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2025 Environmental Implementation Review
Country Report - SLOVAKIA

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

2025 Environmental Implementation Review for prosperity and security

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Executive summary

In May 2016, the European Commission launched the Environmental Implementation Review (EIR), a regular reporting tool based on analysis, dialogue and collaboration with EU Member States to improve the implementation of existing EU environmental policy and legislation ([1]). Following previous cycles in 2017, 2019 and 2022, this report assesses the progress made while describing the main outstanding challenges and opportunities regarding environmental legal implementation in Slovakia. The purpose of this report is to provide information on the implementation performance and highlight the most effective ways to address the implementation gaps that impact human health and the environment and hamper the economic development and competitiveness of the country. The report relies on detailed sectoral implementation reports collected or issued by the Commission under specific environmental legislation.

The main challenges set out below have been selected from Part I of this report, 'Thematic areas', taking into account factors such as the gravity of the environmental implementation issue in light of the impact on the quality of life of citizens, the distance to target, and financial implications.

In Slovakia such challenges have been lingering since the first Environmental Implementation Review in 2017, and require urgent action.

Despite the adoption of the **circular economy** roadmap, Slovakia still needs to strengthen its circularity policy framework and swiftly implement it. Slovakia is at risk of missing the **municipal waste and packaging waste targets**, and not meeting the 2035 target of a maximum of 10 % of municipal waste being landfilled. Mixed **municipal waste is still allowed to be landfilled without pretreatment**, and Slovakia has repeatedly postponed the introduction of a pretreatment obligation.

Slovakia faces serious challenges in **nature and biodiversity protection**. The functioning of **national parks** administration bodies suffered a setback in 2024 following the dismissal of large numbers of staff. In addition, Slovakia abandoned a plan, funded by the recovery and resilience plan, to foster direct conservation management through buying out privately owned land in protected areas. In 2024, Slovakia also abandoned national co-funding for several **LIFE projects** dedicated to nature protection and restoration of habitats, and diverted **cohesion funds** away from nature protection. **Slovak forests in Natura 2000 sites** are still facing high levels of **logging** that is not properly assessed. Slovakia also keeps **failing to protect the Capercaillie bird species**. Finally, a recent amendment to **Slovakia's Nature Conservation Act** lifted prohibitions to motorised vehicles' access to protected areas, including NATURA 2000 sites, reduced public participation in related administrative procedures and restricted the functioning of voluntary nature guards.

Slovakia faces challenges concerning **water quality and management**. Slovakia's **surface water bodies** show a **deteriorating trend concerning their ecological and chemical status**. Slovakia needs to urgently reduce the **harmful impacts of hydropower plants** installed along the river Hron and other rivers. Finally, Slovakia still faces a **significant gap in implementing the Urban Wastewater Treatment Directive**.

The overall **environmental investment needs** to enable Slovakia to meet its objectives, beyond climate change, are estimated at EUR 2.9 billion per year, broken down as follows: EUR 809 million for the circular economy; EUR 780 million for pollution prevention and control; EUR 506 million for water; and EUR 781 million for biodiversity and ecosystems. The additional investment need over the current levels – **the investment gap** – has reached an estimated EUR 1.1 billion per year in Slovakia, which represents around 1.02 % of its gross domestic product (higher than the EU average of 0.77 %).

On **environmental governance**, Slovakia needs to urgently ensure a correct transposition of the revised EIA Directive; there has been an ongoing infringement case since 2019. A 2024 amendment to Slovakia's EIA Act has not resolved the non-conformity issues; on the contrary, it has likely further deteriorated access to justice.

On the positive side, the emissions of **several air pollutants have decreased significantly** in Slovakia since 2005, while GDP growth has continued. Based on 2024 data, Slovakia meets its 2020-2029 emission reduction commitments for air pollutants NOx, non-methane volatile organic compounds (NMVOC), sulphur dioxide (SO2), ammonia (NH3) and PM2.5. The **quality of drinking water in Slovakia does not give rise to concern**, with compliance rate for all parameter groups exceeding 99%.

([1]) Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – Delivering the benefits of EU environmental policies through a regular environmental implementation review, COM(2016) 316 final of 27 May 2016, http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2016%3A316%3AFIN.

Part I: Thematic areas

1. Circular economy and waste management

Transitioning to a circular economy

Advancing the transition to a circular economy in the EU will reduce the environmental and climate impact of our industrial systems by reducing input materials, keeping products and materials in the loop for longer and reducing waste generation, thus decoupling economic growth from resource consumption. A circular economy has considerable potential to increase competitiveness and job creation and will also promote innovation and provide access to new markets. With the 2020 circular economy action plan (CEAP) ([2]) measures either in place or legislatively advanced, Member States will now have to focus on a swift and effective implementation.

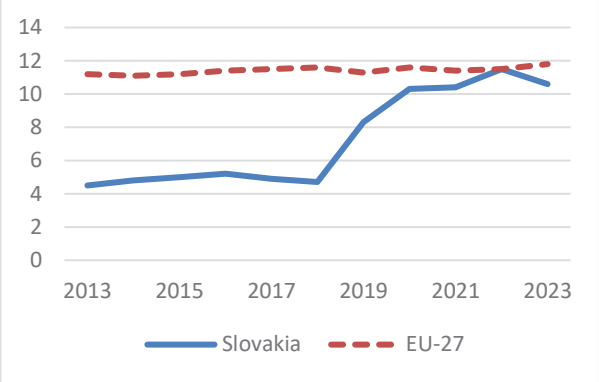
The 2020 CEAP launched the legislative process for a set of initiatives that will now have to be implemented by national governments across the EU. These initiatives were all introduced following a holistic life-cycle approach, with measures addressing the different stages of a product's life cycle, from design through use to end of life.

