municipal-waste generation in Slovenia has started to increase again in recent years. It came to 487 kg/year/inhabitant in 2020 (compared to 449 kg/year/inhabitant in 2015), although it remains just below the EU average (505 kg/year/inhabitant)¹¹ – see Figure 4.

⁶ 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 [EU GPP criteria](#) are regularly published and updated.

⁷ EMAS is the European Commission's eco-Management and audit scheme, a programme to encourage organisations to behave in a more environmentally sustainable way.

⁸ European Commission, [Ecolabel Facts and Figures](#).

⁹ As of May 2018. European Commission, [Eco-Management and Audit Scheme](#).

¹⁰ Municipal waste consists of: (a) mixed waste and separately collected waste from households, including paper and cardboard, glass, metals, plastics, biowaste, wood, textiles, packaging, waste electrical and electronic equipment, waste batteries and accumulators, and bulky waste, including mattresses and furniture; and (b) mixed waste and separately collected waste from other sources, where such waste is similar in nature and composition to waste from households. ([Directive 2008/98/EC](#), Art. 3 2b).

¹¹ Eurostat, [Municipal waste by treatment](#).

Figure 4: Municipal waste by treatment in Slovenia, 2010-2020¹²

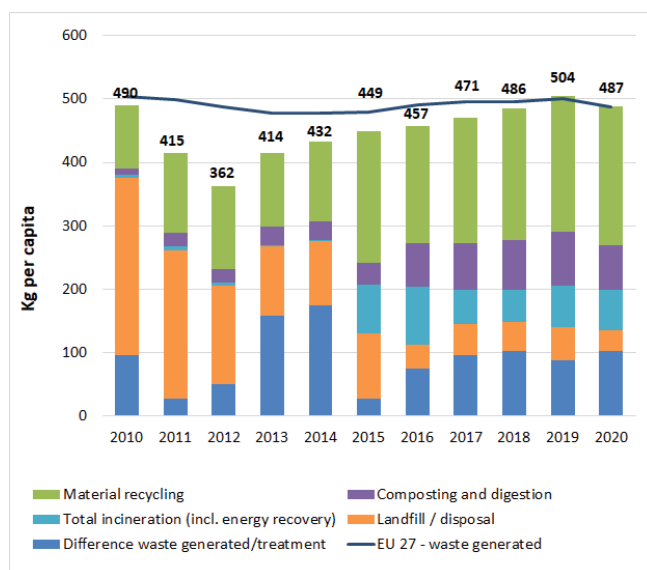


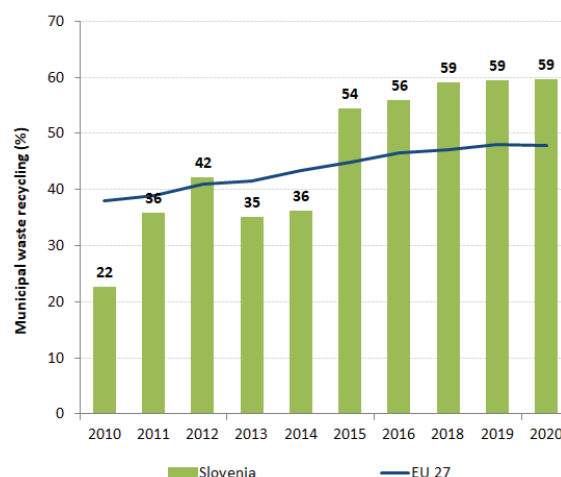
Figure 4 also shows municipal waste by treatment type, in kg per capita. The situation varies by region, but managing waste efficiently still remains a challenge for Slovenia.

Slovenia has made slow but steady progress over the past decade on stepping up its recycling rate and diverting municipal waste from landfilling. The recycling rate for municipal waste in 2020 was 59.3%. This is well above the EU-27 average of 47.8% (2020)¹³. This puts Slovenia among eight Member States (Germany, Austria, the Netherlands, Belgium, Denmark, Luxembourg and Italy¹⁴), which achieved recycling rates of 50% or higher.

There is still a problem with several illegal landfills that have yet to be closed. Two infringement cases remain open, one concerning the site of Bukovžlak close to Cinkarna Celje, and the landfill of Suhadole (last remaining ones of the group of illegal landfills). Slovenia may be facing fines due to the abovementioned infringements.

Figure 5 shows that Slovenia has already reached the EU's 2025 recycling target (55%) and is on the way to meeting the EU 2030 recycling target (60%).

Figure 5: Recycling rate of municipal waste, 2010-2020¹⁵



The Commission's Early Warning report¹⁶ did not list Slovenia as one of the countries at risk of missing the EU 2020 target of recycling 50% of municipal waste – it is among best performing Member States in this respect. The Commission is currently finalising its analysis of the progress made on the recommendations from the 2018 Early Warning Reports and its analysis of the progress made towards achieving the 2025 waste recycling targets. This report will be presented at the end of 2022 and will assess the progress made to date.

Implementation of the 2018 waste legislative package

By 5 July 2020 EU Member States were required to bring their national laws into line with changes included in the revised *Waste Framework Directive*, the *Packaging and Packaging Waste Directive* and the *Landfill Directive*¹⁷. Slovenia has notified the transposition of the Landfill and the Packaging and Packaging Waste directives to the Commission. A conformity assessment is now ongoing.

Waste-management plans and waste-prevention programmes are instrumental for the full implementation of the EU waste legislation. They set out key provisions and investments to ensure compliance with existing and new legal requirements (e.g. on waste prevention; on separate collection for a number of specific waste

¹² Eurostat, [Municipal waste by waste operation](#), april 2022.

¹³ Eurostat, [Recycling rate of municipal waste](#).

¹⁴ Eurostat 2020 data, with an exception of AT and IT data (2019).

¹⁵ Eurostat, [Recycling rate of municipal rate](#), april 2022.

¹⁶ European Commission, Report on the implementation of waste legislation, including the early warning report for Member States at risk of missing the 2020 preparation for re-use/recycling target on municipal waste, [SWD\(2018\)422](#) accompanying [COM\(2018\)656](#).

¹⁷ [Directive \(EU\) 2018/851](#), [Directive \(EU\) 2018/852](#), [Directive \(EU\) 2018/850](#) and [Directive \(EU\) 2018/849](#) amend the previous waste legislation and set more ambitious recycling targets for the period up to 2035.

streams; on recycling targets; and on landfill targets). Slovenia was due to submit revised waste-management plans and waste-prevention programmes by 5 July 2020.

The drafting of the operational programme for waste management and prevention is in the final stage. It will provide the basis for the drawing up of an environmental report. The programme also includes activities for preventing food waste. An analysis of how effective the management of municipal and other waste was in 2018 and of possible developments over the next 20 years is being carried out. The Slovenian government had been expected to adopt the programme in the first quarter of 2022.

The 2019 EIR for Slovenia contained several priority actions in the waste sector, including the need to:

- i. introduce new instruments to promote waste prevention, make reuse and recycling more economically attractive and shift reusable and recyclable waste away from incineration;
- ii. improve and extend separate collection of waste, including for biowaste;

- iii. set mandatory recycling targets for municipalities with measures in case of non-compliance (e.g. fines);
- iv. improve the functioning of extended producer responsibility systems;
- v. improve data on waste management;
- vi. close and rehabilitate the non-compliant landfills.

2022 priority actions

- Introduce new policies, including economic instruments, to further implement the waste hierarchy, i.e. promote prevention, and make reuse and recycling more economically attractive; and/or implement the policies which are already in place.
- Ensure a waste-management plan in line with the revised Waste Framework Directive is in place.
- Close and rehabilitate, as quickly as possible, the remaining illegal landfills to avoid charges from infringement procedures.

2. Biodiversity and natural capital

The 2030 EU biodiversity strategy adopted in May 2020 aims to put the EU's biodiversity on a path to recovery and sets out new targets and governance mechanisms to achieve healthy and resilient ecosystems.

In particular, the strategy sets out ambitious targets to:

(i) protect a minimum of 30% of the EU's land area and 30% of its sea area and integrate ecological corridors, as part of a true trans-European nature network;

(ii) strictly protect at least a third of the EU's protected areas, including all remaining EU primary and old-growth forests;

(iii) effectively manage all protected areas, defining clear conservation objectives and measures, and monitoring them appropriately.

The strategy also sets out an EU nature restoration plan – a series of concrete commitments and actions to restore degraded ecosystems across the EU by 2030, and manage them sustainably, addressing the key drivers of biodiversity loss.

The EU Habitats and the Birds Directives are key legislative tools to deliver on the targets in the EU's biodiversity strategy for 2030, and are the cornerstone of European legislation aimed at conserving the EU's wildlife¹⁸.

At present, Slovenia does not have a national strategy for biodiversity and nature that reflects the commitments and actions of the EU biodiversity strategy.

Nature protection and restoration

Natura 2000¹⁹, the largest coordinated network of protected areas in the world, is the key instrument to achieve the objectives in the Birds and Habitats Directives. These objectives are to ensure the long-term protection, conservation and survival of Europe's most valuable and threatened species and habitats and the ecosystems they underpin. Key milestones towards meeting the objectives of the Birds and Habitats Directives are: (i) the setting up of a coherent Natura 2000 network; (ii) the designation of sites of community

importance (SCIs) as special areas of conservation (SACs)²⁰, and the setting of conservation objectives and measures for the Natura 2000 sites.

Setting up a coherent network of Natura 2000 sites

Slovenia hosts 60 habitat type²¹s and 202 species²² covered by the Habitats Directive. The country also hosts populations of 76 bird taxa listed in the Birds Directive Annex I²³.

By 2021, 37.9% of the national land area of Slovenia was covered by Natura 2000 (EU coverage 18.5%), with special protection areas (SPAs) classified under Birds Directive covering 25% (EU coverage 12.8%) and sites of community importance (SCIs) under the Habitats Directive covering 32.7% (EU coverage 14.2%) of the Slovenian territory. Whilst the Natura 2000 network on land can be considered complete, there is still a gap in the classification of marine SPAs for the Mediterranean Shag in Slovenian marine waters, for which the Commission began an infringement procedure in 2020.

Taking into account both Natura 2000 and other nationally designated protected areas, Slovenia legally protects 40.5% of its terrestrial areas (EU-27 coverage 26.4%) and 5.2% of its marine areas (EU-27 coverage 10.7%)²⁴.

¹⁸ These should be strengthened by the Nature Restoration Law, a key deliverable of the EU biodiversity strategy for 2030.

¹⁹ Natura 2000 comprises sites of community importance (SCIs) designated under the Habitats Directive as well as special protection areas (SPAs) classified under the Birds Directive; figures of coverage do not add up to 100% due to some SCIs and SPAs overlapping. A special area of conservation (SAC) is an SCI designated by the Member States.

²⁰ SCIs are designated under the Habitats Directive whereas SPAs are designated under the Birds Directive; figures of coverage do not add up to 100% due to some SCIs and SPAs overlapping. SACs are SCIs designated by the Member States.

²¹ [EEA, Article 17 dashboard, Annex I total, 2019.](#)

²² [EEA, Article 17 dashboard, Annex II + Annex IV excluding those in Annex II + Annex V excluding those in Annex II, 2019. This counting only takes into account species and habitats for which assessment of conservation status was requested.](#)

²³ [EEA, Article 12 dashboard, Annex I, 2020. This counting only takes into account birds taxa for which information was requested.](#)

²⁴ European Environment Agency, [Protected Areas](#), terrestrial protected area percentage (2021) and marine protected area percentage (2019), March 2022.

Figure 6: Marine & terrestrial protected area coverage, 2021²⁵

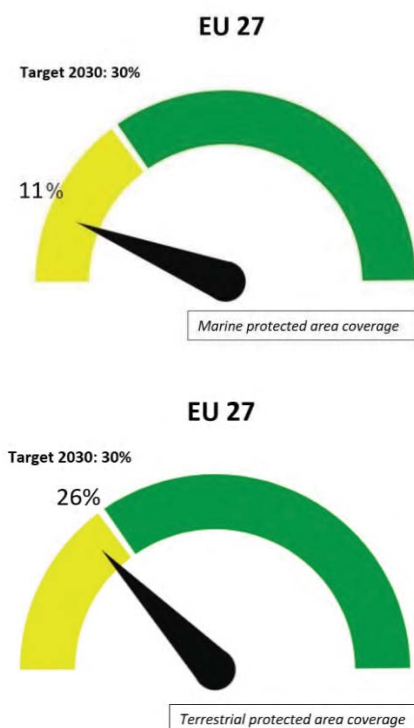
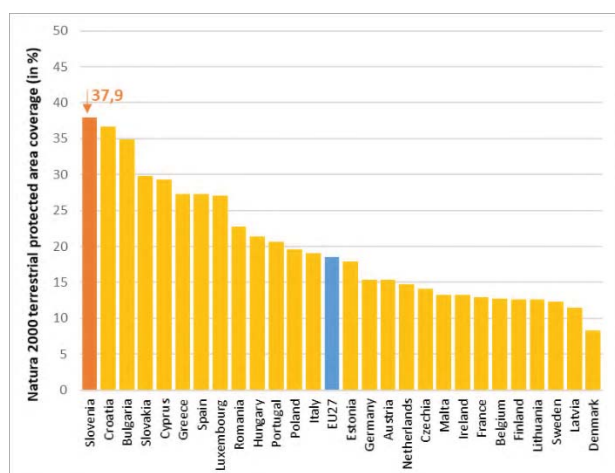


Figure 7: Natura 2000 terrestrial protected area coverage, 2021²⁶



Designating SACs and setting conservation objectives and measures

The 6-year deadline set by the Habitats Directive to designate an SCI as an SAC and to establish appropriate

conservation objectives and measures has expired for all but a few sites in Slovenia.

Although all SCIs have been designated as SACs, Slovenia has yet to establish site-specific conservation objectives of sufficient quality for all of them.

Furthermore, the implementation of the necessary conservation measures has been delayed for many sites. Slovenia is currently addressing some of these shortcomings within the 'LIFE Integrated Project for Enhanced Management of Natura 2000 in Slovenia'.

Therefore, Slovenia still has to provide for the necessary conservation objectives and measures for the designated sites.

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

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

According to the report submitted by Slovenia on the conservation status of habitats and species covered by Article 17 of the Habitats Directive for 2013-2018²⁷, the share of assessments for habitats in good conservation status in 2018 is 10% less than the 42.7% reported under the previous reporting period (2007-2012). On protected species, the share of assessments for habitats in good conservation status in 2018 was 29.22%, slightly more than the 28.96% reported under the previous reporting period (2007-2012). On birds, 82% of the breeding species showed short-term increases or stable population trends (for key wintering species this figure was 40%).

At the same time, the share of habitats in bad conservation status in 2018 increased to 61.8% and the share of assessments for species in bad conservation status also increased to 53%.

The habitat groups that have been faring particularly badly are forests, bogs, mires and fens, grasslands and freshwater habitats. On species, groups that have been faring particularly badly are mammals, amphibians and arthropods, while notably there are still knowledge gaps on the conservation status of species.

The main pressures are from agriculture, urban development, changes in water regime, forestry and other extraction of resources.

²⁵ [EU Biodiversity Strategy Dashboard](#), indicators A1.1.1 and A1.2.1, February 2022.

²⁶ European Environment Agency, [Natura 2000 Barometer](#), February 2022.

²⁷ EEA, [Conservation status and trends of habitats and species](#), 2019.

On the impact of agriculture on grassland habitats and associated species, in particular birds and butterflies, the Commission began an infringement procedure against Slovenia in 2019 for its failure to address damaging agricultural practices inside and outside Natura 2000 sites.

Figure 8: Assessments on conservation status for habitats for 2007-2012 and 2013-2018 reporting periods²⁸

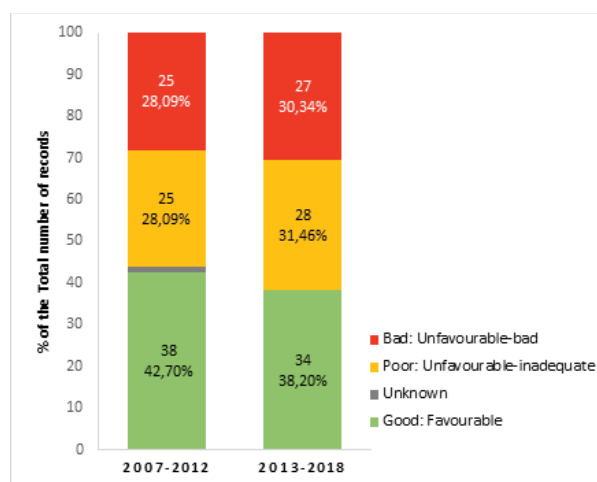
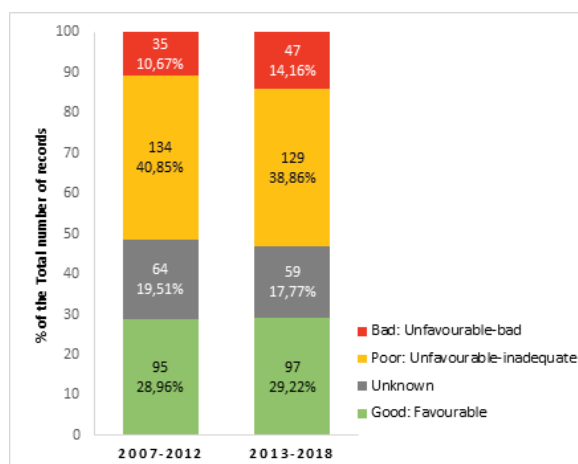


Figure 9: Assessments on conservation status for species for 2007-2012 and 2013-2018 reporting periods²⁹



To make significant progress in restoring and maintaining favourable conservation status of protected habitats and species, Slovenia should focus its

implementation of conservation and restoration measures on the habitats and species in bad conservation status and/or declining trends, such as (i) grasslands and associated species by addressing agricultural pressures, (ii) forests and associated species by addressing forestry practices and (iii) freshwater habitats and associated species by addressing changes in the water system.

Bringing nature back to agricultural land and restoring soil ecosystems

Agricultural land

The biodiversity strategy works alongside the new farm to fork strategy and the new common agricultural policy (CAP) to support and achieve the transition to fully sustainable agriculture.

The biodiversity and farm to fork strategies have set four important targets for 2030:

- a 50% reduction in the overall use of – and risk from – chemical pesticides;
- a 50% reduction in the use of more hazardous pesticides;
- a 50% reduction in losses of nutrients from fertilisers while ensuring there is no deterioration of soil fertility (which will result in a 20% reduction in the use of fertilisers);
- bring back at least 10% of agricultural area under high-diversity landscape features and increase areas under organic farming to at least 25%.

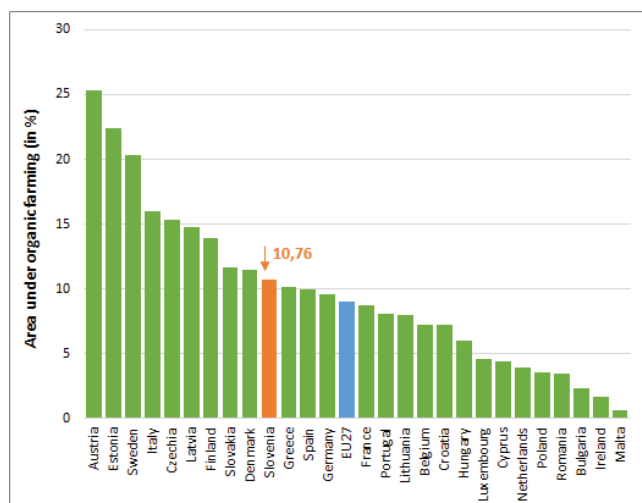
Slovenia has an estimated 10.76% of area under organic farming, marginally above the EU average of 9.07% (2020)³⁰.

²⁸ European Environment Agency, [Conservation status and trends of habitats and species](#), December 2021. Please note when comparing the figures shown for 2007-2012 and 2013-2018 these may also be affected by changes of methods or due to better data availability.

²⁹ Idem.