In the CEAP, the EU sets as its overarching objective the doubling of its circular material use rate (CMUR) by 2030.

The CMUR is a measure of one aspect of circularity: the share of the total amount of material used in the economy that is accounted for by recycled waste. A higher CMUR value means that more secondary materials were used as a substitute for raw materials, thus reducing the environmental impacts of extracting primary material.

Slovakia's CMUR increased sharply between 2018 and 2020 but has been stagnating since, reaching 10.6 % in 2023, which is still below the EU average of 11.8 % (Figure 1).

Figure 1: CMUR (%), 2013–2023

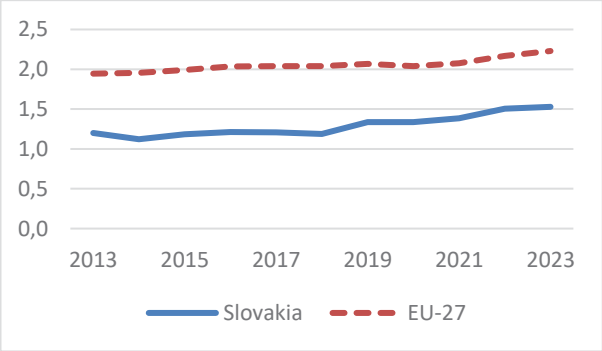


Source: Eurostat, 'Circular material use rate', env_ac_cur, last updated 13 November 2024, accessed 9 December 2024, https://ec.europa.eu/eurostat/databrowser/product/view/env_ac_cur.

Resource productivity measures the total amount of materials directly used by an economy in relation to gross domestic product (GDP). 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, with EUR 1.52 generated per kg of material consumed in 2023, resource productivity in Slovakia is below the EU average of EUR 2.23 per kg.

Figure 2: Resource productivity (EUR/kg), 2013–2023



NB: The unit of measurement used is EUR/kg chain-linked volume (2015). Chain-linked volumes focus on changes on quantities and prices of commodities in previous years, taking account of inflation, and are indexed to the nearest appropriate year, in this case 2015.

Source: Eurostat, 'Resource productivity', env_ac_rp, last updated 7 August 2024, accessed 9 December 2024, https://ec.europa.eu/eurostat/databrowser/product/view/env_ac_rp.

([2]) Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – A new circular economy action plan for a cleaner and more competitive Europe, COM(2020) 98 final of 11 March 2020, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2020%3A98%3AFIN.

Policies and measures

In parallel with European initiatives under the CEAP, Member States are encouraged to adopt and implement circular strategies at the national, regional and city levels. These should be tailored to each national and local reality, to harness the proximity economy's ([3]) potential, while following the principles of a holistic whole-value-chain approach.

Since the launch of the online European Circular Economy Stakeholder Platform in 2017 ([4]) national, regional and local authorities have used the platform to share their strategies, roadmaps and good practices, for example alternative business models and innovative technologies.

Slovakia's circular economy policy framework is set in its first dedicated roadmap ([5]), developed in 2022 with the cooperation of the Organisation for Economic Co-operation and Development (OECD) and the European Commission's technical support instrument. The roadmap introduces more than 30 concrete policy recommendations supported by an implementation plan and a monitoring framework to be introduced by 2040.

Priority areas are food and biowaste, the construction sector, sustainable production and consumption, and economic instruments as horizontal measures.

Slovakia's recovery and resilience plan (RRP) ([6]) includes one circular economy-related reform concerning the management of construction and demolition waste.

Circular economy targets were introduced as part of the country's wider environmental policy strategy ([7]) in 2019, but they relate more strictly to waste.

Green public procurement

Public procurement accounts for a large proportion of European consumption, with public authorities' purchasing power representing around 14 % of EU GDP. Public procurement using green or circular criteria (life-cycle analysis, PaaS (platform as a service), second hand) can help drive the demand for sustainable products that meet reparability and recyclability standards.

Slovakia adopted a national action plan for green public procurement covering the period 2016–2020. However, monitoring showed that the strategic objective to achieve a 50 % share of green contracts in 12 selected product groups procured by public authorities, including counties and municipalities, was not met. A new concept for development and implementation of green public procurement (GPP) in Slovakia was adopted by the government in 2019 ([8]), to encourage ministries and other central state administration bodies to make more intensive use of GPP ([9]). The latest amendment to the procurement act introduced an obligation to reach a 6 % quota of public procurement with environmental aspect, in addition or alternatively (depending on the type of public authority) to a 6 % quota of public procurement with social aspect ([10]). The greener Slovakia strategy sets a long-term goal to achieve, by 2030, 70 % of GPP for the total value of public procurement and for the total number of contracts.

No further measures have been brought to the Commission's attention since the 2022 Environmental Implementation Review.

The EU Ecolabel and the eco-management and audit scheme

The number of EU Ecolabel product groups and the number of eco-management and audit scheme (EMAS)-licensed organisations in each country provide 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. The EU Ecolabel is awarded to products with best-in-class environmental performance. EMAS is a voluntary environment management scheme aimed at reducing the environmental impacts of organisations.

As of September 2024, Slovakia had 15 products and 3 licences registered in the EU Ecolabel scheme. Compared

([3]) European Commission, 'Proximity and social economy ecosystem', European Commission website, https://single-market-economy.ec.europa.eu/sectors/proximity-and-social-economy_en.

([4]) Circular Economy Stakeholder Platform (https://circulareconomy.europa.eu/platform/en/strategies).

([5]) Ministry of the Environment and OECD, *Closing the Loop in the Slovak Republic – A roadmap towards circularity for competitiveness, eco-innovation and sustainability*, 2022, https://www.oecd.org/environment/waste/highlights-closing-the-loop-in-the-slovak-republic-roadmap_EN.pdf.

([6]) Slovakia's recovery and resilience plan (https://rokovania.gov.sk/RVL/Material/28317/1).

([7]) Ministry of the Environment, *Greener Slovakia*, 2019, https://www.minzp.sk/files/iep/greener_slovakia-strategy_of_the_environmental_policy_of_the_slovak_republic_until_2030.pdf.

([8]) Government of Slovakia, *Concept for development and implementation of green public procurement in the Slovak Republic*, 2019, https://www.slov-lex.sk/elegislativa/legislativne-procesy/SK/LP/2019/570#error=login_required&state=2a68734e-fe36-4676-87c0-38563c1b2621.

([9]) Following the concept, four methodologies for GPP were prepared and adopted by the government in 2020 and 2021; these are mandatory for ministries and central administration bodies.

([10]) Government of Slovakia, Public Procurement Act, 2021, https://www.slov-lex.sk/ezbierky/pravne-predpisy/SK/ZZ/2015/343/20220331.html#error=login_required&state=652e4a17-7391-449a-a1b5-8bd59d7c20bd.

with the EU totals of 98 977 products and 2 983 licences, this shows a very low take-up of the EU Ecolabel in the country ([11]). Currently, 161 organisations from Slovakia are registered in EMAS ([12]). In this case, Slovakia shows a strong increase compared with the 2022 report.

Since the CMUR figures in the 2022 report refer to 2020, and the latest available data as of September 2024 are from 2022, it is not yet possible to assess progress in this regard.

Despite the adoption of the circular economy roadmap, which means that some progress has been made on the 2022 report's priority actions, Slovakia still needs to strengthen its policy framework for the circularity transition.

2025 priority actions

- Speed up the transition to a circular economy by implementing an updated national strategy and the EU framework and recommendations, in particular to complement it with upstream circularity measures.
- Adopt measures to increase the CMUR.

Waste management

Turning waste into a resource is supported by:

(i) addressing the full life cycle of products, from conception to end of life, by setting requirements on the design of products to ensure that they are more sustainable;
(ii) fully implementing EU waste legislation, which includes the waste hierarchy, the obligation to ensure separate collection of waste, landfill diversion targets, etc.;
(iii) reducing waste generation per capita and in absolute terms;
(iv) increasing the recycling rates of waste containing critical raw materials (CRMs), with a view to reducing dependencies and building resilient value chains, and stimulating demand for recycled content in all products;
(v) limiting energy recovery to non-recyclable materials; and
(vi) phasing out landfilling of recyclable or recoverable waste.

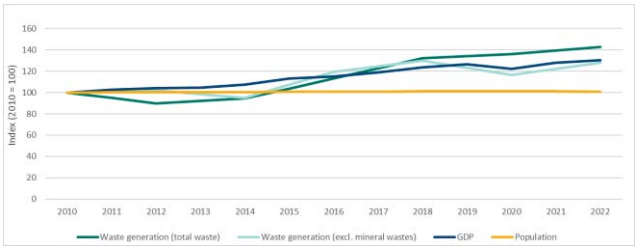
One of the main objectives of the EU Waste Law is to decouple economic growth from its environmental impacts.

The EU's approach to waste management is based on the waste treatment hierarchy: prevention, preparing for reuse, recycling, recovery and, as the least preferred option, disposal (which includes landfilling and incineration without energy recovery).

All legislative proposals in the field of waste management put forward by the Commission since 2021 are intended to encourage Member States to promote better product design, to require producers to cover the costs of managing the waste resulting from their products and to ensure that waste is managed at the higher levels of the waste hierarchy.

The total amount of waste generated in Slovakia has increased by more than a third over the last 12 years (Figure 3). This trend is mainly driven by the mineral and solidified waste categories. Excluding these wastes, waste generation has largely stagnated since 2018, apart from a notable drop in 2020. The increasing trend in waste generation, excluding major mineral waste, is primarily driven by a significant increase in recyclable waste, which has more than doubled over the last 12 years. Slovakia's GDP shows a limited break in its increasing trend in 2020, which is most likely to be due to the COVID-19 outbreak. In general, it appears that there has been no decoupling of waste generation and economic growth.

Figure 3: Generation of waste (total and excluding major mineral waste), population and GDP, 2010–2022



Sources: Eurostat, 'GDP and main components (output, expenditure and income)', nama_10_gdp, accessed 15 October 2024, https://ec.europa.eu/eurostat/databrowser/view/nama_10_gdp__custom_9301905/default/table; Eurostat, 'Generation of waste by waste category, hazardousness and NACE Rev. 2 activity', env_wasgen, last updated 30 September 2024, accessed 22 October 2024, https://ec.europa.eu/eurostat/databrowser/view/env_wasgen/default/table?lang=en; Eurostat, 'Population change – Demographic balance and crude rates at national level', demo_grind, accessed 15 October 2024, https://ec.europa.eu/eurostat/databrowser/view/demo_gind/default/table?lang=en&category=demo.demo_ind.