Figure 10: Share of total utilised agricultural area occupied by organic farming per Member State, 2020³¹

³⁰ Eurostat, [Area under organic farming](#).



Agricultural land covers 36% of Slovenia's territory. The agricultural sector consists of a significant share of small-sized, semi-subsistence and small-scale commercial farms, due to the country's geological and other natural conditions. Slovenia's agriculture generates one of the lowest incomes from agriculture in the EU.

In terms of environmental impacts, Slovenia's agriculture has been identified as one of the main pressures on water bodies which is, among other things, linked to the management of nutrients (nitrogen, phosphorous, potassium, etc.) and livestock manure. According to the Slovenian prioritised action framework (PAF)³², the sector also affects biodiversity because of the (i) intensification of agricultural systems (fertilisation, intensification of mowing systems), (ii) conversion into arable land, (iii) abandonment of traditional management systems, (iv) inappropriate techniques or timing for mowing grasslands, (v) inappropriate application of natural or inorganic fertilisers as well as (vi) drainage of land³³.

Soil ecosystems

Soil is a finite and extremely fragile resource. It is increasingly degrading in the EU.

The new EU soil strategy, adopted on 17 November 2021, stresses the importance of soil protection, of sustainable soil management and of restoring degraded soils to achieve the Green Deal objectives as well as

land degradation neutrality by 2030.

This entails:

- (i) preventing further soil degradation;
- (ii) making sustainable soil management the new normal;
- (iii) taking action for ecosystem restoration.

One factor in the degradation of soil ecosystems is the area of soil that is sealed or artificialised³⁴. The net land taken (land 'taken' means land that is sealed or artificialised) per year in 2012-2018 can be seen as a measure of one significant pressure on nature and biodiversity – land-use change. At the same time, land-use change constitutes an environmental pressure on people living in urbanised areas.

Despite a reduction in the last decade (land take was over 1 000 km²/year in the EU-28 between 2000 and 2006), land take in the EU-28 still amounted to 539km²/year between 2012-2018³⁵. The concept of 'net land take' combines land take with the return of land to non-artificial land categories (re-cultivation). While some land was re-cultivated in the EU-28 in 2000-2018, 11 times more land was taken than returned.

Slovenia ranks below the EU average with a net land take of 49.8 m²/km² (EU-27 average: 83.8 m²/km²)³⁶.

In 2018, according to the Performance Review and Implementation System (PRAIS3) reporting platform, Slovenia updated its reporting on land degradation³⁷ with actions intended to combat the degradation identified. However, Slovenia has not yet committed to setting land degradation neutrality targets under the UN Convention to Combat Desertification (UNCCD)³⁸.

³¹ https://ec.europa.eu/eurostat/databrowser/view/sdg_02_40/default/table?lang=en (Eurostat, Area under organic farming, February 2022).

³² Ministry of the Environment and Spatial Planning, *The Slovenian Prioritised Action Framework (PAF)*, 2019.

³³ European Commission, CAP strategic plans recommendations, *SWD 2020(394) –Slovenia* and Ministry of the Environment and Spatial Planning, *The Slovenian Prioritised Action Framework (PAF)*, 2019.

³⁴ Artificial land cover is defined as the total of roofed built-up areas (e.g. buildings and greenhouses), artificial non-built-up areas (e.g. sealed area features, such as yards, farmyards, cemeteries, and car parking areas, and linear features, e.g. streets, roads, railways, runways, bridges) and other artificial areas (e.g. bridges and viaducts, mobile homes, solar panels, power plants, electrical substations, pipelines, water sewage plants, and open dump sites).

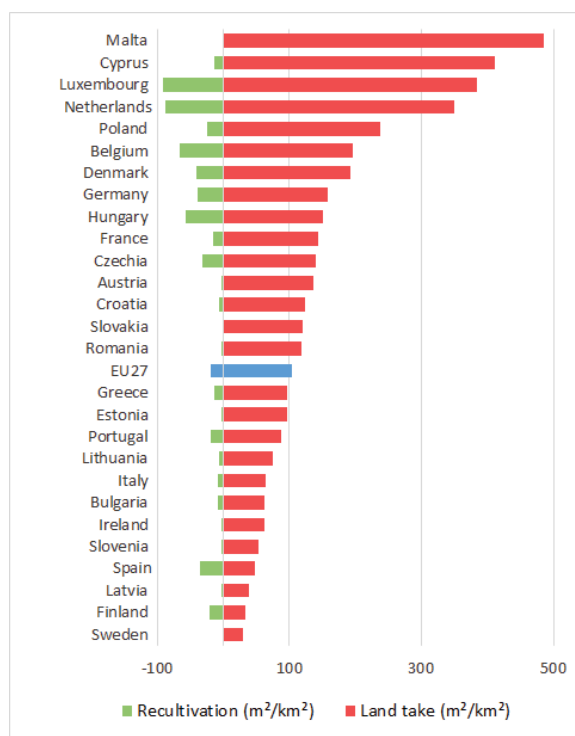
³⁵ *Land take in Europe — European Environment Agency (europa.eu)* figure 6.

³⁶ EEA, *Land take in Europe*.

³⁷ UNCCD, Prais3, *Slovenia Report*, 2018.

³⁸ UNCCD, *The LDN Target Setting Programme*.

Figure 11: Land take and re-cultivation in EU27 (m²/km²), 2012-2018³⁹



Contamination can severely reduce soil quality and threaten human health and the environment. The last available information from EU Member States⁴⁰ estimated that potentially polluting activities have taken place or are still taking place on approximately 2.8 million sites in the EU. At EU level, 650 000 of these sites have been registered in national or regional inventories. A total of 65 500 contaminated sites already have been remediated.

Slovenia had registered 181 sites where potentially polluting activities had taken place or are still taking place, and had already remediated or applied aftercare measures on 83 sites.

Soil organic matter plays an important role in the carbon cycle and in climate change. Soils are the second largest carbon sink in the world after the oceans.

Forests and timber

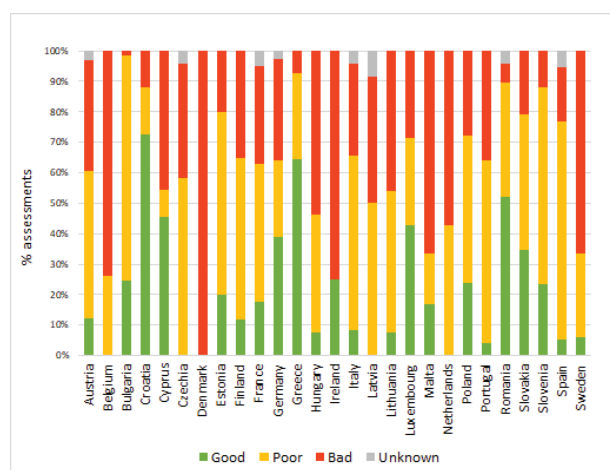
The EU forest strategy for 2030, adopted in July 2021, is part of the 'Fit for 55' package. The strategy promotes the many services that forests provide. Its key objective

is to ensure healthy, diverse and resilient EU forests that contribute significantly to the strengthened biodiversity and climate ambitions. Forests are important carbon sinks and conserving them is vital if the EU is to achieve climate neutrality by 2050.

Of the 27% of EU forest area protected under the EU nature directives, less than 15% has a favorable conservation status. Assessments reveal that bad conservation status increased from 27% to 31% in the EU⁴¹ in 2018 compared to 2015. More than 75% of the assessments in Slovenia show a bad to poor conservation status.

In Slovenia, forests cover 58.61% of its territory⁴² and more than 75% of the assessments reveal a bad to poor status⁴³. A total of 34 000 ha in Slovenia are covered by primary forests⁴⁴.

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



45

The European Union Timber Regulation (EUTR)⁴⁶, which prohibits the placing on the EU market of illegally harvested timber. In accordance with the EUTR, EU Member States' competent authorities must conduct regular checks on operators and traders, and apply penalties for non-compliance. With the amendment of Article 20 of the EUTR, reporting every 2 years has been

³⁹ European Environment Agency, [Land take in Europe](#), December 2021.

⁴⁰ Ana Paya Perez, Natalia Rodriguez Eugenio (2018), Status of local soil contamination in Europe: Revision of the indicator 'Progress in the management Contaminated Sites in Europe'.

⁴¹ [COM/2020/635 final](#)

⁴² EEA, [Forest information system for Europe](#)

⁴³ [COM SWD \(2021\) 652](#)

⁴⁴ JCR, [Mapping and assessment of primary and old-growth forests in Europe](#), p. 13.

⁴⁵ European Environment Agency, [Conservation status and trend in conservation status by habitat group - forests](#), January 2022.

⁴⁶ [Regulation \(EU\) No 995/2010 of the European Parliament and of the Council of 20 October 2010.](#)

changed to annual reporting, and covers the calendar year as of 2019.

In the period from March 2017 to February 2019⁴⁷, Slovenia carried out 611 checks on domestic timber operators. It also carried out 29 checks on operators importing timber. It is estimated that Slovenia had 2 124 operators placing imported timber types onto the internal market over the reporting period.

The new Deforestation Regulation⁴⁸ will repeal and replace the EUTR, as it will essentially integrate and improve the existing system to check the legality of timber.

Invasive alien species (IAS)

IAS are a key cause of biodiversity loss in the EU (alongside changes in land and sea use, overexploitation, climate change and pollution).

Besides inflicting major damage on nature and the economy, many IAS also facilitate the outbreak and spread of infectious diseases, posing a threat to humans and wildlife.

The implementation of the EU Invasive Alien Species Regulation and other relevant legislation must be stepped up.

The biodiversity strategy for 2030 aims to manage recognised IAS and decrease the number of 'red list' species they threaten by 50%.

The core of Regulation (EU) 1143/2014 on IAS ('the IAS Regulation'⁴⁹) is the list of IAS of Union concern.

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

According to a 2021 report⁵⁰ on the review of how the IAS Regulation has been applied, the implementation of the IAS Regulation is already starting to deliver on its objectives such as a coherent framework for addressing IAS at EU level and increased awareness of the problem of IAS. At the same time, the above report identified

⁴⁷ [COM/2020/629 final](#).

⁴⁸ A proposal for the Regulation on the making available on the Union market as well as export from the Union of certain commodities and products associated with deforestation and forest degradation.

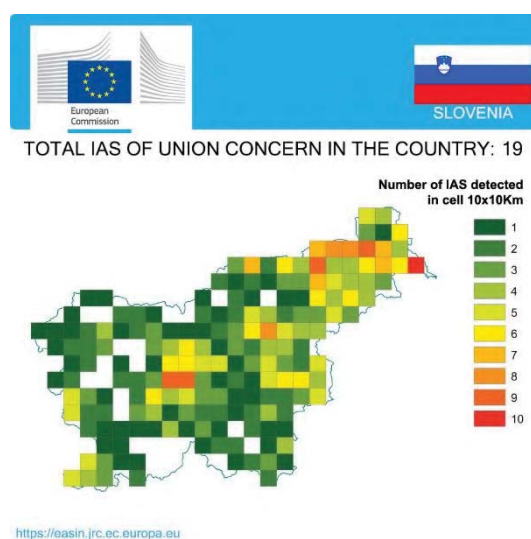
⁴⁹ Regulation (EU) No 1143/2014 of the European Parliament and of the Council of 22 October 2014 on the prevention and management of the introduction and spread of invasive alien species.

⁵⁰ Report from the Commission to the European Parliament and the Council on the review of the application of Regulation (EU) No 1143/2014 of the European Parliament and of the Council of 22 October 2014 on the prevention and management of the introduction and spread of invasive alien species, COM(2021) 628 final, 13.10.2021.

some challenges and areas for improvement. Given that the deadlines for implementing the various obligations of the IAS Regulation applied gradually between July 2016 and July 2019, it is premature to draw conclusions on several aspects of the implementation of the IAS Regulation.

A 2021 report⁵¹ on the baseline distribution (see Figure 13) shows that from the 66 species on the Union list, 21 have been observed in the environment in Slovenia.

Figure 13: Number of invasive alien species of EU concern, based on available georeferenced information for Slovenia, 2021



An infringement case is ongoing against Slovenia as it failed to establish and implement a single action plan or a set of action plans fulfilling the requirements specified in Article 13 of the IAS Regulation by 13 July 2019 and to notify it/them to the Commission.

2022 priority actions

- Improve the quality of conservation objectives and measures in all sites.
- Fully implement all conservation measures in all Natura 2000 sites, paying special attention to adapting agricultural practices within the sites where conservation status of habitats and/or species are experiencing a decline due to agricultural activities.

⁵¹ Cardoso A.C., Tsiamis K., Deriu I., D' Amico F., Gervasini E., EU Regulation 1143/2014: assessment of invasive alien species of Union concern distribution, Member States reports vs JRC baselines, EUR 30689 EN, Publications Office of the European Union, Luxembourg, 2021, ISBN 978-92-76-37420-6, doi:10.2760/11150, [JRC123170](#).

- Integrate the Commission's recommendations⁵² in the Slovenian CAP strategic plan of relevance to environment and climate action, including related EU objectives⁵³.
- Commit to setting land degradation neutrality targets under the UNCCD.
- Take measures to address the bad and poor conservation status of forest habitats to ensure the number of habitats with a favourable status increases.
- Establish and implement a single action plan or a set of action plans under Article 13 of the IAS Regulation.

Marine ecosystems

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

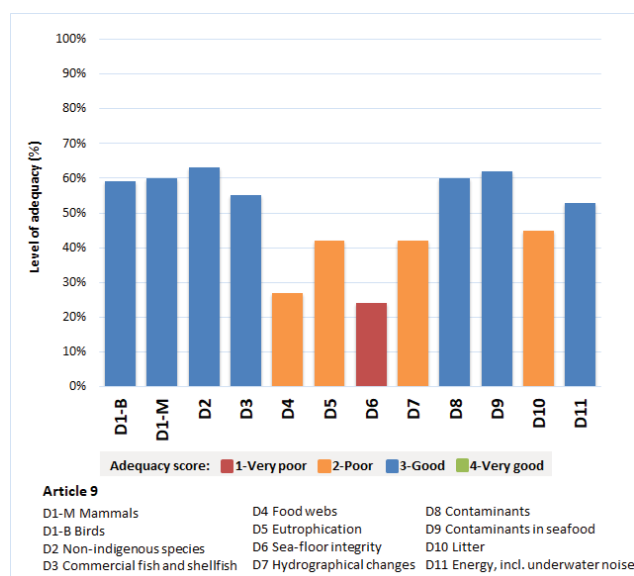
The Marine Strategy Framework Directive (MSFD)⁵⁴ requires Member States to achieve good environmental status (GES) for their marine waters. To that end, Member States must draw up marine strategies for their marine waters, and cooperate with Member States sharing the same marine region or sub-region. These marine strategies comprise different steps to be developed and implemented over 6-year cycles.

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

The Commission assessed Slovenia's 2018 determinations of GES for each of the MSFD's 11

descriptors⁵⁵ and determined their level of adequacy in relation to the Commission GES Decision⁵⁶. A good or very good score in the Commission assessment indicates that the national determinations of GES are well aligned with the requirements of the Commission GES Decision, and provide qualitative and quantitative national environmental objectives to be achieved for their marine waters.

Figure 14: Level of adequacy of GES determination by Slovenia (MAD region) with criteria set under the Commission GES Decision – article 9 (2018 reporting exercise)⁵⁷



Slovenia has one marine sub-region, MAD Mediterranean: Adriatic Sea.

In this marine sub-region, 6 out of 11 determinations of GES were assessed as good or very good. The national determination of GES by Slovenia is consistent for 6 out of 11 descriptors.

The MSFD also requires Member States to make an assessment of the current environmental status of their marine waters in relation to the determination of GES. A good or very good score indicates that the Member State has good capabilities to assess its marine

⁵² European Commission, CAP strategic plans recommendations, [SWD 2020\(394\) – Slovenia](#).

⁵³ More specifically, recommendations on: (i) improving biodiversity status; (ii) fostering sustainable forest management; (iii) encouraging farming practices aimed at improving nutrient management; (iv) sustaining current trend in organic production; (v) increasing resilience to climate change; (vi) mitigating the recent trend of increased GHG emissions from agriculture; and (vii) strengthening the efforts to reduce ammonia and methane emissions in line with the EU methane strategy.

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

⁵⁴ [Marine Strategy Framework Directive 2008/56/EC](#)

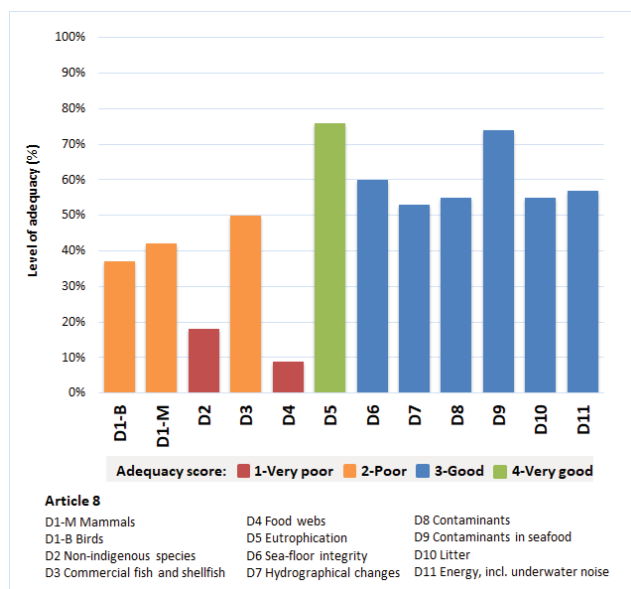
⁵⁵ Annex I of Directive 2008/56/EC.

⁵⁶ [Commission Decision \(EU\) 2017/848](#) laying down criteria and methodological standards on good environmental status of marine waters and specifications and standardised methods for monitoring and assessment, and repealing Decision 2010/477/EU.

⁵⁷ Assessment carried out by the European Commission of the data reported by the Member States, January 2022. Please note that only two sub-sections of descriptor D1 are displayed (D1-M Mammals and D1-B Birds). For the analysis, these two sub-sections were considered as a whole after averaging them.

environment in accordance with the requirements set out in the Commission GES Decision.

Figure 15: Level of adequacy of national assessment of Slovenia's marine environment (MAD region) with criteria set under the Commission GES Decision – article 8 (2018 reporting exercise)⁵⁸



Seven descriptors out of 11 were scored as good or very good. Slovenia's assessment of its marine environment is aligned with the requirements set out under the Commission GES Decision for 7 out of 11 descriptors.

In the EIR 2019, the Commission recommended that Slovenia should promptly report on the updates to the different steps to comply with the MSFD.

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

2022 priority actions

- Ensure regional cooperation with Member States sharing the same marine (sub)region to address major pressures.
- Implement the recommendations made by the Commission in the staff working document⁵⁹ accompanying the Communication⁶⁰ on

recommendations per Member State and region on the 2018 updated reports for Articles 8, 9 and 10 of the MSFD. It should improve national GES determinations for five descriptors with a very poor/poor score; and it should carry out assessments of the marine environment for five descriptors with a very poor/poor score.

- Implement the Commission's recommendations regarding the preparation of the marine strategies, encompassing: (i) their assessment, (ii) the determination of good environmental status and (iii) the establishment of environmental targets.

Ecosystem assessment and accounting

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

Within the AlpES project (Ecosystem Services in the Alps, 2018), eight ecosystem services have been mapped for the whole of Slovenia: (i) surface water for drinking; (ii) biomass production from grassland, (iii) fuelwood; (iv) filtration of surface water by ecosystem types; (v) protection against avalanches, mudslides and rockfalls; (vi) CO₂ sequestration by forest and bogs; (vii) outdoor recreation activities; and (viii) symbolic alpine plants and animals, landscapes. The mapping is publicly available at the AlpES project's website⁶¹.

To assess progress in ecosystem mapping and assessment, the Commission sends out a questionnaire twice a year containing 27 implementation questions. Slovenia has provided updated information and progress has been recorded since January 2016 (Figure 16). This assessment is updated every 6 months.