Critical raw materials

In Slovakia, some of CRMs or CRM-rich products are addressed in Act No 79/2015 on waste and on amendments to certain acts. These include electrical equipment, batteries and accumulators, and vehicles, for

([11]) European Commission, 'Ecolabel facts and figures', European Commission website, https://environment.ec.europa.eu/topics/circular-economy/eu-ecolabel/businesses/ecolabel-facts-and-figures_en.

([12]) As of 6 November 2024. European Commission, 'Eco-management and audit scheme (EMAS)', European Commission website, https://green-business.ec.europa.eu/emas_en.

which the principles of extended producer responsibility (EPR) applies.

The 2021–2025 waste management programme identified CRM-relevant areas that would require further investment and development, even where adequate processing capacity exists. Investment in new processing capacity is needed for end-of-life vehicles, while for construction and demolition waste, batteries and waste from electrical and electronic equipment, the focus should be on modernising the existing facilities and improving recycling rates.

Slovakia has initiated or is considering measures to increase the use of secondary CRMs such as mandatory GPP, increasing the content of recycled materials in products and setting standards for the quality of recyclates from waste.

Construction and demolition waste

Construction and demolition waste accounts for almost 40 % of all waste generated in the EU. A recent study ([13]) by the Joint Research Centre shows that preparing for reuse and recycling operations are preferred over incineration and landfilling from an environmental perspective for most of the different streams of construction and demolition waste. However, the economics are often unfavourable for preparing for reuse and recycling compared with incineration and landfilling. If available technology were to be applied, it is estimated that an increase in preparing for reuse and recycling would lead to 33 Mt greenhouse gas (GHG) emission savings annually (more than, for example, the combined annual GHG emissions from Estonia, Latvia and Luxembourg).

The preparing for reuse and recycling rate of mineral construction and demolition waste in Slovakia in 2022 was 93.2 % compared with the EU average of 79.8 %. Measures to further increase the preparing for reuse and recycling rate of construction and demolition waste include separate collection at source, for instance through digitalised pre-demolition audits ([14]) (so-called resource assessments); EPR and other economic instruments; and upstream measures such as increasing the recycled content in construction products and the circular design ([15]) of construction works.

Construction and demolition waste was addressed in the document *Closing the Loop in the Slovak Republic – A roadmap towards circularity for competitiveness, eco-innovation and sustainability* ([16]), which was published in 2022 in cooperation with the European Commission and the OECD. This document discusses important aspects of the transition of the construction sector from a linear economy to a circular one, namely by reusing and recycling construction and demolition waste.

In 2022, Slovakia reformed its construction and demolition waste management through an amendment to the Waste Act (Act No 230/2022 Coll.). The reform is aimed at addressing Slovakia's low construction waste recycling rates. Modifications that have been introduced include mandatory selective demolition, increased legal fees for landfilling, and notification obligations for the start and end of demolition works.

Boosting implementation – the 2023 *Waste Early Warning Report*

This section focuses on the management of municipal waste ([17]), for which EU law sets mandatory recycling targets. In June 2023, the Commission published the *Waste Early Warning Report* ([18]) identifying the general trends in waste management and the Member States at risk of missing 2025 waste targets (see Figure 4). Slovakia is in the category of countries at risk of missing both the municipal waste and the packaging waste targets. Slovakia is also at risk of not meeting the 2035 target of a maximum of 10 % of municipal waste landfilled.

Slovakia has moved in the right direction as the preparing for reuse and recycling rates of municipal waste and total

([13]) European Commission: Joint Research Centre, Cristobal Garcia, J., Caro D., Foster G., et al., *Techno-economic and environmental assessment of construction and demolition waste management in the European Union*, Publications Office of the European Union, Luxembourg, 2024, https://publications.jrc.ec.europa.eu/repository/handle/JRC135470.

([14]) European Commission: Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, *EU Construction & Demolition Waste Management Protocol including guidelines for pre-demolition and pre-renovation audits of construction works – Updated edition 2024*, Publications Office of the European Union, Luxembourg, 2024, https://op.europa.eu/en/publication-detail/-/publication/d63d5a8f-64e8-11ef-a8ba-01aa75ed71a1/language-en.

([15]) European Commission, *Circular Economy – Principles for building design*, Brussels, 2020, https://ec.europa.eu/docsroom/documents/39984.

([16]) OECD, *Closing the Loop in the Slovak Republic – A roadmap towards circularity for competitiveness, eco-innovation and sustainability*, 2022, https://www.oecd.org/en/publications/closing-the-loop-in-the-slovak-republic_acadd43a-en.html.

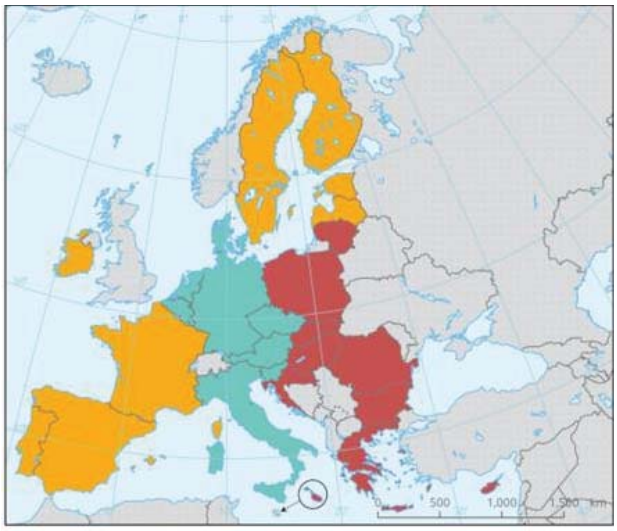
([17]) Municipal waste consists of (i) mixed waste and separately collected waste from households, including paper and cardboard, glass, metals, plastics, biowaste, wood, textiles, packaging, waste electrical and electronic equipment, waste batteries and accumulators, and bulky waste, including mattresses and furniture; and (ii) 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, Article 3.2b).

([18]) https://environment.ec.europa.eu/publications/waste-early-warning-report_en.

packaging waste have increased, and the landfill rate of municipal waste has decreased. Despite this progress, improvements are needed regarding Slovakia's performance.

On the one hand, Slovakia already reports a recycling rate of total packaging waste close to the 2025 target, and recycling rates of packaging waste materials above the 2025 targets, except for aluminium packaging. On the other hand, however, the recycling rates presented are not yet based on the new calculation rules and are likely to be overestimated ([19]).

Figure 4: Member States' prospects of meeting the preparing for reuse and recycling targets for municipal waste and packaging waste



- Member States not at risk of missing the 55 % preparing for reuse and recycling target for municipal waste and the 65 % recycling target for packaging waste
- Member States at risk of missing the preparing for reuse and recycling target for municipal waste but not at risk of missing the recycling target for packaging waste
- Member states at risk of missing both targets
- Outside coverage

Source: European Environment Agency (EEA), 'Many EU Member States not on track to meet recycling targets for municipal waste and packaging waste', briefing No 28/2022, Copenhagen, 2023. Reference data © ESRI.

Under certain conditions, EU waste legislation enables some Member States to postpone the deadlines for reaching certain waste management targets for municipal and packaging waste. Member States that want to take this option have to notify the Commission 24 months in advance of the deadline and submit an implementation plan laying down the steps they envisage to reach the postponed targets within a new time frame. Regarding the 2025 targets, 12 Member States, including Slovakia, have used this prerogative.

On 22 December 2023, Slovakia notified the Commission of its intention to postpone the attainment of the preparing municipal waste for reuse and recycling target established by the Waste Framework Directive for 2025. Attached to the notification, Slovakia submitted an implementation plan laying down the measures necessary to attain the target within a postponed time frame (i.e. 2030 instead of 2025). According to the implementation plan, the main measures Slovakia will put in place include landfilling and incineration fees and restrictions, the introduction of pay-as-you-throw schemes, and the setting up of EPR schemes.

In the *Waste Early Warning Report*, the Commission recommended that Member States accelerate their efforts to improve their recycling performance. The Commission is, on one hand, working together with the national authorities and stakeholders to speed up the implementation of measures necessary to meet the targets, including through dedicated financing. On the other hand, the Commission is pursuing enforcement actions against those Member States that, based on data submitted to the Commission, do not achieve the targets of the Waste Framework Directive ([20]), the Packaging and Packaging Waste Directive ([21]) and the Directive on Waste Electrical and Electronic Equipment ([22]).

Municipal waste

Slovakia generated 478 kg per capita of municipal waste in 2022, which is a significant increase compared with 2015 (Figure 5) but still slightly below the estimated EU-27 average of 513 kg per capita. This increase is mainly due to a significant increase in reported amounts going to material recycling and, to a lesser extent, composting and digestion. The increment observed is mainly due to changes in statistical reporting rather than an

([19]) European Environment Agency (EEA), *Early warning assessment related to the 2025 targets for municipal waste and packaging waste – Slovakia*, Copenhagen, 2022, https://www.eea.europa.eu/publications/many-eu-member-states/slovakia/view.

([20]) Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives, Directive - 2008/98 - EN - Waste framework directive - EUR-Lex.

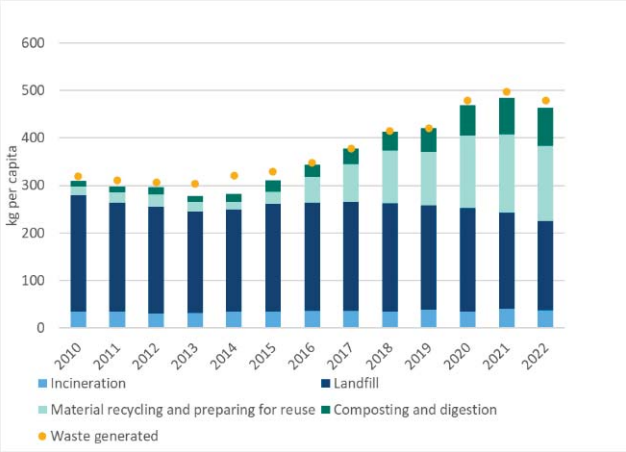
([21]) European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste (OJ L 365, 31/12/1994, p. 10–23), Directive - 94/62 - EN - EUR-Lex.

([22]) Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE) (OJ L 197, 24.7.2012, p. 38), Directive - 2012/19 - EN - EUR-Lex.

improvement in Slovakia's recycling performance ([23]). Several factors contributed to the strong increase since 2015, including a change in the registration of reporting on metals from households, the introduction of EPR and the introduction of a sorting rate for municipalities.