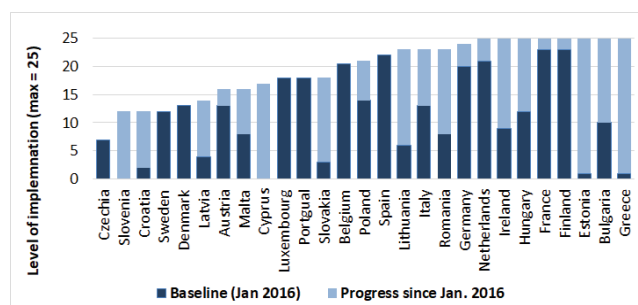
⁵⁸ Idem.

⁵⁹ [SWD\(2022\)1392](#).

⁶⁰ [COM\(2022\)550](#).

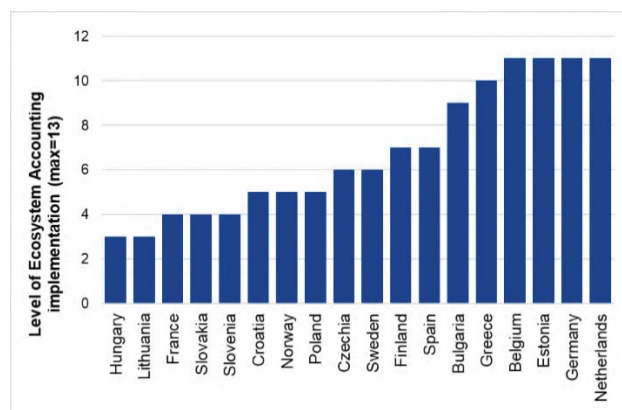
⁶¹ [AlpES project's mapping](#).

**Figure 16: ESERALDA MAES Barometer, January 2016
- March 2021⁶²**



Progress on ecosystem accounting implementation is assessed at national scale based on 13 questions (see figure 17).

**Figure 17: Ecosystem accounting Barometer,
September 2021⁶³**



2022 priority action

- Slovenia should continue to support the mapping and assessment of ecosystems and their services, and the development of ecosystem accounting. It should do this through appropriate indicators for integrating ecosystem extent, condition and services (including some monetary values) into national accounts. Slovenia should also continue to support the development of national business and biodiversity platforms, including natural-capital accounting systems to monitor and value the impact of business on biodiversity.

⁶² European Commission, Joint Research Centre, Publication Office, [EU Ecosystem assessment: summary for policymakers](#), page 80, May 2021.

⁶³ MAIA Portal, Mapping and assessment for Integrated Ecosystem Accounting (EU Horizon 2020 project), 2022. MAIA uses the System of Environmental Economic Accounting – Experimental Ecosystem Accounting (SEEA-EEA) as the methodological basis for the ecosystem accounting. The SEEA EA is an integrated and comprehensive statistical framework that is based on five core accounts: ecosystem extent, condition, services and monetary ecosystem asset.

3. Zero Pollution

Clean air

EU clean air policies and legislation need to significantly improve air quality in the EU, moving the EU closer to the quality recommended by the WHO and curbing emissions of key air pollutants.

Air pollution and its impacts on ecosystems and biodiversity should be further reduced with the long-term aim of not exceeding critical loads and levels. This requires strengthening efforts to reach full compliance with EU clean air legislation and defining strategic targets and actions for 2030 and beyond.

The 2030 zero pollution action plan targets are to reduce the health impacts of air pollution by 55% and to reduce the EU ecosystems threatened by air pollution by 25%.

The EU has developed a comprehensive suite of air-quality legislation, which sets health-based air-quality standards⁶⁴ and emissions-reduction commitments⁶⁵ by Member State for a number of air pollutants.

Air quality in Slovenia still continues to give cause for concern. However, the trend seems to be more positive compared with previous data. The latest available annual estimates (for 2019) by the European Environment Agency⁶⁶ point to Slovenia suffering about 1 400 premature deaths each year (or 15 500 years of life lost (YLL)) attributable to fine particulate matter concentrations⁶⁷; 90 premature deaths each year (1 000 YLL) attributable to excessive ozone concentrations⁶⁸; and 40 premature deaths (400 YLL) attributable to excessive nitrogen dioxide concentrations⁶⁹.⁷⁰ Compared with the EU-27 average, Slovenia is doing worse for fine particulate matter and ozone, but better for nitrogen dioxide concentrations.

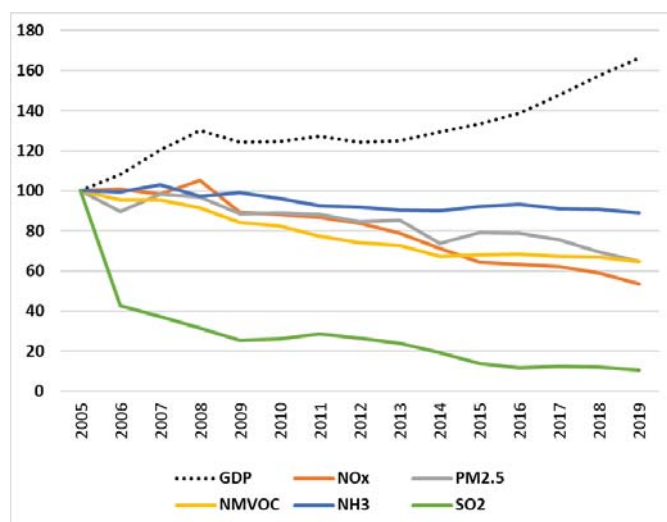
The number of YLL due to air pollution from PM_{2.5} decreased from 1 016 in 2018 to 744 in 2019, which is

below the EU average of 762 per 100 000 inhabitants. Similarly, the number of YLL due to pollution from NO₂ dropped from 29 per 100 000 inhabitants in 2018 to 19 in 2019 (EU-27 average is 99).

The emissions of key air pollutants have decreased significantly in Slovenia in recent years, while GDP growth has continued (see Figure 18). According to the latest projections as submitted under Article 10(2) of the National Emission Reduction Commitments Directive (NECD)⁷¹, Slovenia projects that it will reach its emissions-reduction commitments for all air pollutants covered by the Directive for the period 2020-2029 and for most pollutants from 2030 onwards. However, the projections do not demonstrate how the emissions-reduction commitments for PM_{2.5} from 2030 onwards will be reached. The latest inventory data submitted by Slovenia, prior to review by the Commission, indicate that Slovenia complied with the emissions-reduction commitments for all pollutants in 2020.

Slovenia submitted its national air-pollution control programme on 10 October 2019.

Figure 18: Emission trends of main pollutants/ GDP in Slovenia, 2005-2019⁷²



⁶⁴ European Commission, 2016. [Air Quality Standards](#).

⁶⁵ European Commission, [Reduction of National Emissions](#).

⁶⁶ [European Environment Agency, Air Quality in Europe –2021 Report](#). Please see details in this report as regards the underpinning methodology, p.106.

⁶⁷ Particulate matter (PM) is a mixture of aerosol particles (solid and liquid) covering a wide range of sizes and chemical compositions. PM10 refers to particles with a diameter of 10 micrometres or less. PM2.5 refers to particles with a diameter of 2.5 micrometres or less. PM is emitted from many human sources, including combustion.

⁶⁸ Low-level ozone is produced by photochemical action on pollution.

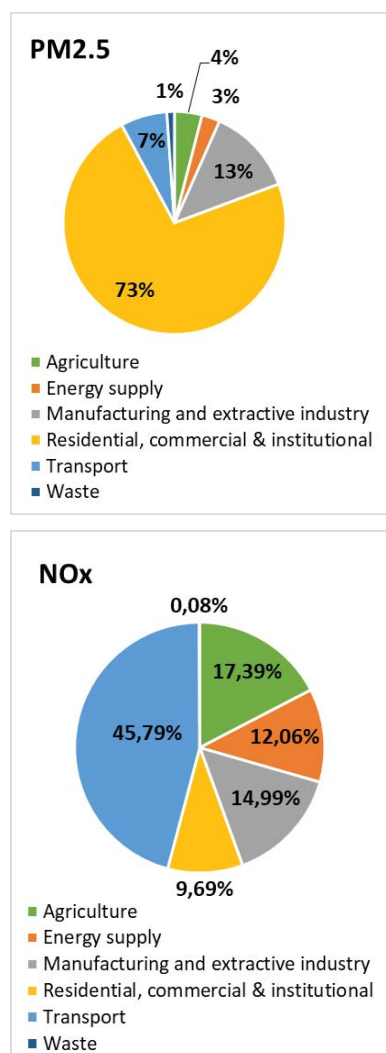
⁶⁹ NOx is emitted during fuel combustion e.g. from industrial facilities and the road transport sector. NOx is a group of gases comprising nitrogen monoxide (NO) and nitrogen dioxide (NO₂).

⁷⁰ Please note that these figures refer to the impacts of individual pollutants, and to avoid double-counting cannot be added up to derive a sum.

⁷¹ Directive 2016/2284/EU

⁷² European Environment Agency.

Figure 19: PM2.5 and NOx emissions by sector in Slovenia, 2019⁷³



In 2020, no exceedances above the EU limit values set by the Ambient Air Quality Directive were registered. However, for several air-quality zones, the target values for ozone concentration have not been met⁷⁴.

Persistent breaches of air-quality requirements, which have severe negative effects on health and the environment, are being followed up by the European Commission through infringement procedures (mainly for PM₁₀ and NO₂ exceedances) covering all Member States concerned, including Slovenia for exceedances of PM₁₀ limit values. The aim is for appropriate measures to be put in place to swiftly bring all air-quality zones into compliance with the EU requirements. An infringement

case against Slovenia concerning daily exceedances of PM₁₀ values has been ongoing since 2012.

Slovenia received several priority actions from the Commission in the 2019 EIR as regards clean air. More specifically, the Commission recommended that Slovenia: (i) take action to reduce the main emission sources, under its national air-pollution control programme (NAPCP); (ii) accelerate the reduction in particulate matter emissions and concentrations; (iii) upgrade and improve the air-quality monitoring network; and (iv) ensure the timely reporting of adequate data. Slovenia has been taking some action in this respect, e.g. planning for clean-energy and transport investments under the national recovery and resilience plans, and upgrading the monitoring network, e.g. with funding of approximately EUR 39 million under the 2014-2020 cohesion policy (this was used for a monitoring project: 'Sinica - Upgrading the Air-Pollution Monitoring System, Identifying Causes of Excessive Burden, and Analysing the Effects of Improvement Measures').

2022 priority actions

- Take, in the context of the NAPCP, action towards reducing emissions from the main sources mentioned above.
- Ensure full compliance with EU air-quality standards and maintain downward trends in emissions from air pollutants. This will help the country reduce adverse air-pollution impacts on health and the economy and abide by WHO guideline values in the future.

Industrial emissions

The main objectives of EU policy on industrial emissions are to:

- protect air, water and soil;
- prevent and manage waste;
- improve energy and resource efficiency;
- clean up contaminated sites.

To achieve this, the EU takes an integrated approach to the prevention and control of routine and accidental industrial emissions. The cornerstone of the policy is the Industrial Emissions Directive⁷⁵ (IED). The Commission

⁷³ Idem.

⁷⁴ European Environment Agency, [Eionet Central Data Repository](https://eionet.europa.eu/data-repository).

⁷⁵ Directive 2010/75/EU covers industrial activities carried out above certain thresholds. It covers the energy industry, metal production, the mineral and chemical industry, waste management, and a wide range of

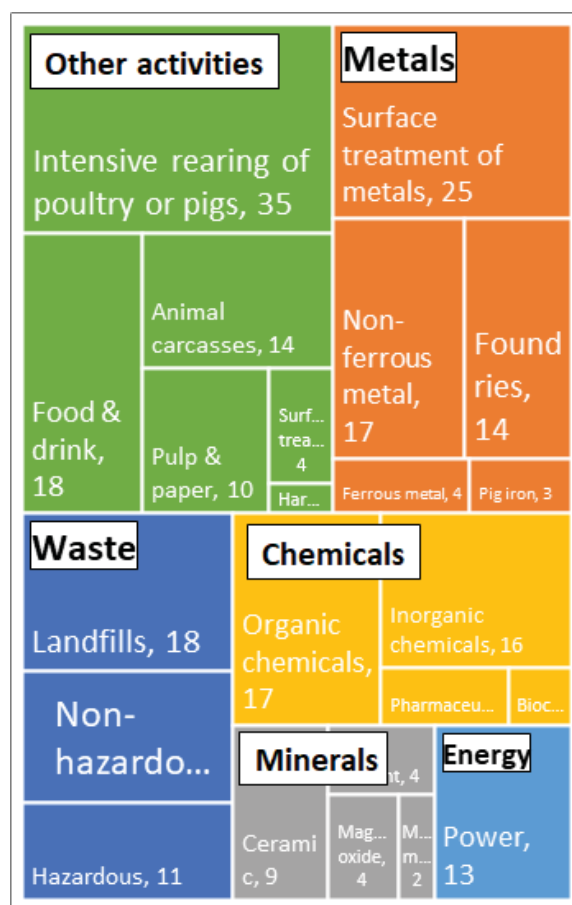
tabled a proposal in April 2022⁷⁶. The revision seeks to improve the Directive's contribution to the zero-pollution objective, as well as its consistency with climate, energy and circular-economy policies

The overview of industrial activities regulated by IED below is based on data reported to the EU Registry (2018)⁷⁷.

In Slovenia, around 260 industrial installations are required to have a permit based on the IED. The distribution of installations is shown in the Figure 20 below.

The industrial sectors in Slovenia with the most IED installations in 2018 were: (i) metals production (24%), (ii) waste management (17%), (iii) chemicals production (15%), and (iv) intensive rearing of poultry and pigs (14%).

Figure 20: Number of IED industrial installations per sector in Slovenia, 2018⁷⁸



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

- the iron and steel production for cadmium (Cd), mercury (Hg), nickel (Ni), lead (Pb), zinc (Zn) and dioxins;
- the power generation for arsenic (As), chromium (Cr), Copper (Cu), nitrogen oxides (NOx) and sulphur oxides (SOx);
- manure management for ammonia (NH₃);
- coating applications for non-methane volatile organic compounds (NMVOCs); and
- mineral activities for particulate matter (PM_{2.5}).

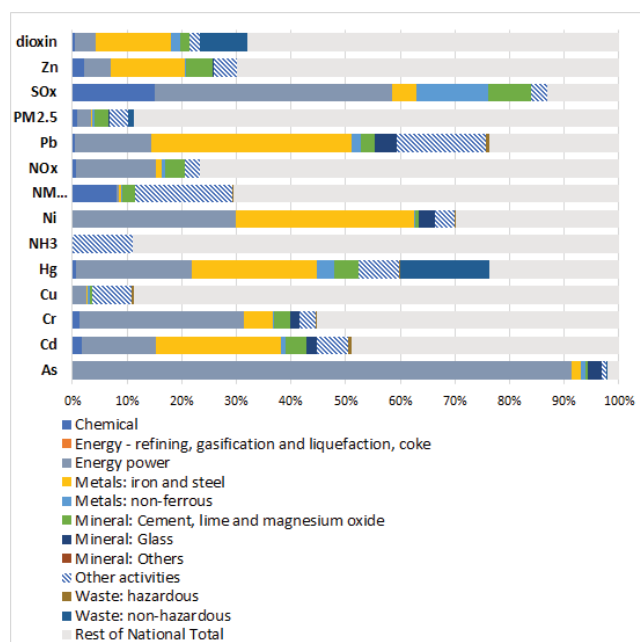
industrial and agricultural sectors (e.g. intensive rearing of pigs and poultry, pulp and paper production, painting and cleaning).

⁷⁶ European Commission, [proposal for a revision of the Industrial Emissions Directive](#), 4 April 2022. The revision of the IED is performed in parallel to the revision of Regulation (EC) No 166/2006 on the European Pollutant Release and Transfer Register (E-PRTR).

⁷⁷ <https://industry.eea.europa.eu/>

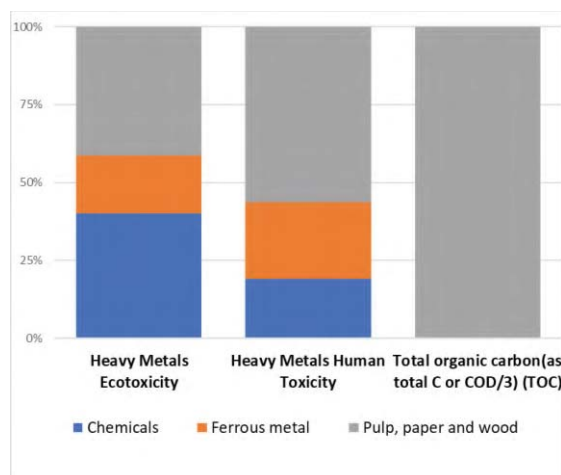
⁷⁸ European Environment Agency, EU Registry, [European Industrial Emissions Portal](#) (data retrieved on 3 November 2021).

Figure 21: Emissions to air from IED sectors and rest of national total air emissions in Slovenia, 2018⁷⁹



The environmental burdens for industrial **emissions to water** mainly result from: (i) the production of pulp, paper and wood for heavy metals and (ii) total organic carbon. The breakdown, based on E-PRTR data, is presented in Figure 22.

Figure 22: Relative releases to water from industry in Slovenia, 2018⁸⁰

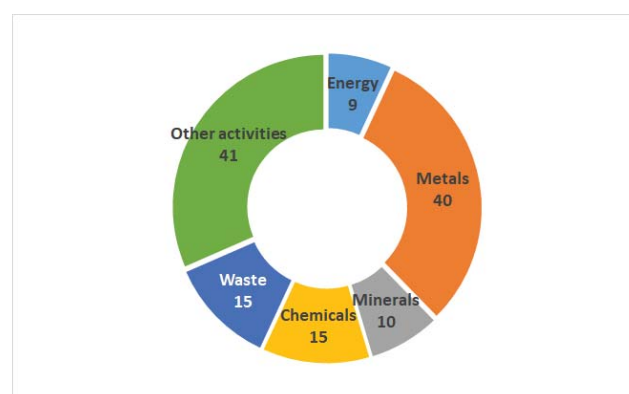


⁷⁹ European Environment Agency, LRTAP, [Air pollutant emissions data viewer \(Gothenburg Protocol, LRTAP Convention\) 1990-2019 \(data retrieved on 3 November 2021\)](#).

⁸⁰ European Environment Agency, E-PRTR, [European Industrial Emissions Portal](#). The heavy metals are presented both as a weighted sum of eco toxicity and human toxicity factors to illustrate both the ecological and human impact (based on USEtox) [\(data retrieved on 3 November 2021\)](#).

The EU approach to enforcement under the IED creates strong rights for the public to have access to relevant information and to participate in the permitting process for potentially polluting installations. This empowers the public and NGOs, to ensure that permits are appropriately granted and that the conditions of these permits are complied with. As part of environmental inspection, competent authorities undertake site visits to IED installations to take samples and to gather necessary information. According to Article 23(4) of the IED, site visits must be carried out between once a year and once every 3 years, depending on the environmental risks posed by the installations. In 2018, Slovenia undertook 130 site visits. The largest number of visits were at plants for the production of metals (31% of visits), chemicals production (15% of visits), and waste management (15% of visits).

Figure 23: Number of inspections in IED installations in Slovenia in 2018⁸¹



The development of best-available technique (BAT) reference documents (BREFs) and BAT conclusions ensures good collaboration between stakeholders and enables better implementation of the IED⁸². Since the last EIR report, the Commission adopted BAT conclusions for Slovenia for: (i) waste incineration; (ii) the food, drink and milk Industries; and (iii) surface treatment using organic solvents including the preservation of wood and wood-products with chemicals.

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

⁸¹ European Environment Agency, EU Registry, [European Industrial Emissions Portal \(data retrieved on 3 November 2021\)](#).

⁸² European Commission [BAT reference documents](#).