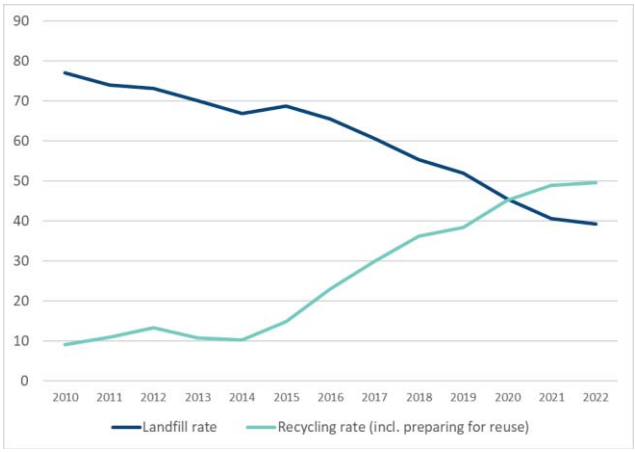
As of 2020, waste from restaurants and catering establishments, and not only waste from sorted municipal waste collections from households, but also waste from other sources that is similar in nature and composition to household waste, is counted as municipal waste in Slovakia. This change has resulted in an increase in the reported per capita production of municipal waste of approximately 9 % ([24]).

Figure 5: Municipal waste management and recycling (including preparation for reuse), 2010–2022



Source: Eurostat, 'Municipal waste by waste management operations', env_wasmun, accessed 22 October 2024, https://ec.europa.eu/eurostat/databrowser/view/ENV_WASMUN/default/table.

Figure 6: Recycling (including preparation for reuse) and landfill rates (%), 2010–2022



Source: Eurostat, 'Municipal waste by waste management operations', env_wasmun, accessed 22 October 2024, https://ec.europa.eu/eurostat/databrowser/view/ENV_WASMUN/default/table.

The preparing for reuse and recycling rate in Slovakia significantly increased from 23 % in 2016 to 50 % in 2022, which is very close to the estimated EU-27 average of 49 % in the same year (Figure 6). Both material recycling and composting and digestion contributed to this increase. The development is also heavily influenced by changes in reporting.

Slovakia has also reported data showing compliance with the preparing for reuse and recycling target of 55 % for 2025, as laid down in the Waste Framework Directive. The difference between these data, following the reporting obligation of the Waste Framework Directive, and the data shown in Figure 6 (voluntary reporting) is below one percentage point for the preparing for reuse and recycling rate in both 2021 and 2022. The 2022 data according to this reporting obligation are provisional and still awaiting validation by Eurostat.

The incineration rate remained quite stable during this time frame, standing at 8 % in 2022.

The landfill rate dropped significantly from 77 % in 2010 to 39 % in 2022 (Figure 6), and most recently the total amount of landfilled waste also decreased slightly.

An infringement procedure ([25]) against Slovakia is still ongoing concerning landfills that were open before 2004 and are currently out of operation but have still not been closed and rehabilitated as required by the Landfill Directive. This was also confirmed by the ruling of Court of Justice of the European Union. Slovakia should therefore

([23]) EEA, *Early warning assessment related to the 2025 targets for municipal and packaging waste – Slovakia*, Copenhagen, 2022, https://www.eea.europa.eu/publications/many-eu-member-states/slovakia/view.

([24]) Slovak Environment Agency, Comments provided during the Eionet review of the draft EEA briefing *Economic Instruments and Separate Collection – Key instruments to increase recycling*, 2023.

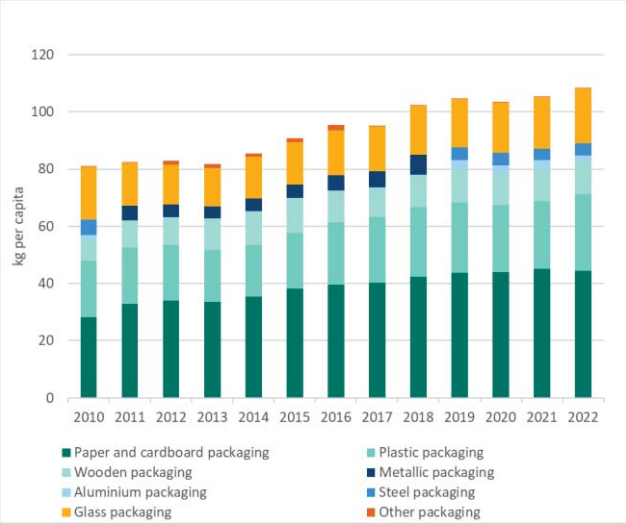
([25]) European Commission, 'Waste: Commission decides to refer Slovakia to court for failing to comply with EU rules on landfills', European Commission website, https://ec.europa.eu/commission/presscorner/detail/en/ip_23_164.

take the necessary measures to comply and protect environmental and human health. In addition, old environmental burdens (contaminated waste sites, which pose serious risks to human health and the environment, and which thus need to be remediated) are the subject of an infringement procedure ([26]) and require significant investments.