In 2019, Slovenia received priority actions to (i) review permits to comply with newly adopted BAT conclusions; and (ii) to strengthen control and enforcement to ensure compliance with BAT conclusions. These actions have been followed up by the Commission through the reporting by Slovenia to the EU Registry. The Commission is currently verifying with Slovenia the reported information about the permits granted for each installation in the scope of the IED.

There is an ongoing infringement case against Slovenia concerning the transposition of the requirements of IED Directive into its legislation.

Major industrial accidents prevention – SEVESO

The main objectives of EU policy on the prevention of major industrial accidents are to:

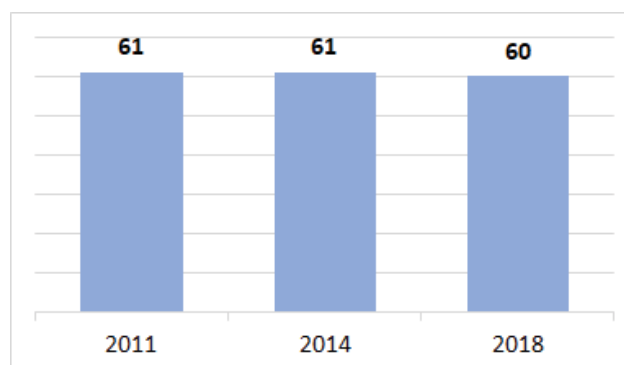
- (i) control major accident hazards involving dangerous substances, especially chemicals;
- (ii) limit the consequences of such accidents for human health and the environment;
- (iii) continuously improve prevention, preparedness and response to major accidents.

The cornerstone of the policy is Directive 2012/18/EU (the Seveso-III Directive)⁸³.

The below overview of industrial plants regulated by the Seveso-III Directive ('Seveso establishments') is based on data reported to the eSPIRS database (2018)⁸⁴ and the Slovenia report on the implementation of the Seveso-III Directive for the period 2015-2018⁸⁵.

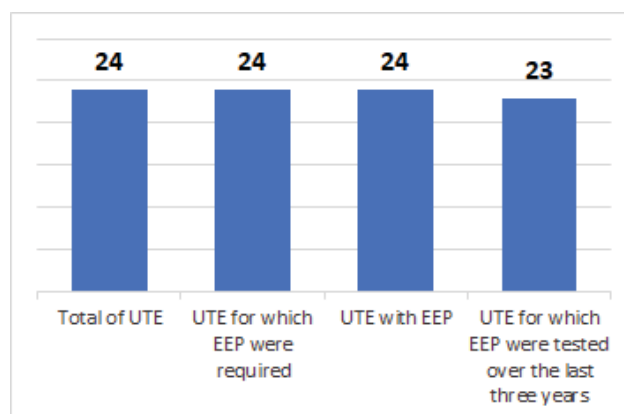
In Slovenia, of the 60 Seveso establishments, 36 are categorised as lower-tier establishments (LTEs) and 24 as upper-tier establishments (UTEs), based on the quantity of hazardous substances likely to be present in them. The UTEs are subject to more stringent requirements. The change in the number of Seveso establishments is presented in Figure 24.

Figure 24: Number of Seveso establishments in Slovenia (2011, 2014 and 2018)⁸⁶



Many Seveso establishments are required to draw up external emergency plans (EEPs). These EEPs are essential to allow proper preparation and effective implementation of the necessary actions to protect the environment and the population should a major industrial accident occur at them. According to Slovenia, an EEP is required for 24 UTEs. In 2018, 24 UTEs had an EEP, and 23 of these EEPs had been tested over the last 3 years. The summary of EEPs in Slovenia is shown in Figure 25. The establishment of EEPs is essential to enable establishments to properly prepare and implement effectively the actions needed to protect the environment and the population should a major industrial accident ever happen.

Figure 25: Situation regarding EEP in Slovenia(2018)⁸⁷



The following types of information are permanently available for 80% of the Seveso establishments in Slovenia: (i) information to the public referred to in

⁸³ Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances.

⁸⁴ European Environment Agency, [European Industrial Emissions Portal](#).

⁸⁵ As provided for by Article 21(2) of the Seveso-III Directive.

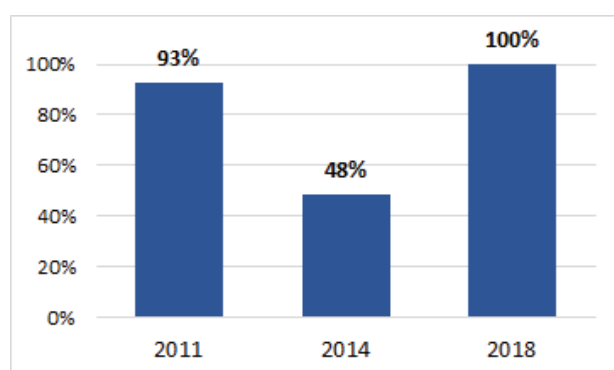
⁸⁶ European Commission, [Assessment and summary of Member States' implementation reports for Implementing Decision 2014/896/EU \(implementing Directive 2012/18/EU on the control of major accident hazards involving dangerous substances\)](#), 2022.

⁸⁷ Idem.

Annex V of the Seveso-III Directive especially about how the public concerned will be warned if there is a major accident; (ii) information about appropriate behaviour in the event of a major accident; and (iii) information containing the date of the last site visit. This provision on knowledge is an important provision of the Seveso-III Directive, as knowledge of this information by the public may reduce the consequences of a major industrial accident.

The share of UTEs for which information on safety measures and requisite behaviours was actively made available to the public in recent years are presented in Figure 26.

Figure 26: Share of UTE for which information on safety measures and requisite behaviours was actively made available to the public in Slovenia (2011, 2014 and 2018)⁸⁸



Slovenia has had some issues with the transposition of the Seveso-III Directive.

2022 priority action

- Slovenia should strengthen control and enforcement to ensure compliance with Seveso-III Directive provisions, especially on information to the public.

Noise

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

Excessive noise from aircrafts, railways and roads is one of the main causes of environmental-health-related issues in the EU. It can cause ischaemic heart disease,

stroke, interrupted sleep, cognitive impairment and stress⁸⁹.

In Slovenia, based on a limited set of data⁹⁰, environmental noise is estimated to cause at least 30 premature deaths and 130 cases of ischaemic heart disease annually⁹¹. Moreover, some 15 000 people in Slovenia suffer from disturbed sleep. In Slovenia, the proportion of people exposed to noise reduced by 9% between 2012 and 2017. On the basis of the latest full set of information analysed, noise mapping of agglomerations, roads and railways is complete.

Water quality and management

EU legislation and policy requires that the impact of pressures on transitional, coastal and fresh waters (including surface and ground waters) be significantly reduced. Achieving, maintaining or enhancing a good status of water bodies as defined by the Water Framework Directive will ensure that EU citizens benefit from good quality and safe drinking and bathing water. It will further ensure that the nutrient cycle (nitrogen and phosphorus) is managed in a more sustainable and resource-efficient way.

Water Framework Directive

The Water Framework Directive (WFD)⁹² is the cornerstone of the EU water policy in the 21st century⁹³. The WFD and other water-related legislation⁹⁴ set the framework for sustainable and integrated water management, which aims at a high level of protection of water resources, prevention of further deterioration, and restoration to good status.

⁸⁹ WHO 2018, Environmental Noise Guidelines for the European Region

⁹⁰ For further information: European Environment Agency, [Noise Fact Sheets 2021](#).

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

⁹² The [Water Framework Directive \(2000/60/EC\)](#).

⁹³ The [EU Water Policy](#).

⁹⁴ This includes the [Groundwater Directive \(2006/118/EC\)](#), the [Environmental Quality Standards Directive \(2008/105/EC\)](#), the [Floods Directive \(2007/60/EC\)](#), the [Bathing Water Directive \(2006/7/EC\)](#), the [Urban Waste Water Treatment Directive \(91/271/EEC\)](#), the new [Drinking Water Directive \(2020/2184/EC\)](#), the [Nitrates Directive \(91/676/EEC\)](#), the [Marine Strategy Framework Directive \(2008/56/EC\)](#), the [Industrial Emissions Directive \(2010/75/EU\)](#), and the new [Regulation on minimum requirements for water reuse \(2020/741\)](#).

⁸⁸ Idem.

By March 2022, Member States were meant to have reported on the third round of river basin management plans (RBMPs). Under the WFD, Member States must draw up management plans for all river basins on their territory. The Commission will assess the reported status of river basins and progress made in these river basins. It will check how the findings identified in its assessment of the second round of RBMPs⁹⁵ have been addressed. Slovenia has yet to report on the third round of RBMPs.

The Commission published in December 2021 the 6th Implementation Report, which assesses implementation of the WFD and the Floods Directives⁹⁶. This report includes an interim assessment of: (i) the implementation of the programmes of measures; and (ii) the new priority substances. The assessment report for Slovenia⁹⁷, which forms part of the 6th Implementation Report, showed that 78 measures (71 basic and 7 supplementary) were adopted in the Programme of Measures (PoM) for the second management cycle. The measures in the PoM are not related to key type measures and do not give any structured information about significant pressures or chemical substances that could prevent environmental objectives from being achieved. The targeted pressures are described only in a general sense. It was also noted that in 2018 and 2021, the environmental objective had not been met for addressing any of the pressures originating from chemical substances and there are no specific measures to: (i) cover remediation of contaminated sites; (ii) control pollution originating from forestry; (iii) implement natural water retention; and (iv) adapt to climate change. They are only implicitly included in various measures.

Based on the reporting in the second round of RBMPs and the data published in 2020⁹⁸, 58.4% of all surface water bodies in Slovenia⁹⁹ have reached good ecological status (with only 3.2% of surface water bodies having unknown status), while only 0.6% have reached good chemical status (with only 0.6% having unknown status). For groundwater, 14.3% of groundwater bodies failed to achieve good chemical status, while 100% are in good quantitative status.

⁹⁵ Detailed information can be found in the [5th Report from the Commission on the implementation of the Water Framework Directive and the Floods Directive](#), as well as in the 2019 EIR.

⁹⁶ See the [6th Implementation Report of the WFD and FD](#).

⁹⁷ European Commission, Directorate-General for Environment, Assessment of Member States' progress in Programmes of Measures during the second planning cycle of the Water Framework Directive. Member State: [Slovenia](#), 2022.

⁹⁸ European Commission, [WISE Freshwater](#).

⁹⁹ Rivers, lakes, transitional waters, coastal waters, and territorial waters.

Figure 27 below illustrates the proportion of surface water bodies in Slovenia and other European countries that failed to achieve good ecological status.

Figure 27. Proportion of surface water bodies (rivers, lakes, transitional and coastal waters) in less than good ecological status per River Basin District¹⁰⁰

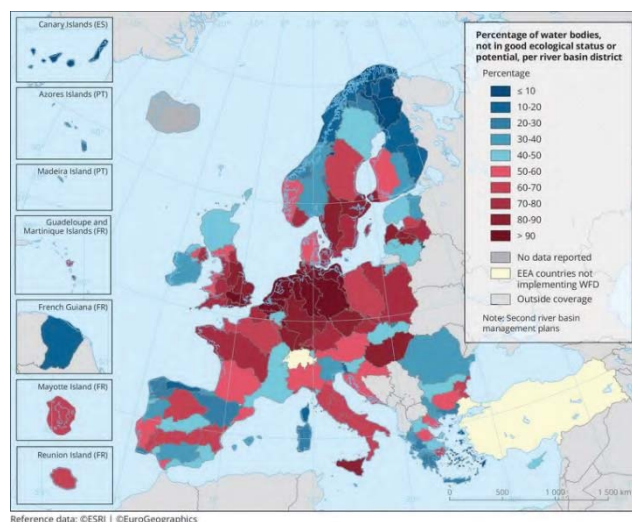
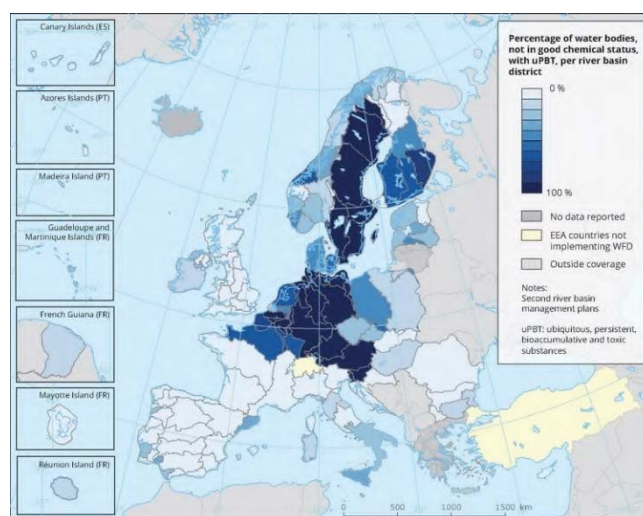


Figure 28 presents the percentage of surface water bodies in Slovenia and other European countries failing to achieve good chemical status. For Slovenia, the percentage is 98.7%, if one includes water bodies failing due to substances behaving as ubiquitous PBTs (uPBTs – persistent, bio-accumulative and toxic). Without uPBTs, 99% of surface water bodies achieve good chemical status.

Figure 28. Percentage of surface water bodies not achieving good chemical status¹⁰¹



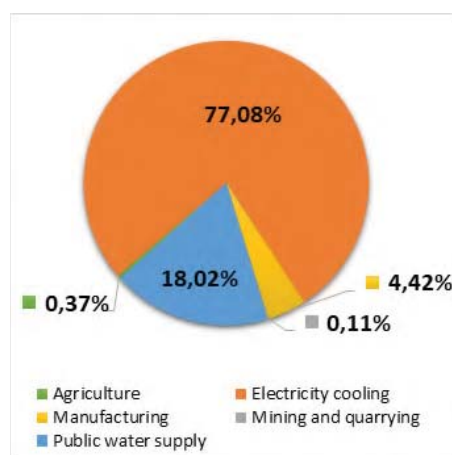
¹⁰⁰ European Environment Agency, [2021](#).

¹⁰¹ European Environment Agency, [December 2019](#).

Under the IED framework, it should be stressed that over the last decade, Slovenia showed a significant increase (61.1%) in releases of heavy metals like Cd, Hg, Ni, Pb and a decrease in total organic carbon (5.8%) to water¹⁰².

The total water abstracted annually (corresponding to 2019 baseline) from surface and groundwater sources in Slovenia is 943.22 hm³ (EEA, 2022). The percentage for water abstraction per sector is: (i) 0.37% for agriculture, (ii) 18.02% for public water supply, (iii) 77.08% for electricity cooling, (iv) 4.42% for manufacturing, and (v) 0.11% for mining and quarrying (Figure 29). Slovenia uses a register to monitor water abstractions. Small abstractions do not require permits in Slovenia, but all are registered.

Figure 29: Water abstraction per sector in Slovenia¹⁰³



In Slovenia, the water-exploitation index plus (WEI+)¹⁰⁴ was 0.7% in 2017, which is less than the 20% that is generally considered as an indication of water scarcity¹⁰⁵. Slovenia is ranked 20th (with 1st indicating a country that has a high WEI+ and therefore a country with water-scarcity problems) in the EU on the WEI+.

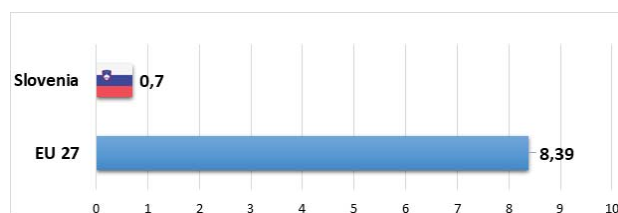
¹⁰² European Environment Agency, June 2021.

¹⁰³ European Environment Agency, [Water abstraction by source and economic sector in Europe](#), 2022.

¹⁰⁴ The water-exploitation index plus (WEI+) is a measure of total fresh water use as a percentage of the renewable fresh water resources (groundwater and surface water) at a given time and place. It quantifies how much water is abstracted and how much water is returned after use to the environment.

¹⁰⁵ By May 2022, the EEA will develop a seasonal WEI+ at river-basin and NUTS2 level, which will provide a more complete picture of water stress and water scarcity for each Member State.

Figure 30. Water exploitation index plus (WEI+) inside EU, 2017¹⁰⁶



It is worth mentioning that as a positive step, in its recovery and resilience plan¹⁰⁷, Slovenia invested over EUR 50 million to support improved drinking water supply and water-saving projects.

Furthermore, in what can be considered an example of good practice, Slovenia has set up satellite observation of watercourses.

Floods Directive

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

Within the 6th Implementation Report, the assessment report¹⁰⁸ showed that the approach that Slovenia took for designating new areas of potential significant flood risk (APSEFRs) and for making changes to existing APSEFRs (from the first cycle) is straightforward and included a public consultation. The final decision is made by specialist and local staff of the water management authorities. In addition, the following was noted as good practice: in areas where it is estimated that climate change will affect the projected extent of high waters in a way that will result in them being reduced in the future, Slovenia has not reduced the hazard potential and therefore has taken a precautionary approach. Slovenia should consider including long-term trends, other than climate change, in their flood-risk assessments.

Slovenia has not yet adopted or reported on the second round of flood-risk management plans under the Floods Directive. The European Commission will assess progress made since the adoption of the first flood-risk management plans and publish a report on this, as it did in 2019.

¹⁰⁶ European Environment Agency, [Water exploitation Index Plus](#), 2022.

¹⁰⁷ European Commission, [Slovenia's recovery and resilience plan](#).

¹⁰⁸ European Commission, Directorate-General for Environment, Assessment of Second Cycle Preliminary Flood Risk Assessments and Identification of Areas of Potential Significant Flood Risk under the Floods Directive : Member State : [Slovenia](#), 2022

Drinking Water Directive

On the Drinking Water Directive¹⁰⁹, no new assessment of the quality of drinking water has been available since the 2019 EIR. The quality of drinking water in Slovenia has not been indicated as an area of concern.

The recast Directive¹¹⁰ entered into force on 12 January 2021, and Member States have until 12 January 2023 to transpose it into their national legal system. Slovenia will have to comply with these revised quality standards.

Bathing Water Directive

On the Bathing Water Directive, Figure 32 shows that in 2020, out of the 361 Slovenian bathing waters, 85.1% were of excellent quality¹¹¹. Detailed information on Slovenian bathing waters is available from a national portal¹¹² and via an interactive map viewer of the European Environment Agency.

Figure 31: Bathing water quality in Europe in the 2020 season¹¹³

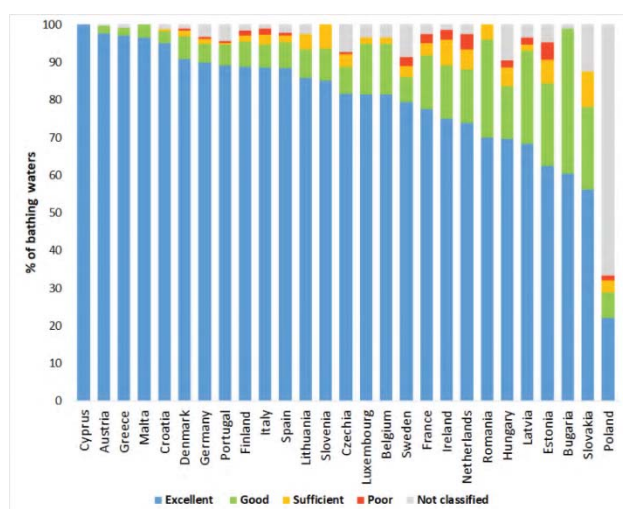
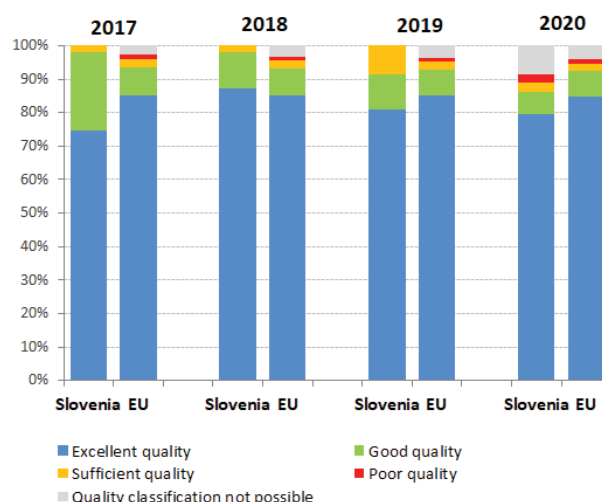


Figure 32: Slovenia, bathing water quality 2017-2020¹¹⁴



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

Nitrates Directive

According to the last report on the implementation of the Nitrates Directive for 2016-2019,¹¹⁵ there is a mixed picture on groundwater quality in Slovenia and trends in this respect.