Packaging waste

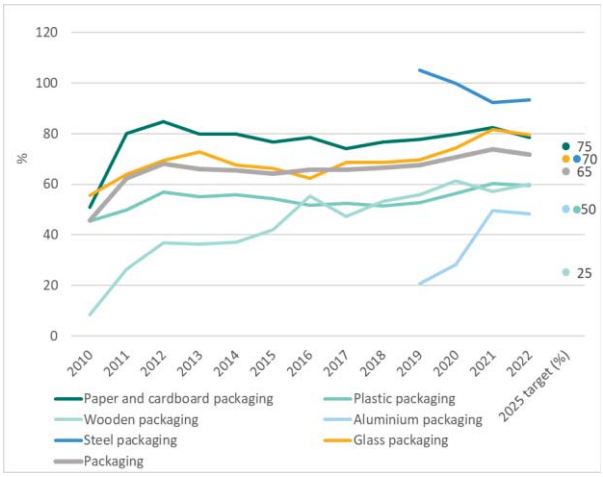
Slovakia's total packaging waste generation has significantly increased since 2010 (Figure 7). The country generated 108 kg per capita in 2022, which is nevertheless significantly below the estimated European average of 186 kg per capita in the same year ([27]).

Figure 7: Packaging waste generation, 2010–2022



Source: Eurostat, 'Packaging waste by waste management operations', env_waspac, last updated 23 October 2024, accessed 28 October 2024, https://ec.europa.eu/eurostat/databrowser/view/ENV_WASPAC__custom_842634/default/table?lang=en.

Figure 8: Packaging waste recycling rates (%), 2010–2022



Source: Eurostat, 'Packaging waste by waste management operations', env_waspac, last updated 23 October 2024, accessed 28 October 2024, https://ec.europa.eu/eurostat/databrowser/view/ENV_WASPAC__custom_842634/default/table?lang=en.

Slovakia's overall packaging waste recycling rate has remained nearly the same since 2012, reaching 72 % in 2022. The overall packaging waste recycling rate is mainly driven by paper and cardboard, along with glass packaging waste. This is because these fractions represent a high share of packaging waste generation, along with a high recycling rate. A similar trend to that of the overall packaging waste recycling rate can be seen for the separate packaging waste fractions, except for wooden and glass packaging, which recorded a more significant increase between 2012 and 2022 (Figure 8). Since 2020 it has been mandatory to report steel and aluminium packaging separately. The recycling rate of steel packaging waste exceeded the 2025 target in 2022, while the recycling rate of aluminium packaging waste was close to the target.

It should be noted that the recycling rates presented are not based on the new calculation rules, which present a few key differences. In addition, the amounts of packaging placed on the market in Slovakia may be under-reported, as no estimates are made to improve coverage due to, among other things, free riding.

Policies to encourage waste prevention

Waste management plans and waste prevention programmes are instrumental to the full implementation of 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

([26]) European Commission, 'July infringements package: Key decisions', European Commission website, https://ec.europa.eu/commission/presscorner/detail/en/inf_23_3445.

([27]) The EU average might have been influenced by not all Member States fully applying the reporting rules for packaging waste set out in Commission Implementing Decision (EU) 2019/665.

collection for certain waste streams, on recycling and on landfill targets).

In Slovakia, the Waste Act (No 79/2015) came into force in 2016 and has been amended several times since. The country's environmental strategy recognises waste as a key policy area and sets out targets and measures for improvement.

In 2021, Slovakia adopted the national waste management plan for 2021–2025 ([28]). The main objective of the plan is to divert waste away from landfill, especially municipal waste, by switching to more waste prevention, reuse, preparing for reuse, recycling, and supplementing this with energy recovery. Specific measures include increasing landfill taxes and a deposit return system for single-use beverage packaging, which entered into force in January 2022 ([29]). This national plan should be complemented by regional waste management plans, which are under development.

Slovakia's national waste prevention programme (NWPP) for 2019–2025 is a stand-alone programme, which was partly updated in the national waste management plan in 2021. The objective of the NWPP is to focus on preventing waste instead of material recovery. The priority waste streams for prevention are food waste, construction and demolition waste, hazardous waste, municipal waste, packaging, bulky waste, and other miscellaneous waste such as paper waste and waste from extractive industries ([30]). The NWPP defines prevention measures in a series of areas, aimed at reducing waste generation and improved circularity. Financial tools have been introduced, such as the Environmental Fund and Operational Programme Slovakia.

An evaluation of the previous NWPP is included in the current NWPP. This highlights the need for several legislative changes in order to change production and consumption behaviours.

Policies to encourage separate collection and recycling

Residual waste, biowaste and fractions falling under EPR for packaging (paper, cardboard, metals, composite materials and plastics) are usually collected via bring points from residential properties with multiple apartments, and door to door from individual properties. Glass waste is collected mostly via bring points.

Since 2023, all municipalities have provided a separate collection of biowaste, that is, biowaste is collected separately and is not mixed with other types of waste, or it can be sorted and recycled at source.

In Slovakia a pay-as-you-throw system is in place, but its design is decided by each municipality and it currently covers a small fraction of the population. Finally, there are mandatory deposit return schemes for aluminium beverage cans and plastic drink bottles, and for some glass drink bottles.

Policies to discourage landfilling or incineration

Slovakia has a landfill ban on sorted biodegradable waste from households and restaurants, and municipal garden waste, as well as biodegradable waste from retail wholesale and distribution, which has applied since 2023. However, according to a 2023 analysis aimed at assessing the available capacity for the treatment of mixed municipal waste, mixed municipal waste was allowed to continue to be landfilled without treatment. In this regard, an infringement procedure has been ongoing since 2021, as waste is being landfilled without ensuring the selection of different fractions of waste and the stabilisation of organic waste ([31]). In addition, Slovakia did not correctly transpose the pretreatment obligation into its national legislation. The introduction of this obligation has been repeatedly postponed, most recently until 2027.