On one hand, the percentage of monitoring stations above 50 mg of nitrate per litre (l) decreased from 11.6% (2012-2015) to 9%, which is an improvement. However, the percentage of monitoring stations in the range of 40-50 mg/l increased from 4.5% (2012-2015) to 6.2% (2016-2019), which is a deterioration. However, after considering these two ranges together (i.e. the range above 40 mg of nitrate per l), there was a slight improvement in 2016-2019, with 15.2% of monitoring stations exceeding 40 mg/l (2016-2019) versus 16.1% of monitoring stations (2012-2015). There is also an improvement in the percentage of monitoring stations in the range below 25 mg/l, from 72% (2012-2015) to 73.9% (2016-2019).

The situation concerning nitrate concentrations in surface water deteriorated with eutrophication increasing from 4.2% (2012-2015) to 19.4% (2016-2019).

Slovenia has an average livestock density and a surplus of nitrogen and phosphorus slightly below the EU average. There is a well-developed network of monitoring stations. There are numerous hotspots, with a nitrate concentration above 50 mg/l. and numerous surface

¹⁰⁹ OJ L 330, 5.12.1998, p. 32–54.

¹¹⁰ OJ L 435, 23.12.2020, p. 1–62.

¹¹¹ EEA, [State of bathing water, Country Report –Slovenia](#), 2021.

¹¹² ARSO, [An interactive map of all Slovenia's bathing water sites](#).

¹¹³ European Environment Agency, [Bathing Water Quality in 2020](#), 2022.

¹¹⁴ European Environment Agency, [European Bathing Water Quality in 2017, 2018, 2019, 2020](#).

¹¹⁵ [COM/2021/1000 final](#) and [SWD/2021/1001 final](#), [Slovenia Fiche - PART 33/38](#).

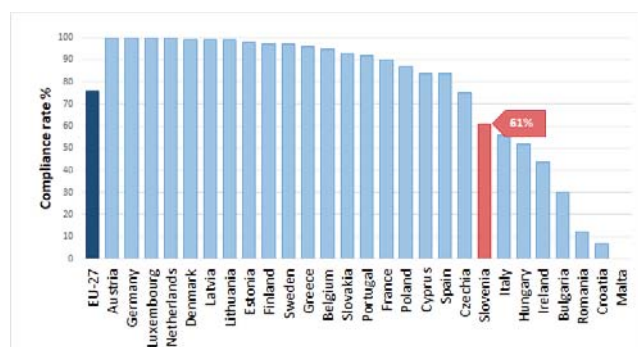
waters are eutrophic. A revised action programme was published in 2017¹¹⁶.

The Commission recommends that Slovenia continues to follow up on these hotspots.

Urban Waste Water Treatment Directive

Slovenia has, over the years, encountered difficulties in meeting its obligations under the Urban Waste Water Treatment Directive (UWWTD). Overall, in Slovenia, the compliance rate is 61%, which is lower than the EU average in 2018. 0.7% of urban wastewater in Slovenia is not collected and/or does not meet the requirements for biological treatment¹¹⁷.

Figure 33: The proportion of urban waste water that meets all requirements of the UWWTD (collection, biological treatment, biological treatment with nitrogen and/or phosphorus removal) in compliant urban areas of the UWWTD ('compliance rate'), 2018¹¹⁸



In recent years, there have been improvements in compliance with the UWWTD, for which the use of EU funding has been fundamental. But despite these improvements, the incomplete implementation of the UWWTD has led to several rulings of the Court of Justice of the European Union against Slovenia. In 2020, the Commission has decided to refer Slovenia to the Court of Justice because it had not applied the UWWTD properly.

2022 priority actions

- Assess new physical modifications of water bodies in line with Article 4(7) of the WFD. In these assessments, Slovenia has to consider alternative options and adequate mitigation measures.
- Continue to follow up on the nitrates groundwater hotspots and address the increasing eutrophication of surface waters.

- Make efforts to improve the coordinated implementation of water, marine and nature policies.
- Implement the UWWTD completely for all agglomerations under the Directive, by building up the necessary infrastructure.

Chemicals

The EU seeks to ensure that chemicals are produced and used in way that minimises any significant adverse effects on human health and the environment. In October 2020, the Commission published its chemicals strategy for sustainability – 'Towards a Toxic-Free Environment'¹¹⁹, which led to some systemic changes in EU chemicals legislation. The strategy is part of the EU's zero pollution ambition – a key commitment of the European Green Deal.

The EU's chemicals legislation¹²⁰ provides baseline protection for human health and the environment. It also ensures stability and predictability for businesses operating within the internal market.

Since 2007, the Commission has gathered information on the enforcement of the Regulation on the Registration, Evaluation, Authorisation and Restriction of Chemicals ('the REACH' Regulation') and the Regulation on Classification, Labelling and Packaging ('CLP Regulation'). In December 2020, the Commission assessed the Member States' reports on the implementation and enforcement of these Regulations¹²¹, in line with Article 117(1) of the REACH Regulation and Article 46(2) of the CLP Regulation. According to the latest available data, national enforcement structures have not changed much in recent years. However, it is apparent from this report that there are still many disparities in the implementation of the REACH and CLP Regulations, and notably in the area of law enforcement. Recorded compliance levels in Member States seem to be quite stable over time, but with a slight worsening trend, which is likely due to: (i) enforcement authorities being more effective in detecting non-compliant products/companies; and (ii) more non-compliant products being put on the EU market. In August 2021, the Commission published a measurable assessment of the enforcement¹²² of the two main EU Regulations on chemicals (the REACH Regulation and the CLP Regulation)

¹¹⁶ [COM\(2021/1000 final](#) and [SWD\(2021/1001 final](#), [Slovenia Fiche - PART 33/38](#).

¹¹⁷ WISE, [Country profiles on urban waste water treatment, Slovenia fiche](#).

¹¹⁸ European Commission, [WISE Freshwater](#), 2021.

¹¹⁹ [COM\(2020\) 667 final](#)

¹²⁰ REACH: OJ L 396, 30.12.2006, p.1. - CLP: OJ L 252, 31.12.2006, p.1

¹²¹ European Commission, Final Report, on the operation of REACH and CLP, [Final report REACH-CLP MS reporting 2020.pdf \(europa.eu\)](#)

¹²² [European Commission, REACH and CLP enforcement: EU level enforcement indicators.](#)

using a set of indicators on different aspects of enforcement.

Responsibility for checking compliance with REACH in Slovenia lies with the following authorities¹²³:

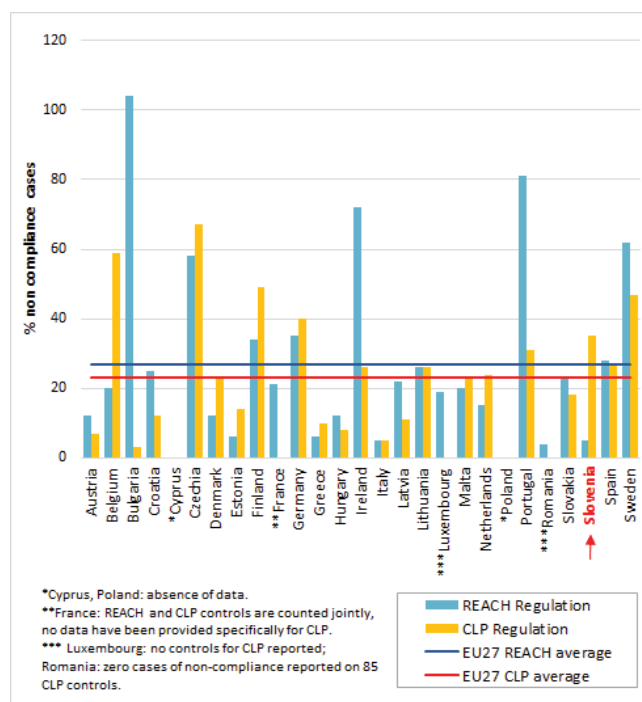
- Chemicals Inspection (part of the Chemicals Office of the Republic of Slovenia);
- the Health Inspectorate;
- the Labour Inspectorate.

Slovenia has developed and fully implemented both its REACH and CLP enforcement strategies¹²⁴. The strategies include the annual planning of enforcement activities. They are also subject to an annual evaluation and review.

As a rule, all infringements of REACH are classed as serious or very serious environmental administrative offences. If the infringement is sufficiently serious, the competent authority may decide to impose further penalties in addition to a fine. That authority may also, where necessary, order the provisional seizure of assets and documents.

In Slovenia only four full-time equivalent workers (FTEs) are allocated to REACH and CLP enforcement¹²⁵. However, more than 3 500 REACH and CLP inspections were carried out in the reporting period (2019). Most of the inspections were reactive/non-routine (i.e. investigations in response to complaints, accidents and referrals) compared with proactive inspections. The high percentage of non-compliance cases out of the total number of inspections should be underlined¹²⁶ (Figure 34).

Figure 34: Percentage % of non-compliance cases out of the total number of REACH and CLP inspections during 2019 per Member State and compared to the EU average¹²⁷



2022 priority action

- Slovenia should upgrade its administrative capacities in implementation and enforcement towards a policy of zero tolerance to instances of non-compliance.

¹²³ Final report REACH-CLP MS reporting 2020.pdf (europa.eu), p. 71.

¹²⁴ Final report REACH-CLP MS reporting 2020.pdf (europa.eu), p. 76.

¹²⁵ European Commission, Final Report, on the operation of REACH and CLP, Final report REACH-CLP MS reporting 2020.pdf (europa.eu), p. 75.

¹²⁶ Final report REACH-CLP MS reporting 2020.pdf (europa.eu), p. 87-88.

¹²⁷ European Commission, Final Report, on the operation of REACH and CLP, pp.87-88, 2022.

4. Climate Action

In line with the Paris Agreement and as part of the European Green Deal, the European Climate Law sets the EU target of reaching climate neutrality by 2050 and reducing its greenhouse gas emissions by 55% by 2030 compared to 1990. The law also limits the contribution that carbon removals can make towards emission reductions in 2030 to ensure that there is sufficient mitigation effort. The EU and its Member States submitted updated Nationally Determined Contribution (NDC) to the UNFCCC in December 2020. The EU is working across all sectors and policies to cut greenhouse gas emissions and make the transition to climate neutral and sustainable economy, as well as addressing unavoidable consequences of climate change. Climate legislation has been adopted to incentivize emissions reductions from power generation, industry, transport, the maritime sector and fluorinated gases (F-gases) used in products. In road transport, current EU legislation requires the greenhouse gas intensity of vehicle fuels to be cut by 6% by 2020 compared to 2010¹²⁸ and sets GHG emission standards for different vehicle categories to be respected¹²⁹. Thanks to the current F-gas Regulation, the EU's F-gas emissions will be cut by two-thirds by 2030 compared with 2014 levels. From 2021 emissions and removals of greenhouse gases from LULUCF have been included in the EU emission reduction efforts. The EU adaptation policy is an integral part of the European Green Deal.

Starting in 2021, Member States are required to report on their national adaptation policies.¹³⁰ The European Climate Law recognises adaptation as a key component of the long-term global response to climate change. It requires Member States and the Union to enhance their adaptation action by introducing a requirement for the implementation of national strategies and regular progress assessments as part of the overall EU governance on climate action. In February 2021, the updated EU adaptation strategy sets out how the EU can adapt to the unavoidable impacts of climate change and become climate resilient by 2050.

Key national climate policies and strategies

Slovenia has an integrated *national energy and climate plan* (NECP) for 2021-2030, which is consistent with the

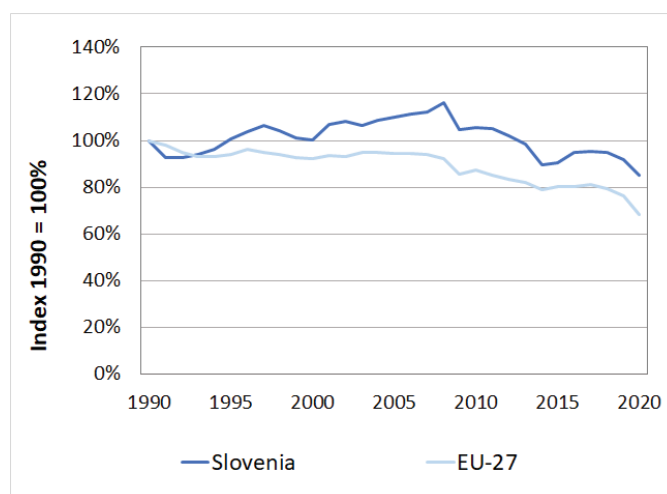
national *long-term strategy*¹³¹. Slovenia is required to reach climate neutrality in line with the EU general target. The national objective is to reduce GHG emissions by 36% below 2005 levels.

In its *national recovery and resilience plan*, Slovenia allocates 42% of the funds to climate objectives and outlines crucial reforms and investments to further the transition to a more sustainable, low-carbon, and climate-resilient economy. Investments are allocated to clean power, building renovation and sustainable transport (more details in Chapter 5).

Adaptation priorities were laid down in the *strategic framework for climate change adaptation*, adopted by the government in December 2016. It provides a long-term vision, purpose and strategic guidelines for stepping up adaptation-related activities.

Between 1990 and 2020, economy-wide greenhouse-gas emissions decreased by 15%, less than the EU average (24%).

Figure 35: Total greenhouse gas emissions (incl. international aviation) in Slovenia, 1990-2020



Effort sharing target

For emissions not covered by the EU's emissions trading scheme (ETS), Member States have binding national targets under the Effort Sharing legislation¹³². Under EU legislation, Slovenia has a target to limit the increase of GHG emissions in the non-ETS sectors (buildings, road and domestic maritime transport, agriculture, waste and small industries) to +4% by 2020 and reduce emissions by

¹²⁸ The Fuel Quality Directive (Directive 98/70/EC) sets strict quality requirements for fuels used in road transport in the EU to protect human health and the environment, and to make road travel across the EU safer.

¹²⁹ Directive 98/70/EC

¹³⁰ Article 29 of Regulation (EU) 2018/1999.

¹³¹ [EU countries' long-term strategies to meet their Paris Agreement commitments and the energy union objectives.](#)

¹³² Regulation (EU) 2018/842

15% by 2030, compared to 2005 levels. Slovenia is estimated to largely overachieve its current national 2020 and 2030 targets.

Figure 36: Emissions and targets under the Effort Sharing Decision/ Effort Sharing Regulation in Slovenia, 2020 and 2030 as percentage change from 2005

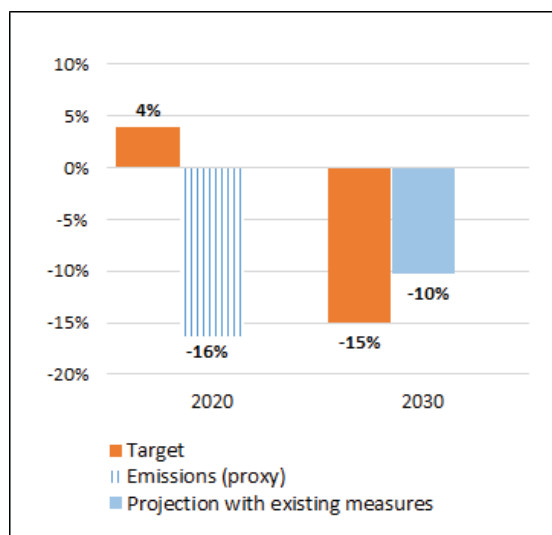
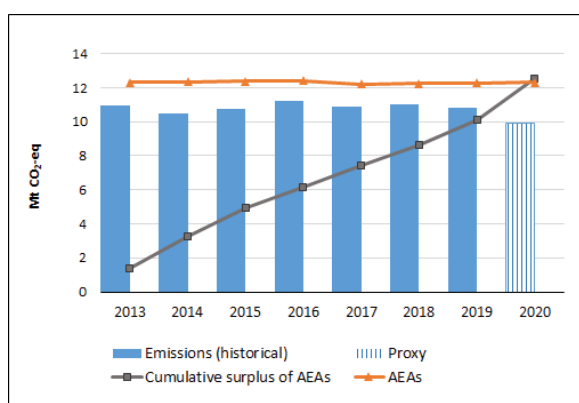


Figure 37: Emissions, annual emission allocations (AEAs) and accumulated surplus/ deficit of AEAs under the Effort Sharing Decision in Slovenia, 2013-2020



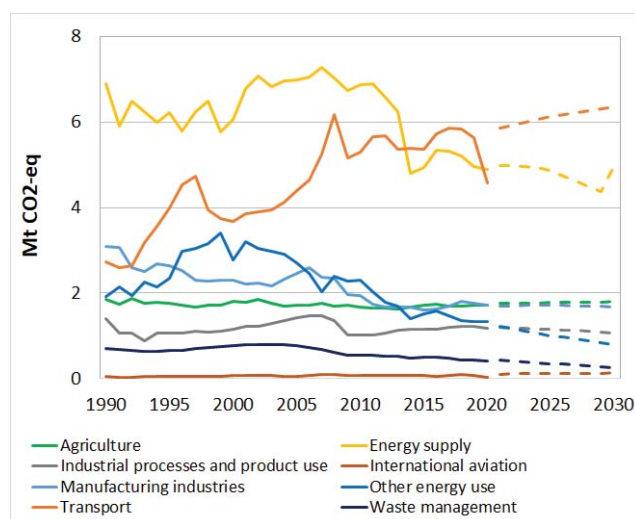
Key sectoral developments

On road transport, the GHG intensity of vehicle fuels in Slovenia decreased by 2.9% from 2010 to 2019. The country needs to act swiftly to meet the current reduction target of a 6% decrease in GHG intensity by 2020. There are several types of action that Member States can take in this regard, for example: (i) further expanding the use of electricity in road transport; (ii) supporting the use of biofuels, and advanced biofuels in particular; (iii) incentivising the development and deployment of renewable fuels of non-biological origin; and (iv) reducing upstream emissions before refining processes.

Road transport in 2019 in Slovenia represented 32% of the total GHG emissions. Emissions in road transport have increased by 29% compared to 2005.

Emissions from agriculture have remained at the same level as in 2005.

Figure 38: Greenhouse gas emissions by sector in Slovenia¹³³ – historical emissions 1990-2020, projections 2021-2030¹³⁴



Emissions from buildings have been on a decreasing trend. The national energy and climate plan includes comprehensive information on buildings, including a target to reduce final energy consumption by 20% by 2030 compared to 2005.

In the land-use, land-use-change and forestry (LULUCF) sector, Slovenia projects net removals of CO₂ equivalent from land use and forestry by 2030. Reported quantities under the Kyoto Protocol for the LULUCF sector in Slovenia show net emissions of, on average, 0.8 Mt CO₂-eq in 2013 to 2019. Therefore, Slovenia represents -0.2% of the EU-27's annual average sink of 344.9 Mt CO₂-eq. Using a separate measurement scheme, carbon accounting for the same period shows net 'debits' 135 of,

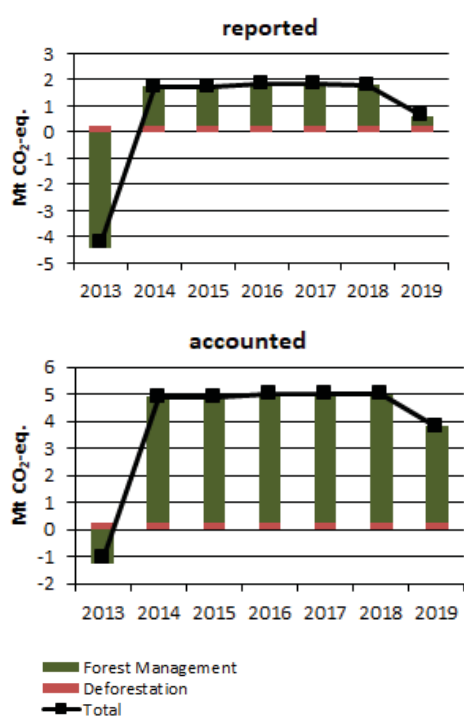
¹³³ The sectors in the figure correspond to the following IPCC sectors: Energy supply: 1A1, 1B and 1C. Energy use in manufacturing industries: 1A2. Industrial processes and product use: 2. Transport: 1A3. Other energy use: 1A4, 1A5 and 6. Agriculture: 3. Waste: 5. International aviation: 1.D.1.a.

¹³⁴ European Environmental Agency, [Total GHG trends and projections](#).

¹³⁵ the no-debit commitment (i.e. emissions do not exceed removals) under the LULUCF. Regulation (EU) 2018/841 of the European Parliament and of the Council of 30 May 2018 on the inclusion of greenhouse gas emissions and removals from land use, land use change and forestry in the 2030 climate and energy framework, and

on average, 3.9 Mt CO₂-eq, which represents -3.4% of the EU-27 accounted sink of 115.0 Mt CO₂-eq. Reported net removals for 2013 decrease markedly to net emissions in 2014 that remain on that level until 2018 and slightly decrease in 2019. Accounted quantities show the same pattern with net 'credits' (i.e. the equivalent of carbon removals) for 2013 and net debits thereafter. Slovenia is one of three EU Member States with average net emissions and one of six EU Member States that show net emissions for at least one year. In addition, Slovenia is one of six EU Member States with average net debits and one of 14 EU Member States that show net debits for at least one year in this preliminary accounting exercise.

Figure 39: Reported and accounted emissions and removals from LULUCF in Slovenia¹³⁶



2022 priority actions

- Support energy efficiency, especially through the renovation of buildings.
- Support sustainable transport.
- Increase its uptake of renewable energy.
- Ensure the sustainability of biomass.

Use of revenues from the auctioning of EU ETS allowances

The total revenues from the auctioning of emission allowances in Slovenia under the EU ETS in 2011-2021 were nearly EUR 412 million. In Slovenia, 100% of the auctioning revenues are used for climate and energy projects.

amending Regulation (EU) No 525/2013 and Decision No 529/2013/EU.

¹³⁶ The differences between reported and accounted emissions from LULUCF under the Kyoto Protocol are described in the 'explanatory note on LULUCF – accounted and reported quantities under the Kyoto Protocol'.

Part II: Enabling framework: Implementation tools

5. Financing

Environmental investment needs in the European Union

Financing environmental measures is essential for their success. Although most financing comes from national sources, various EU funds contribute significantly, helping to close the financing gap between countries.

Post-2020, environmental measures will also be supported by the EU's COVID-19 Recovery Fund (via the RRF) and the 'do no significant harm' (DNSH) principle which runs across the EU budget. The renewed commitments made at COP26 (Glasgow, Oct-Nov 2021) and the Biodiversity Convention (April-May 2022)¹³⁷ will also be reflected in the EU budget.

Overall environmental investment gaps (EU-27)

The EU's investment needs for the green transition cover a range of interlinked areas. The additional investment needs over the baselines (i.e. the gap between what is needed and what is forecast to be invested if no additional action is taken) for climate, energy and transport were estimated in 2021 at EUR 390 billion a year (EU-27)¹³⁸, with a further EUR 130 billion a year to deliver the EU's core environmental objectives¹³⁹. The costs of climate-change adaptation can also be significant, and are estimated to reach a total of EUR 35-62 billion (narrower scope) or EUR 158-518 billion (wider scope) per year¹⁴⁰. Those investment needs reflect the implementation objectives to 2020 and to 2030 (except for climate-change adaptation, the costs of which are expected to last over a longer time horizon).

A preliminary update of the EU's core environmental investment gap is provided in Table 1¹⁴¹. Almost 40% of the environmental-

investment needs relate to dealing with pollution, which accounts for nearly two thirds of the total gap if combined with water management. The investment gap in the circular economy and waste is estimated to be between EUR 13-28 billion a year, depending on the levels of circularity implemented. The annual biodiversity financing gap is estimated at around EUR 20 billion.

Table 1: Estimated breakdown of the EU's environmental-investment needs, by environmental objective, 2021-2030 (per year)¹⁴²

Environmental objective	Estimated investment gap (EU27, p.a.)	
	EUR billion	%
Pollution prevention & control	42.8	39%
Water management & industries	26.6	24%
Circular economy & waste	13.0	12%
Biodiversity & ecosystems ¹⁴³	21.5	20%
R & D & I and other	6.2	6%
Total	110.1	100%

Environmental-investment needs in Slovenia

There is a clear shift of investment priorities in Slovenia to support climate, energy and transport policies as can be seen in the national recovery and resilience plan. Over EUR 750 million will be spent under the Recovery and Resilience Fund on

¹³⁷ [The Convention on Biological Diversity \(cbd.int\); Post-2020 Global Biodiversity Framework | IUCN.](https://www.cbd.int/post2020/global-biodiversity-framework)

¹³⁸ [SWD\(2021\)621](#), accompanying proposal COM(2021)557 to amend the REDII Directive (EU) 2018/2001.

¹³⁹ [SWD\(2020\) 98 final/2.](#)

¹⁴⁰ [SWD\(2018\)292.](#)

¹⁴¹ With decreases due to Brexit and some reconciliation among the objectives. Source: DG ENV 'Study supporting EU green investment needs analysis' (ongoing, 2021-2023) and DG ENV internal analysis 'Environmental investment needs and financing in the EU's green transition' July 2020.

¹⁴² European Commission, DG Environment, 'Study supporting EU green investment needs analysis' (ongoing, 2021-2023) and DG Environment internal analysis 'Environmental Investment needs and financing in the EU's green transition', July 2020.

¹⁴³ To meet the needs of the 2030 Biodiversity Strategy (Natura 2000, green infrastructure), at least EUR 20 billion a year should be unlocked for nature (COM/2020/380 final) while to fully cover the strategy (including restoration) EUR 30-35 billion may be needed, indicating a gap of EUR 10-20 billion a year compared to current baseline expenditure.

investments in a wide range of economic sectors such as energy efficiency and energy renovation of housing, clean transport, water management, flood protection and the circular economy.

Pollution prevention & control

The EU's first Clean-Air Outlook¹⁴⁴ under the clean-air programme estimated that the total air-pollution-control costs for Slovenia to reach the NECD's emission-reduction requirements¹⁴⁵ by 2030 amount to EUR 384 million per year. This includes EUR 239 million for capital investment (assuming the 2030 climate and energy targets are achieved).

The second EU Clean-Air Outlook¹⁴⁶ suggests that the EU would largely achieve the reductions of air pollutant emissions that correspond to the obligations under the NEC Directive for 2030 if: (i) all relevant legislation adopted up to 2018 is implemented (including all air-pollution legislation and the 2030 climate and energy targets set in 2018); and (ii) Member States also implemented the measures announced in their national air-pollution-control programmes. The only exception is for ammonia (NH₃) for 15 Member States, excluding Slovenia.

Water management

According to the OECD study 'Financing Water Supply Sanitation and Flood Protection (2020)'¹⁴⁷, Slovenia has relatively abundant water resources and low abstraction rates. It performs well in the provision of drinking water but significant investment is needed in sanitation infrastructure. Ageing networks and connection challenges need to be addressed. Slovenia also faces significant future flood risks. EU funding has provided a significant share of public funding over the past

decade¹⁴⁸. It is also estimated that Slovenia will need to invest an additional cumulative EUR 894 million by 2030 for drinking water and sanitation. This corresponds to around EUR 89 million in investment needs (capital expenditure) per year, with almost 90% of it related to wastewater¹⁴⁹. Moreover, the recent 6th Water Framework Directive and Floods Directive Implementation Report¹⁵⁰ and the financial - economic study¹⁵¹ accompanying it, are also a relevant source of information in this domain.

Waste & the circular economy

According to a Commission study¹⁵² if Slovenia is to meet the recycling targets for municipal waste and packaging waste, it still needs to invest an additional EUR 109 million (around EUR 16 million per year) in 2021-2027 in: collection, biowaste treatment, recycling reprocessors, waste-sorting facilities and waste-registry digitalisation. This does not include the investment necessary for other key waste streams (plastics, textile, furniture) or for enabling a higher uptake of circularity and waste prevention across the economy.

Biodiversity & ecosystems

The recently submitted prioritised action framework (PAF) for Slovenia shows that costs for nature protection (including Natura 2000) in 2021-2027 are about EUR 600 million, or around EUR 57 to EUR 86 million per year. Within total annual costs, the annual one-off costs are EUR 29 million. The main conservation priorities relate to the management of the Natura 2000 network and restoration and/or maintenance of grassland, forest and freshwater habitats¹⁵³. This excludes additional costs to implement the biodiversity strategy to 2030, including on increased protection and restoration.

¹⁴⁴ International Institute for Applied Systems Analysis (IIASA), [Progress towards the achievement of the EU's air quality and emissions objectives](#), 2018.

¹⁴⁵ Covering the reductions of and the emission ceilings for 5 atmospheric pollutants, SO_x, NO_x, PM_{2.5}, NH₃ and VOC by 2030, compared to 2005. Source: Progress towards the achievement of the EU's air quality and emissions objectives, IIASA 2018. (page 29). Requirements are based on [Directive \(EU\) 2016/2284](#).

¹⁴⁶ [COM\(2021\) 3 final](#). International Institute for Applied Systems Analysis (IIASA), [Support to the development of the Second Clean Air Outlook](#), 2020 and [Annex](#).

¹⁴⁷ OECD, [Financing Water Supply, Sanitation and Flood Protection: Challenges and Options](#), 2020

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

¹⁴⁹ OECD, [Slovenia - Country fact sheet- Financing Water Supply, Sanitation and Flood Protection](#).

¹⁵⁰ WFD and FD Implementation Reports – DG Environment – European Commission.

¹⁵¹ European Commission, Directorate-General for Environment, Economic data related to the implementation of the WFD and the FD and the financing of measures, Final report. Publications Office, 2021.

¹⁵² European Commission, [Study on investment needs in the waste sector and on the financing of municipal waste management in Member States](#), 2019.

¹⁵³ The N2K Group, [Strengthening investments in Natura 2000 and improving synergies with EU funding instruments report to the European Commission](#), 2021.

EU environmental funding 2014-2020

The multiannual financial framework (MFF) for 2014-2020 allocated almost EUR 960 billion (in commitments, 2011 prices)¹⁵⁴ for the EU to spend over this period. The commitment in this 2014-2020 MFF to the green transition included a 20% spending target for climate. It also included funding opportunities for the environment, in particular, under the European Structural and Investment (ESI) Funds¹⁵⁵. The 2014-2020 MFF budget was subsequently topped up with over EUR 50 billion (in current prices) from the REACT-EU programme for cohesion-policy action against COVID-19¹⁵⁶.

Slovenia received EUR 4.5 billion from the ESI Funds over 2014-2020 to invest in job creation and a sustainable and healthy European economy and environment. The planned direct environmental investment amounted to EUR 514.4 million of this 4.5 billion with a further EUR 258.8 million identified as indirect environmental investment, totalling EUR 773.2 million. Figure 40 shows an overview of (planned) individual ESI Funds earmarked for Slovenia (EU amounts, without national amounts).

Figure 40: ESI Funds allocated to Slovenia, including environmental investments 2014-2020¹⁵⁷

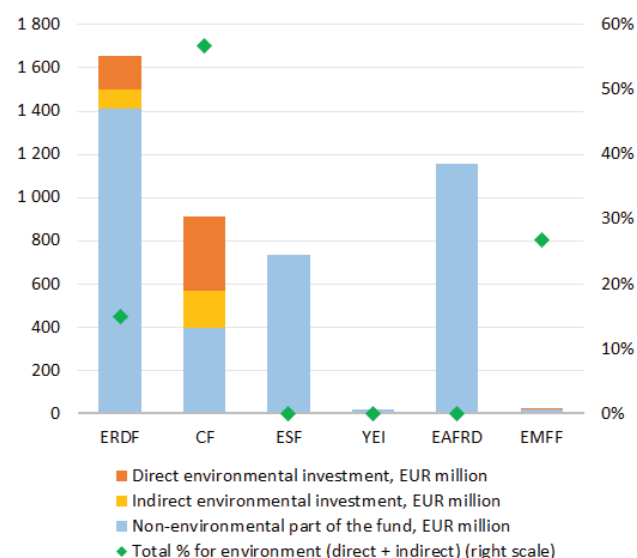


Table 2: Direct and indirect Environmental investments under the ESI Funds in Slovenia, 2014-2020¹⁵⁸

Instrument	Allocations for the environment (EUR million)
Under Cohesion policy (ERDF + CF)	767.4
<u>Direct environmental investments</u>	<u>508.5</u>
water	303.3
air quality	38.9
biodiversity and nature	41.0
land rehabilitation	32.4
climate and risk management	92.8

¹⁵⁷ European Commission, DG Environment - Data analysis, DG Environment analysis based on ESI Funds Open Data Portal (cohesiondata.ec.europa.eu), [Integration of environmental concerns in Cohesion Policy Funds \(COWI, 2017\)](#), [Regulation \(EU\) No 1303/2013](#), [Regulation \(EU\) 2021/1060](#) and [Implementing Regulation \(EU\) No 215/2014](#). Cut-off date for data: December 2021. Environmental investments here are captured via the combined use of intervention fields and coefficients under the Regulation (EU) No 1303/2013 and Regulation (EU) 2021/1060 allowing for a more precise identification and valuation of relevant environmental investments. N.B. Indirect environmental investments are valued using the Annex I environmental coefficients of the Regulation (EU) 2021/1060 (as opposed to full value).

¹⁵⁸ European Commission, DG Environment - Data analysis. The values of environmental investments identified here in the specific environmental areas may differ from the tracking values at cohesiondata.ec.europa.eu, e.g. for [clean air](#) or [biodiversity](#) due to two factors: the set of environmental coefficients used and the range of funds assessed. DG Environment's analysis here covered the full range of ESI Funds. Please see also previous footnote.

¹⁵⁴ [Council Regulation \(EU, Euratom\) No 1311/2013](#).

¹⁵⁵ The European Structural and Investment (ESI) Funds include the European Regional Development Fund (ERDF), the Cohesion Fund (CF), the European Social Fund (ESF) with the Youth Employment Initiative (YEI), the European Agricultural Fund for Rural Development (EAFRD) and the European Maritime and Fisheries Fund (EMFF).

¹⁵⁶ [Regulation \(EU\) 2020/2221](#).

Indirect environmental investments	258.8
renewable energy	16.5
energy efficiency	86.8
other energy ¹⁵⁹	13.6
sustainable transport	115.3
business development, R&I	26.6
Under EAFRD/rural development	0
Under EMFF	5.8
Direct environmental investments	5.8
environment protection & resource efficiency	5.8
Under ESI Funds total	773.2
Direct environmental investments	514.4
Indirect environmental investments	258.8

Funding for the environment from the ESI Funds has also been supplemented by other EU funding programmes available to all Member States, such as the LIFE programme or Horizon 2020, which added up to an estimated total of EUR 832 million of EU environmental financing for Slovenia in 2014-2020.

The LIFE programme¹⁶⁰ is entirely dedicated to environmental and climate objectives. It finances demonstration and best-practice actions for green solutions to be deployed. In the 2014-2020 period, Slovenia received EU support for 11 LIFE projects worth EUR 36.4 million from the LIFE programme for nature and environmental projects (out of 1 028 EU-27 LIFE projects financed with a total EU contribution of EUR 1.74 billion)¹⁶¹.

In 2014-2020, Horizon 2020 allocated about EUR 22.3 million for Slovenia for the environment, which is about 5.9% of Slovenia's total allocation under Horizon 2020¹⁶². These Horizon 2020 funds are directed at Slovenian environmental projects focused in particular on the circular economy, research and innovation biodiversity, climate action and biodiversity. From the European Fund for Strategic Investments (EFSI), Slovenia did not receive any environmental funding out of its total allocation (EUR 153 million)¹⁶³. Furthermore, from the EIB, Slovenia did not receive any environmental

support out of the total EIB loans for Slovenia (EUR 1.6 billion).¹⁶⁴ The country ranks number 23 in the amount of total EIB lending it received in this period.

In 2020, the EIB provided EUR 24.2 billion in funding across Europe to fight climate change, 37% of its total financing. It also provided EUR 1.8 billion (3% of its financing) for broader environmental lending^{165 166}.

EU environmental funding 2021-2027

The 2020 European Green Deal investment plan calls for EUR 1 trillion in green investments (public and private) to be made across the EU by 2030. The 2021-2027 MFF and the NextGenerationEU spending programme will mobilise EUR 2.018 trillion (in current prices) to support the recovery from COVID-19 and the EU's long-term priorities, including environmental protection¹⁶⁷. Following the EU Green Deal's¹⁶⁸ pledge to 'do no harm' and the Interinstitutional Agreement on the 2021-2027 MFF¹⁶⁹, 30% of the EU budget in 2021-2027 will support climate efforts, while biodiversity will receive 7.5% of the EU budget as of 2024 and 10% as of 2026. Increased programming of financial resources is required to reach these levels of spending on biodiversity, specifically under the 2021-2027 cohesion policy and the 2023-2027 CAP.

Sustainable finance significantly increases transparency on environmental sustainability (a goal promoted by the EU Taxonomy)¹⁷⁰. It also strengthens non-financial reporting requirements and facilitates the issuance of green bonds (by developing the EU green bond standard¹⁷¹). Reinforced by the renewed sustainable finance strategy (2020)¹⁷², sustainable finance will increase investment flows to climate and the environment.

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

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

¹⁶⁶ [EIB 2020 Activity Report](#).

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

¹⁶⁸ [COM/2019/640 final](#)

¹⁶⁹ [Interinstitutional Agreement, OJ L 433I](#)

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

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

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

¹⁵⁹ Intelligent energy distribution systems (smart grids) and high efficiency co-generation and district heating, based on intervention field 53 and 54 respectively (with 40% environmental coefficients) of Regulation (EU) 2021/1060, Annex I.

¹⁶⁰ [European Commission, LIFE Programme](#).

¹⁶¹ Source: [CINEA](#).

¹⁶² Source: EASME, <https://sc5.easme-web.eu/>, accessed: 15-12-2021.

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

The new strategy on adaptation to climate change¹⁷³ can help to close the insurance-protection gap, which currently leaves many risks from climate-related events uninsured¹⁷⁴. The EIB will align 50% of its lending for climate and environment projects by 2025¹⁷⁵ with a EUR 250 billion contribution to the Green Deal investment plan by 2027.

Table 3 provides an overview of the EU funds earmarked specifically for Slovenia for the 2021-2027 period. These funds are also supplemented by other EU funding programmes available to all Member States.

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

Instrument	Country funding allocation (million EUR)
Cohesion policy	Total: 3 058.4¹⁷⁶
ERDF	1 537.9
CF	718.2 ¹⁷⁷
ESF+	727.3
ETC (ERDF)	75 ¹⁷⁸
Just Transition Fund	258.7¹⁷⁹
EAFRD/rural development	550.9¹⁸¹
under CAP Strategic Plans 2023-2027 ¹⁸⁰	
European Maritime, Fisheries and Aquaculture Fund	23.9¹⁸²

¹⁷³ COM(2021) 82 final.

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

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

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

¹⁷⁷ The transfer to the Connecting Europe Facility (Transport) is not included.

¹⁷⁸ Interreg initial allocations per MS including ETC transnational and ETC cross-border co-operation.

¹⁷⁹ European Commission, [2021-2027 Cohesion policy EU budget allocations](#).

¹⁸⁰ European Commission, [CAP strategic plans](#).

¹⁸¹ [Regulation \(EU\) 2021/2115](#), Annex XI.

¹⁸² [Regulation \(EU\) 2021/1139](#), Annex V.

(EMFAF)	
Recovery and Resilience Facility (RRF)	1 776.9 (grants)
2021 – 2026 ¹⁸³	705.4 (loans)¹⁸⁴

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

Slovenia's national recovery and resilience plan (RRP) responds to the urgent need to foster a strong recovery and make Slovenia more resilient in the future. The reforms and investments in the plan will help Slovenia become more sustainable, resilient and better prepared for the challenges and opportunities of the green and digital transitions. To this end, the plan consists of 55 investments and 33 reforms. Slovenia requested almost EUR 1.8 billion in grants and over EUR 700 million in loans. 42.5% of the plan will support climate objectives. This exceeds the RRF's 37% climate target.

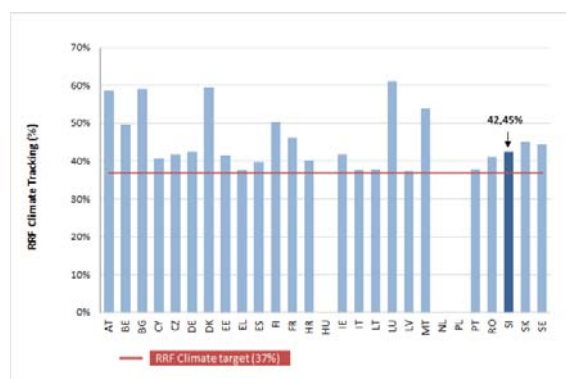
In terms of the green transition, the plan includes reforms for renewable energy, sustainable mobility and the circular economy to support the decarbonisation of the country's economy. The investments will focus on: (i) energy efficiency and seismic renovation of buildings (EUR 230 million); (ii) decarbonisation, digitalisation and safety of railway infrastructure transport (EUR 292 million); (iii) drinking water supply, water-saving and wastewater projects (EUR 54 million); and (iv) actions to facilitate the transition to a circular economy (EUR 48 million)¹⁸⁵.

¹⁸³ The actual reforms and investments under the RRF have to be implemented until 31 December 2026.

¹⁸⁴ [Council Implementing Decision, FIN 584](#).

¹⁸⁵ European Commission, [Slovenia's recovery and resilience plan](#).

Figure 41: Climate expenditure in RRP (2021-2026)¹⁸⁶



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

In addition to EU funds earmarked specifically for Slovenia in 2021-2027, there are also funding programmes that can be accessed at EU level and which are open to all Member States. These include the LIFE programme¹⁸⁷ (EUR 5.4 billion), Horizon Europe (EUR 95.5 billion)¹⁸⁸, the Connecting Europe Facility¹⁸⁹ (EUR 33.7 billion)¹⁹⁰ or the funds to be mobilised via the InvestEU programme¹⁹¹. These other sources of funding will also support the green transition, including through research and innovation activities for environmental protection (Horizon Europe)¹⁹², clean transport and energy

(the Connecting Europe Facility)¹⁹³ or sustainable infrastructure (InvestEU)¹⁹⁴.

National expenditure on environmental protection

Total expenditure on environmental protection (including all relevant current and capital expenditure)¹⁹⁵ in the EU-27 was EUR 272.6 billion in 2020, representing 2% of EU-27 GDP. This percentage has remained quite stable over time. Although the largest absolute amounts of expenditure are concentrated in a few countries, most countries spend between 1-2% of their GDP on environmental protection. Slovenia spends 2% of its GDP on environmental protection.

Of this spending, the EU-27's capital expenditure (Capex) on environmental protection (i.e. investment) amounted to EUR 56.3 billion in 2018, falling to EUR 54.5 billion in 2020, representing around 0.4% of EU-27 GDP. Most Member States invested 0.2-0.5% of their GDP in environmental protection, with Slovenia slightly above that, investing 0.6% of its GDP. During 2014-2020, this totalled to around EUR 376 billion of environmental investment in the EU-27, and to EUR 2.6 billion for Slovenia.

¹⁸⁶ European Commission. The contributions to climate objectives have been calculated using Annex VI of the RRF Regulation (EU) 2021/241.

¹⁸⁷ European Commission, [LIFE Programme](#).

¹⁸⁸ European Commission, [Multiannual financial framework 2021-2027 \(in commitments\) - Current prices](#).

¹⁸⁹ The CEF (Transport) also includes EUR 11.3 billion transferred from the Cohesion Fund. 30% of the transferred amount will be made available, on a competitive basis, to all Member States eligible for the Cohesion Fund. The remaining 70% will respect the national envelopes until 31 December 2023. Any amount under national envelopes that is unspent by that date will support all the Cohesion Fund's Member States.

¹⁹⁰ [Regulation \(EU\) 2021/1153](#).

¹⁹¹ The InvestEU Fund is set to mobilise over EUR 372 billion of investment through an EU budget guarantee of EUR 26.2 billion to back the investment of financial partners such as the European Investment Bank (EIB) Group and others.

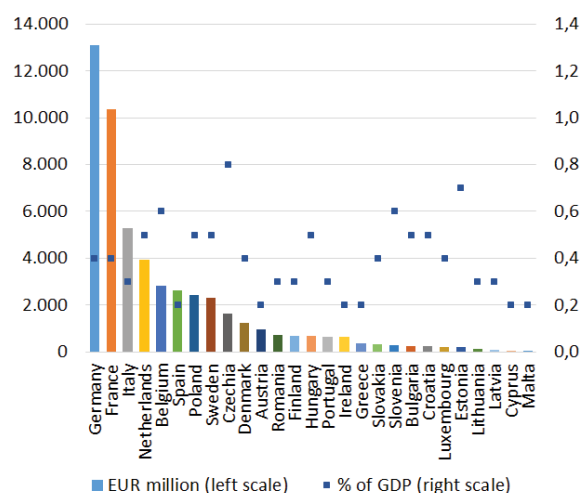
¹⁹² European Commission, [Horizon Europe](#).

¹⁹³ European Commission, [Connecting Europe Facility](#).

¹⁹⁴ European Union, [InvestEU](#).

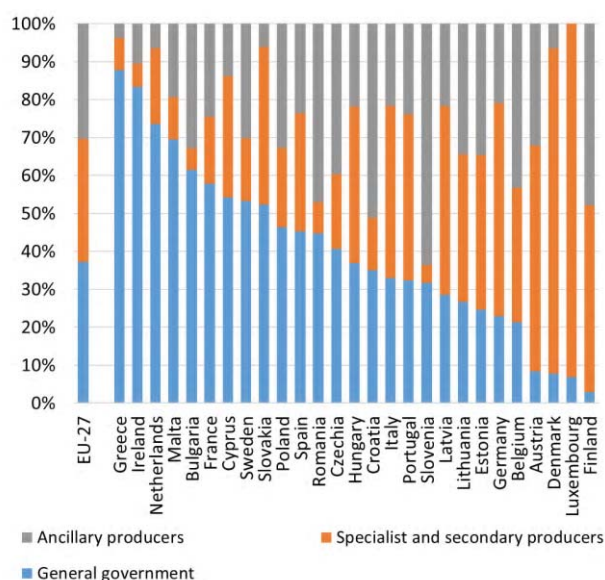
¹⁹⁵ At economy level, including final consumption, intermediate consumption and capital expenditure of households, corporations and governments related to environmental protection goods and services. It excludes EU funds, although it may include some international expenditure beyond strictly domestic expenditure. Data source: Environmental Protection Expenditure Accounts (EPEA), Eurostat. EPEA accounts are based on the [CEPA 2000 classification](#), excluding climate, energy and circular economy.

Figure 42: Direct and indirect environmental protection investments in the EU-27 (EUR million and % of GDP), 2018¹⁹⁶



By institutional sector, around 32% of Slovenia's investment in environmental protection (capital expenditure) came from the general government, just 5% came from specialist producers (of environmental-protection services, e.g. waste and water companies) and the lion's share 64% (the highest compared with other EU Member States) came from industry (businesses) not specialised in environmental-protection services. At EU level, 37% of investment in environmental protection comes from governments, 33% from specialist producers and 30% from industry (businesses) not specialised in environmental protection.

Figure 43: EU-27 Member States' environmental protection investments (Capex) by institutional sectors (Total economy = 100%, 2018)¹⁹⁷



A breakdown of investment by environmental topic is partially available, but only at the level of institutional sectors (rather than at economy level), due to different reporting patterns across the sectors¹⁹⁸. In 2018, at Slovenia's general-government level, 70% of environmental-protection investments went to wastewater, 11% to environmental R&D, 7% to waste management and 7% to biodiversity. For the country's specialist producers, waste management was the key priority with 92% of relevant investments. For industry (businesses) not specialised in environmental protection, waste management attracted 29% of environmental investments, air protection 25%, wastewater 15% and biodiversity protection 7%, to name the most significant items.

In 2020, the total annual issuance of green bonds worldwide¹⁹⁹ amounted to USD 279.8 billion. Of this, the total annual issuance of European green

¹⁹⁶ Eurostat, [Environmental Protection Expenditure Account](#), 2021.

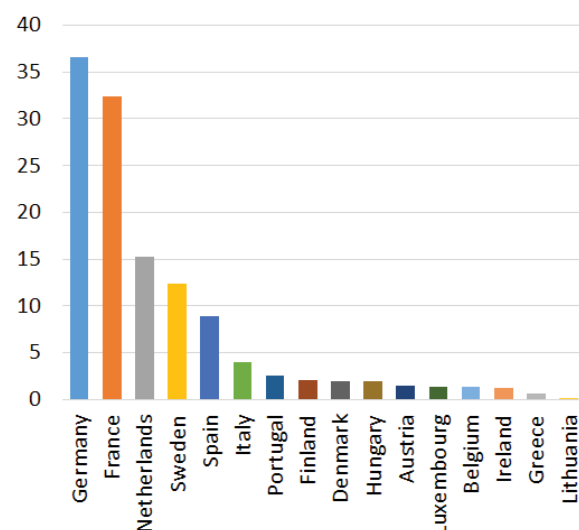
¹⁹⁷ Eurostat, Environmental Protection Expenditure Accounts (env_epe).

¹⁹⁸ Data reporting is different for the three institutional sectors, leading to aggregation difficulties. Specialist companies provide comprehensive data across all environmental areas (CEPA 1-9), although this is less the case for general government and industry, which often report (the non-obligatory) data in merged categories only (because it is difficult to split to disaggregate these data) or not at all.

¹⁹⁹ Green bonds were created to fund projects that have positive environmental and/or climate benefits. Most green bonds issued are green 'use of proceeds' or asset-linked bonds. The very first green bond was issued in 2007 from multilateral institutions European Investment Bank (EIB) and World Bank.

bonds (including some non-EU countries) was USD 156 billion (EUR 137 billion²⁰⁰), up from USD 117 billion (EUR 105 billion) in 2019. Looking only at EU-27 Member States, green-bond issuance in 2020 was EUR 124 billion. In 2014-2020, 83% of the green bonds issued by European countries served objectives in energy, buildings or transport, while 8% supported water and waste, with a further 6% supporting land use, with links to ecosystem conservation and restoration. These data are based on the climate-bonds taxonomy, which is broadly similar to the EU Taxonomy²⁰¹. Of this 2020 annual EU green-bond issuance, Slovenia had no issuance.

Figure 44: Annual EU green bond issuance in 2020 (EUR billion)²⁰²

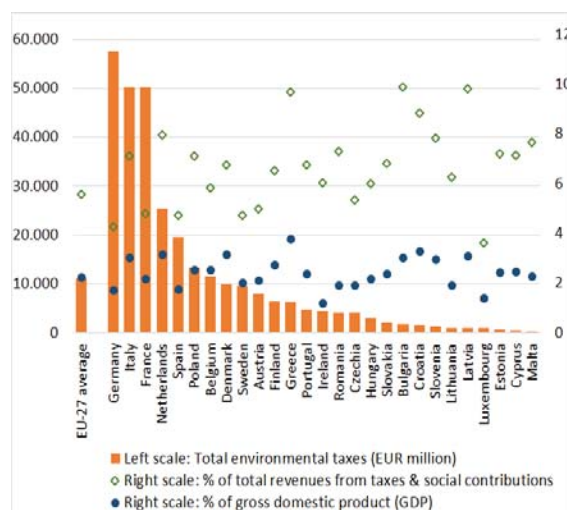


Green budget tools

Green taxation and tax reform

Slovenia's revenue from environmental taxes in 2020 was above the EU average, as shown in Figure 45 (2.95% compared to the EU-27 average of 2.24%). Within this, energy and transport taxation represent the highest share with 2.38% and 0.45% of GDP respectively, while pollution/resource tax accounts for 0.12% of GDP²⁰³.

Figure 45: Environmental taxes in the EU27 (2020)²⁰⁴



The 2019 European Green Deal underlines that well-designed tax reforms can boost economic growth and resilience, foster a fairer society and promote a just transition. Tax reforms can contribute to this by sending the right price signals and incentives to economic actors. The Green Deal creates the context for broad-based tax reforms, the removal of fossil-fuel subsidies, and a shift in the tax burden from labour to pollution. It achieves this while simultaneously taking account of social considerations²⁰⁵. The Green Deal promotes the 'polluter-pays principle'²⁰⁶, which stipulates that polluters should bear the cost of measures to prevent, control and remedy pollution. The polluter-pays principle is facilitated by the EU Commission's Technical Support Instrument (TSI) flagship project²⁰⁷ on greening taxes.

According to a Commission's study on Green taxation and other economic instruments (2021), Slovenia applies polluter-pays economic instruments for air, water and waste²⁰⁸.

²⁰⁰ At Eurostat's annual average EUR/USD exchange rates.

²⁰¹ Interactive Data Platform at www.climatebonds.net. Further information on Climate Bonds Taxonomy: <https://www.climatebonds.net/standard/taxonomy>.

²⁰² Climate Bonds Initiative, 2022.

²⁰³ Eurostat, [Environmental tax revenues](#).

²⁰⁴ Eurostat, Environmental taxes accounts (env_eta).

²⁰⁵ COM (2019/640 final), p.17.

²⁰⁶ Article 191(2) of the Treaty on the Functioning of the European Union: 'Union policy on the environment (...) shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should be a priority be rectified at source and that the polluter should pay'.

²⁰⁷ European Commission, [Greening taxes- applying polluter pays principle in practice](#), [green budgeting TSI participation](#).

²⁰⁸ European Commission, [Green taxation and other economic instruments](#).

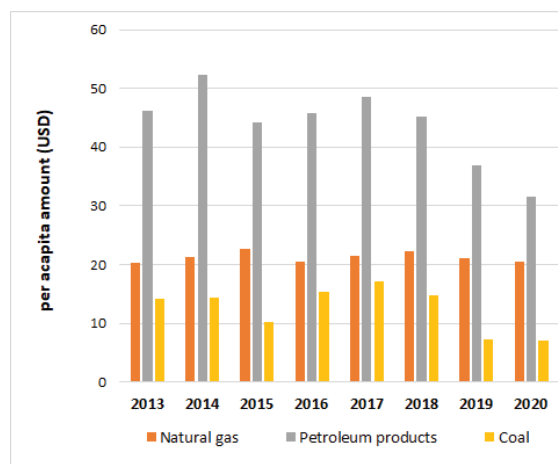
Environmentally-harmful subsidies

Addressing and removing environmentally-harmful subsidies is a further step towards wider fiscal reforms.

Fossil-fuel subsidies are costly for public budgets, and make it difficult to achieve the Green Deal objectives. In many cases these subsidies also counteract incentives for investments in green technologies. Annual fossil-fuel subsidies have been around EUR 55 billion in the EU since 2015. They rose by 4% between 2015 and 2019, although some countries (such as Latvia, Lithuania Sweden, Greece or Ireland) managed to decrease them in this period. In the EU, subsidies for petroleum products in sectors such as transport and agriculture continued to increase in 2015-2019. However, subsidies for coal and lignite decreased, largely due to the diminishing role of solid fuels in electricity generation. As a share of GDP, fossil-fuel subsidies ranged from 1.2% in Hungary to less than 0.1% in Malta in 2019 (with an EU average of 0.4%). In 2019, total fossil-fuel subsidies in Slovenia amounted to EUR 0.1 billion, representing 0.13% of the GDP.

In 2020, the EU-27's total amount of fossil-fuel subsidies decreased to EUR 52 billion (due to falling consumption trends amid the COVID-19-related restrictions). Without Member State actions, these subsidies are likely to rebound as economic activity picks up from 2020²⁰⁹.

Figure 46: Trends in natural gas, petroleum products, electricity and coal subsidies in Slovenia²¹⁰



Slovenia allocated more than the EU average on fossil-fuel subsidies — and significantly higher than on renewable-energy subsidies²¹¹.

Environmentally harmful subsidies in Slovenia include: (i) exemptions (or partial refund) from excise duty on fuels for different operators; (ii) agricultural premiums (beef, veal, pork); (iii) subsidies in the energy sector for the production of electricity from renewables and combined heat and power plants or feed-in tariffs (for natural gas used in combined heat and power plants, biomass, geothermal, ocean, small-scale hydro, solar (PV), waste, wind).

Current green budgeting practices

'Green budgeting' encompasses various climate and environmental tagging²¹² and tracking practices in budgets. Some EU Member states already use certain green-budgeting practices²¹³. Green budgeting helps identify and track green expenditure and green revenues to increase transparency on the environmental implications of

²⁰⁹ See [table on EU FFS data in 2019](#) which is based on (for info) [COM\(2021\) 950](#) and [Annex](#).

²¹⁰ OECD, [Fossil Fuel Subsidy Tracker](#).

²¹¹ European Court of Auditors, [Energy taxation, carbon pricing and energy subsidies](#), 2022.

²¹² Climate and environmental tagging is a tool that allows assessing each individual budget measure and gives it a "tag" according to whether it is helpful or harmful to green objectives.

²¹³ European Commission, [Green Budgeting Practices in the EU: A First Review](#), 2021, [Green Budgeting in the EU Key insights from the 2021 Commission survey](#) and OECD, Public Governance Directorate, Climate Change and Long-term Fiscal Sustainability, Working Paper, February 2021, [Climate Change and Long-term Fiscal Sustainability \(oecd.org\)](#)

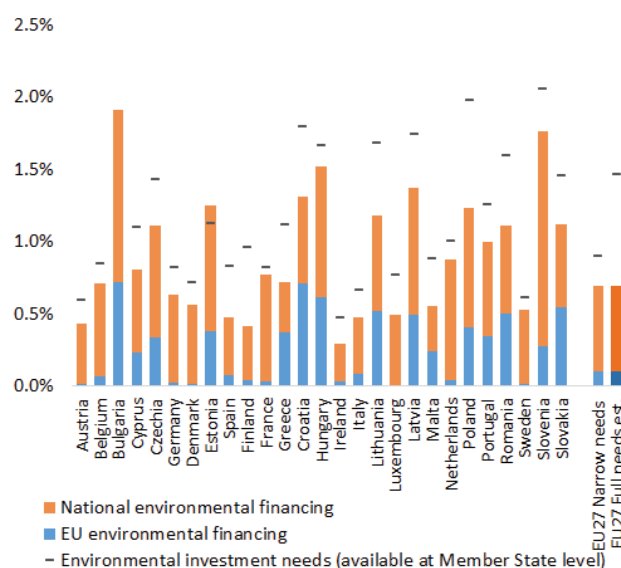
budgetary policies. This is aimed at improving policy coherence and supporting green policies (including climate and environmental objectives)²¹⁴.

The Commission has also drawn up climate-proofing and sustainability-proofing guidance as tools to assess project eligibility and a project's compliance with environmental legislation and criteria²¹⁵. The Commission developed a green-budgeting reference framework²¹⁶ and launched a TSI project on green budgeting in 2021 to help Member States develop or further develop national green-budgeting frameworks to improve policy coherence and the green transition. Slovenia participates in the Commission's green-budgeting TSI, which started in 2021.

Overall financing compared to the needs

The EU's overall financing for environmental investments is estimated to have reached 0.6-0.7% of GDP in 2014-2020, comprising both major EU funds and national financing. This ranged from 0.3% (Ireland) to 1.91% (Bulgaria), depending on the level of environmental challenges in different Member States. In 2021-2027, it is estimated that the overall EU environmental-investment needs will reach between 0.9-1.5% of the projected overall EU GDP (2021-2027). This suggests an additional environmental financing need (gap) of 0.6-0.8% of GDP over baseline financing patterns²¹⁷.

Figure 47: Total environmental financing baseline (2014-2020) and estimated needs (2020-2030) in the EU27 (% of GDP)²¹⁸



Slovenia's financing for environmental investments came to an estimated 1.76% of GDP (EU average: 0.7%) in 2014-2020, with over 80% of that coming from domestic sources. However, the country's environmental-investment needs in 2021-2027 are estimated to be at least 2.06% of GDP, indicating a financing gap of 0.3% of GDP or more, when also accounting for needs that are currently estimated at EU-level only (e.g. water protection, higher circularity, biodiversity strategy etc.).

2022 priority actions

- Ensure an increased level of financing for the environment to cover the investment needs across the environmental objectives by closing the investment gaps.
- Scale up the biodiversity support under the new cohesion policy and the common agricultural policy to achieve the ambition set in the Interinstitutional Agreement on the 2021-2027 MFF on biodiversity²¹⁹.
- Ensure that cohesion policy and EAFRD funding and LIFE programme funding complement each other, especially, as regards LIFE integrated projects and actions certified with a 'Seal of Excellence'²²⁰.

²¹⁴ OECD Paris Collaborative on Green Budgeting initiative, 2017.

²¹⁵ European Commission, [Technical guidance on sustainability proofing for the InvestEU Fund](#).

²¹⁶ European Commission, Green Budgeting Reference Framework, based on the review of the OECD Paris Collaborative on Green Budgeting initiative, 2017.

²¹⁷ Source: DG Environment data analysis. EU financing sources covered: ESI Funds (ERDF, CF, ESF, YEI, EAFRD, and EMFF), Horizon 2020, LIFE, EFSI (EU amount), EIB loans. National financing: total national environmental-protection capital expenditure (investments) - source: Eurostat EPEA dataset. Cut-off date for data: end 2021. N.B. The total financing may be higher, in particular through further indirect investments, requiring further analysis in the future.

²¹⁸ Eurostat, [ESI Funds Open Data](#), 2021.

²¹⁹ More specifically, the EU aims to provide '7.5% of annual spending under the MFF to biodiversity objectives in the year 2024 and 10% of annual spending under the MFF to biodiversity objectives in 2026 and 2027'.

²²⁰ Article 16 to [Regulation \(EU\) 2021/783](#) ('LIFE Regulation') provides that support from the ERDF, ESF+ and the EAFRD 'may be granted to actions awarded a "Seal of Excellence" certification under the LIFE Programme by complying with the following cumulative conditions:

- Take full advantage of existing technical assistance (e.g. available under the cohesion policy programmes, InvestEU Advisory Hub²²¹ or Peer2Peer schemes) to identify and mitigate risks. These risks may include, institutional capacity gaps, process gaps, inadequate capacity of beneficiaries (e.g. smaller applicants in selected sectors such as biodiversity or energy efficiency), existing and foreseeable investment gaps, lack of clarity about EU rules.

-
- (a) they have been assessed in a call for proposals under the LIFE Programme;
 - (b) they comply with the minimum quality requirements of that call for proposals;
 - (c) they cannot be financed under that call for proposals due to budgetary constraints.'

²²¹ European Union, [InvestEU Advisory Hub](#).

6. Environmental Governance

Information, public participation and access to justice

Citizens can more effectively protect the environment if they can rely on the three 'pillars' of the Aarhus Convention:




- (i) access to information;
- (ii) public participation in decision-making
- (iii) access to justice in environmental matters.

It is of crucial importance to public authorities, the public and businesses that environmental information is shared efficiently and effectively²²². Public participation allows authorities to make decisions that take public concerns into account. Access to justice is a set of guarantees that allows citizens and NGOs to use national courts to protect the environment²²³. It includes the right to bring legal challenges ('legal standing')²²⁴.

Environmental information

Slovenia's implementation of the INSPIRE Directive has improved. Its performance has been reviewed based on the country's 2021 fiche²²⁵. The main challenge identified in the INSPIRE monitoring score (in 2020) was the lack of spatial data services. It has been addressed and both view and download services have been implemented for all INSPIRE datasets.

Table 4: Country dashboard on the implementation of the INSPIRE Directive (2016-2020)²²⁶

	2016	2020	Legend
Effective coordination and data sharing			 Implementation of this provision is well advanced or (nearly) completed. Outstanding issues are
Ensure effective coordination			













²²² The Aarhus Convention, the Access to Environmental Information Directive (Directive 2003/4/EC) and the INSPIRE Directive, (Directive 2007/2/EC) together create a legal foundation for the sharing of environmental information between public authorities and with the public. This EIR focuses on the INSPIRE Directive's implementation.

²²³ These guarantees are explained in the Commission Notice on access to justice in environmental matters, OJ L 275, 18.8.2017 and a related Citizen's Guide.

²²⁴ This EIR report focuses on the means implemented by Member States to guarantee rights of access to justice, legal standing and to overcome other major barriers to bringing cases on nature and air pollution.

²²⁵ European Commission, [INSPIRE in your Country, Slovenia fiche](#).

²²⁶ INSPIRE [knowledge base](#)

Data sharing without obstacle			minor and can be addressed easily. Percentage: >89%
INSPIRE performance indicators			
i. Conformity of metadata			 Implementation of this provision has started and made some or substantial progress but is still not close to be complete. Percentage: 31–89%
ii. Conformity of spatial data sets²²⁷			
iii. Accessibility of spatial data sets through view and download services			 Implementation of this provision is falling significantly behind. Serious efforts are necessary to close implementation gap. Percentage: <31%
iv. Conformity of network services			

Public participation

Public participation in environmental impact assessment (EIA) and strategic environmental assessment (SEA) procedures is facilitated by means of electronic tools. The Ministry of the Environment's webpage 'Environmental Assessments'²²⁸, under the heading 'Environmental Impact Assessment' provides an introduction to the EIA procedure, the parties involved and possibilities for public participation²²⁹. The EIA webpage also contains a database with screening decisions, announcements on public participation, useful links, a database with past decisions, etc. A similar webpage is in place for SEA procedures. The Environmental Agency publishes a database of all ongoing EIA procedures²³⁰, which provides access to relevant documents.

Although there is good access to information and guidance on public participation, there is little systematic information on how public views are taken into account. No aggregate data is published and decisions in individual cases do not indicate how public comments have been

²²⁷ The deadlines for implementation of the spatial data interoperability were in 2016 still in the future: 23/11/2017 for Annex I data and 21/10/2020 for Annex II and III data. It must be also considered that this conformity indicator will in many cases never reach 100% conformity as majority of the countries provide as-is-data sets in addition to the INSPIRE harmonised data sets.

²²⁸ Republika Slovenija, gov.si, [Environmental assessments](#).

²²⁹ Republika Slovenija, gov.si, [Obtaining an environmental decision](#).

²³⁰ Republika Slovenija, gov.si, [Construction](#).

taken into account. In addition, following the transfer of responsibility for EIA procedures from the Environment Agency to the Ministry of the Environment in September 2021, there is some confusion about the information available on websites, with neither website providing access to the full text of past EIA decisions.

Access to justice

The lack of protecting citizen's rights for public participation (environmental plans/programmes, spatial plans, nature-conservation plans/programmes, water management programmes and others) is a weakness of the Slovenian legal system with respect to the Aarhus Convention. There is no 'direct' way to obtain an administrative review or challenge a final decision about a plan/programme before a court. There are only two possible indirect and less satisfactory options. First, if the plan or programme is adopted as a general legal act, it could be challenged at the Constitutional Court (conformity with the Constitution). Second, it could be challenged at the Administrative Court as an act or omission of the state or local authority (Administrative Dispute Act, Article 4). Legal standing can be granted to NGOs with the status of 'public interest – nature conservation' for representing nature-conservation interests (Article 137 of the Nature Conservation Act). For other NGOs and individuals, legal standing can be granted on the basis of Article 43 of the General Administrative Procedure Act, if legal interest can be demonstrated; the person should claim to be joining the procedure in order to protect their legal benefits. The legal benefits should be direct personal benefits based on an act or other regulation.

The plans or programmes cannot be challenged in an administrative supervisory forum or in a court. There is a system of regular supervision of regulatory legally binding acts but it is hardly accessible for members of the public and NGOs. They can only contact those bodies or officials who are entitled to initiate an extraordinary supervision procedure.

There is, however, no official website with rules on environmental access to justice. There is only information about conditions and the processes for NGOs with public-interest status. Nonetheless, the Ministry of the Environment and Spatial Planning encourages NGOs to spread such information. Currently all relevant information is available on the Environmental Defenders website²³¹.

²³¹ The network 'Environmental Defenders'.

There is an ongoing infringement procedure against Slovenia concerning requirements of access to justice as provided for by both the EIA and the IED Directives. This concerns the requirement of prior participation in administrative proceedings to secure access to justice for qualified NGOs, the lack of judicial review for negative screening decisions and the limited scope for judicial review.

2022 priority actions

- Improve clarity about how people can find out information on EIA processes and take steps to encourage public participation in EIAs.
- Publish information about public participation in EIA and SEA procedures, both as part of the decision-making process in individual cases and in aggregate form; It should assess whether public participation is increasing or declining.
- Better inform the public about rights on their access to justice, in particular by referring to online judicial and administrative portals, and the EU Commission's eJustice fact sheets on access to justice in environmental matters²³².
- Improve public access to courts when it comes to challenging administrative or regulatory decisions, in particular as regards planning related to water, nature and air quality.

Compliance assurance

Environmental compliance assurance covers all the work undertaken by public authorities to ensure that industries, farmers and others fulfil their obligations to protect water, air and nature, and manage waste²³³. It includes support measures provided by the authorities such as:

- (i) compliance promotion²³⁴;
- (ii) inspections and other checks that they carry out, i.e. compliance monitoring²³⁵;
- (iii) the steps that they take to stop breaches, impose sanctions and require damage to be remedied, i.e. enforcement²³⁶.

²³² European Union, [Access to justice in environmental matters](#).

²³³ The concept is explained in detail in the Communication on 'EU actions to improve environmental compliance and governance' COM(2018) 10 and the related Commission Staff Working Document, SWD(2018)10.

²³⁴ This EIR focuses on the help given to farmers to comply with nature and nitrates legislation.

²³⁵ This EIR focuses on inspections of major industrial installations.

²³⁶ This EIR focuses on the availability of enforcement data and coordination between authorities to tackle environmental crime.

Citizen science and complaints enable authorities to focus their efforts better. Environmental liability²³⁷ ensures that the polluter pays to remedy any damage.

Compliance promotion and monitoring

The websites of the Ministry of Environment and Spatial Planning and the Institute for Nature Conservation provide extensive information on biodiversity and the implementation of the Nature Directives. This includes technical information and information targeted at the general public. However, there is not much focus on practical measures for duty holders (i.e. people with a specific responsibility under environmental law).

There is generally less promotional material available on implementation of the Nitrates Directive, although a document²³⁸ available on the Ministry's website provides a comprehensive overview of the measures to be implemented in the farm sector, with real-life examples. In addition, the Agricultural Advisory Service²³⁹, a network of regional agricultural advisory offices, is active in providing advisory and educational activities on issues concerning nitrates, particularly on optimising fertilisation with nitrogen and avoiding run-off.

The Environment Inspectorate produces an annual plan for inspections under the Industrial Emissions Directorate, setting out the frequency of regular inspections based on a risk assessment. The Inspectorate has also adopted internal guidelines for non-routine inspections, to determine the order of processing complaints and reports from legal and natural persons²⁴⁰. As in 2019, inspection reports will not be published in 2022, although short summary information (date, location, permit number, whether licence conditions are complied with, whether follow-up action is required) is made available online for Industrial Emissions Directive inspections.

In principle, members of the public may ask to see specific inspection reports according to legislation on access to public documents. In addition, the Inspectorate sometimes announces the beginning of an inspection procedure on its website, or reports on its results, but this is not systematic, and is generally focused on cases in the public eye²⁴¹.

Annual activity reports are published by the Inspectorate for the Environment and Spatial Planning²⁴², which provide summary data at a very general level. For Industrial Emissions Directive installations this includes the number of inspections, the number of infringements found and the number of inspection measures (measures ordered to be taken) and sanctions.

Complaint handling and citizen science

The Inspectorate's website provides information on how to submit an online complaint, either anonymously²⁴³ or with an electronic signature²⁴⁴. The website also provides clear and concise instructions on how to file a complaint by post or in person²⁴⁵. There are public guidelines available on how complaints should be prioritised in the inspections process. While complainants have a right to receive a written response after an investigation has been completed, no timescale has been provided for this. Similar complaints procedures are available on the website of the Inspectorate for Agriculture, Forestry and Food, which is responsible for inspecting cases of nitrate pollution. However, there does not seem to be an active policy to encourage public reporting of offences.

There does not appear to be any published statistics on public complaints (number received, issues covered, outcomes, etc). Since 2019, some steps have been taken in Slovenia to encourage citizen-science activities, generally in the field of biodiversity, and there is also a 'Slovenian Partnership for the Soils'²⁴⁶, which encourages public participation in data gathering.

Enforcement

Judgments handed down from the higher courts are usually published, but the information they contain is usually anonymised, and often incomplete. As in 2019, there is currently no public database of environmental prosecutions or judgements nor a public database of prosecutions in general. The statistical instruments on environmental crimes have also not been developed since 2019. However, the State Prosecution Office publishes annual reports, which contain aggregated information about the number of cases by type of

²³⁷ The Environmental Liability Directive, 2004/35, creates the framework.

²³⁸ Ministry of the Environment and Spatial Planning, [Guidelines for implementing measures to protect water against pollution by nitrates from agricultural sources](#), July 2020.

²³⁹ [The Agricultural Advisory Service](#).

²⁴⁰ Republika Slovenija, gov.si, [The Environment and Spatial Planning Inspectorate](#).

²⁴¹ See 'News' page on [The Environment and Spatial Planning Inspectorate](#).

²⁴² Republika Slovenija, gov.si, [About the Environment and Spatial Planning Inspectorate](#).

²⁴³ Republika Slovenija, eUprava, [Anonymous notification of infringement to the Environmental and Spatial Planning Inspectorate of the Republic of Slovenia](#).

²⁴⁴ Republika Slovenija, eUprava, [Report infringement to the Environment and Spatial Planning Inspectorate of the Republic of Slovenia](#).

²⁴⁵ [Republika Slovenija, gov.si](#)

²⁴⁶ Republika Slovenija, gov.si, [Slovenian Soil Partnership](#).

offence and perpetrator²⁴⁷, including a section on environmental crimes. The most common 'environmental crimes' are those regarding animal welfare, poaching, and illegal logging. Offences involving pollution or destruction of the environment are less present in the data: in 2018, out of 125 reported environmental offences, only 8 were brought to court, which ultimately lead to six convictions.

While the legislation identifying environmental offences generally prescribes requirements for cooperation between the organisations responsible for enforcement (duties to inform or consult, etc.), there does not seem to be any memoranda of understanding or other agreements between relevant institutions on how to cooperate, or how to share information and expertise, or training, resulting in no progress being made since 2019.

Environmental Liability Directive

In Slovenia, no database or registry of environmental incidents or of cases brought under the Environmental Liability Directive exists. According to information gathered from the Environment Agency in the context of earlier research for the Commission, 15 Environmental Liability Directive cases had been processed in Slovenia until 2020, nine of which are already completed²⁴⁸. Slovenian legislation does not impose specific mandatory financial security for liabilities under the Environmental Liability Directive; therefore, no progress has been made since 2019.

2022 priority actions

- Improve the availability of online material for duty holders, e.g. farmers and land managers, on practical steps to implement legislation that protects nature; and it should improve the visibility of information on the implementation of the Nitrates Directive.
- Improve public availability of information, e.g. on environmental inspections, and on prosecution of environmental crimes.
- Establish an online registry of Environmental Liability Directive cases and other instances of environmental damage, making information on damages and costs available to the public.

²⁴⁷ [Crown Prosecution Service](#).

²⁴⁸ European Commission, Framework Contract No. ENV D.4/FRA/2016/0003, COWI, Prospect, Justice and Environment, Country reports: [Improving implementation and the evidence base for the ELD](#), 2021.

Effectiveness of environmental administrations

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

Administrative capacity and quality

Slovenia ranks 18 out of 180 in the 2020 Environmental Performance Index²⁴⁹. Overall, during the last decade, an improvement in how EU environmental law is implemented in the different sectors can be observed. For instance, there has been progress made regarding the implementation of the environmental assessments. The Commission checked the conformity of the Slovenian legislation with the Environmental Impact Assessment Directive, resulting in Slovenia being subject to an infringement procedure. Following Slovenia's reply to the Letter of Formal Notice, some of the grievances have been dropped, either due to satisfactory explanations given by Slovenian authorities, or legislative changes that had already taken place. However, some grievances persist, as the legislative changes to solve those grievances have not taken place yet. These grievances relate to the lack of participation of local authorities, the non-conformity of arrangements for transboundary EIA procedures and the gaps concerning measures and conditions for preventing, reducing or eliminating harmful effects on the environment in the permits granted for some projects.

Coordination and integration

As mentioned in the 2019 EIR Report, the transposition of the revised Environmental Impact Assessment Directive (EIA Directive)²⁵⁰ provides an opportunity to streamline the regulatory framework on environmental assessments. Despite a delay in full transposition (deadline was May 2017), Slovenia has **now** transposed the revised Directive. The quality of the transposition is currently under assessment through a conformity check by the Commission.

The Commission encourages the streamlining of the environmental assessments to reduce duplication and avoid overlaps in environmental assessments applicable to projects. Moreover, streamlining helps to reduce

²⁴⁹ [Environmental Performance Index | Environmental Performance Index \(yale.edu\)](#)

²⁵⁰ [Directive 2011/92/EU](#) as amended by [Directive 2014/52/EU](#) ([Informal consolidated version of the EIA Directive](#)).

unnecessary administrative burden and accelerates decision-making, provided it is done without compromising the quality of the environmental-assessment procedures²⁵¹. Slovenia had already introduced the streamlining of environmental assessments under EIA and Habitats Directives prior the revision of the EIA Directive. Coordinated procedures have been established for EIA, Water Framework Directive and Industrial Emission Directive.

The Single Environmental Permitting Platform, which implements the Single Environmental Permitting Regime that simplifies, harmonises and draws up many environmental permits, can be highlighted as an example of good practice.

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

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

The TSI supported several environment-related projects in Slovenia. Under the TSI 2019, a project related the preparation of the regulation on sustainable mobility was supported. The TSI 2020 supported a project on improving the organisation and management of public transport and alternative fuels infrastructure. Under the TSI 2021, a project on the modelling of economic and fiscal impact of green policies was selected. In addition, the TSI 2021 provided support to a project that facilitates renewable energy deployment in the country's electricity sector. It incorporates biodiversity mapping into the assessment of the potential for renewables in Slovenia.

TAIEX EIR peer to peer

The Commission launched the TAIEX EIR peer to peer tool in 2017 to facilitate peer-to-peer learning among environmental authorities²⁵².

Since the 2019 EIR, Slovenia has participated in two multi-country workshops on reducing ammonia (2021) and on zero pollution (2022). Slovenia also benefited from an expert mission on environmental noise protection (2019).

²⁵¹ The Commission issued a guidance document in 2016 on the setting up of coordinated and/or joint procedures that are simultaneously subject to assessments under the EIA Directive, Habitats Directive, Water Framework Directive, and the Industrial Emissions Directive, OJ C 273, 27.7.2016, p. 1.

²⁵² https://ec.europa.eu/environment/eir/p2p/index_en.html.