Since 2016, Slovakia has applied a landfill tax (known as a fee) of between EUR 11 and EUR 30 per tonne of landfilled waste depending on the sorting level in the municipality. There is no tax on waste incineration.

Slovakia has moved in the right direction, as the preparing for reuse and recycling rates of municipal waste and total packaging waste have increased, and the landfill rate of municipal waste has decreased. Despite this progress, improvements in its performance are needed to reach the 2025 target of preparing for reuse and recycling 55 % of municipal waste and the 2035 target to reduce landfill to 10 % of generated municipal waste.

Slovakia has made some progress in terms of waste prevention; improving and extending the separate

([28]) https://minzp.sk/files/sekcia-enviromentalneho-hodnotenia-riadenia/odpady-a-obaly/registre-a-zoznamy/poh_sr_2021_2025_vestnik.pdf

([29]) EEA, *Early warning assessment related to the 2025 targets for municipal and packaging waste – Slovakia*, Copenhagen, 2023, https://www.eea.europa.eu/publications/many-eu-member-states/slovakia/view.

([30]) Ministry of the Environment, *Waste prevention programme of the Slovak Republic for the years 2019–2025*, 2019, https://www.minzp.sk/files/sekcia-enviromentalneho-hodnotenia-riadenia/odpady-a-obaly/registre-a-zoznamy/ppvo-sr-19-25.pdf.

([31]) European Commission, 'October infringements package: Key decisions', European Commission website, https://ec.europa.eu/commission/presscorner/detail/en/inf_21_5342.

collection of waste, including biowaste; improving the functioning of EPR systems, in line with the general minimum requirements; increasing landfill taxes to divert recyclable waste from landfill; and closing and rehabilitating non-compliant landfills. Slovakia has made no progress in ensuring that all landfilled waste has been subject to (pre)treatment. There is not enough information available to assess whether Slovakia has made progress in avoiding investment in potentially stranded assets like mechanical biological treatment or installations for (co-)incineration of mixed municipal waste.

2025 priority actions

- Invest in waste prevention measures to reduce the total amount of waste generated.
- Implement, harmonise and gradually increase landfill taxes to phase out landfilling of recyclable and recoverable waste.
- Increase reuse of products and scale up waste recycling infrastructure associated with the higher steps of the waste hierarchy. In particular, improve collection and increase treatment capacity for bio-waste.
- Complete the closure of non-compliant landfills.
- Improve municipal waste preparation for reuse and recycling.
- Expand waste treatment infrastructure associated with the higher levels of the waste hierarchy (in particular, increasing the treatment capacity for biowaste and supporting home composting), support the treatment of separately collected biowaste and establish a quality management system for compost/digestate from biowaste.
- Implement and expand the pay-as-you-throw scheme for businesses and households.
- Improve the data quality management system on packaging waste to present coherent and verifiable datasets.
- Ensure the achievement of the 2025 waste targets, following the recommendations made by the Commission in the early warning reports where applicable.

2. Biodiversity and natural capital

Global and EU biodiversity frameworks

Biological diversity and healthy ecosystems are critical for our societies, underpin our economies and well-being and are essential for climate change adaptation and mitigation. The Kunming–Montreal global biodiversity framework (GBF), adopted in December 2022, sets comprehensive and measurable targets to tackle biodiversity loss by 2030. To implement this global framework and integrate biodiversity considerations into national decision-making, the EU – as well as all Member States – had to submit national biodiversity strategies and action plans (NBSAPs), or to communicate national targets aligned with the global targets, by the end of 2024.

The EU biodiversity strategy for 2030 (BDS) aims to put EU biodiversity on a path to recovery by 2030. It sets quantified targets intended to protect and restore nature and manage ecosystems in a sustainable manner, as well as measures to enable implementation and commitments to support global biodiversity. A BDS actions tracker ([32]) and a dashboard of indicators ([33]) provide information on implementation progress.

The recently adopted EU Nature Restoration Regulation ([34]) is the first EU-wide, comprehensive law of its kind and a key instrument for the EU to deliver on the global biodiversity targets for 2030. It lays down an overarching objective at the EU level to put in place effective restoration measures on 20 % of EU land and sea by 2030 and for all ecosystems in need of restoration by 2050. To achieve this, it sets binding targets for Member States to restore and maintain ecosystems, as well as an effective implementation framework based on national restoration plans.

The BDS is the main instrument used by the EU to deliver on its obligation under the GBF. The Commission has submitted to the Convention on Biological Diversity its report on GBF-aligned EU targets that stem from the BDS and from other policy instruments under the European Green Deal.

Member States' NBSAPs need to provide coherent frameworks for national delivery on the global and EU 2030 biodiversity targets. In line with the global obligations, NBSAPs should also include a biodiversity financing plan and a capacity-building plan, based on needs assessments, as well as an overview of the national indicators used to measure progress.

Slovakia's 2030 NBSAP is currently in preparation. Slovakia has not yet submitted national targets to the Convention on Biological Diversity online reporting tool.

Slovakia's biodiversity is increasingly under pressure. A recent amendment of the Nature Conservation Act ([35]) lifted certain bans which were in force in protected areas, including Natura 2000 sites (concerning access with cars, bikes, three-wheelers and scooters), and reduced participation of the public in the administrative procedures. At the same time, restrictions in the functioning of the voluntary nature guard will significantly reduce guarding activities in protected areas and most likely lead to an increase in offences and criminal activity against nature. All these changes will also increase the disturbance of and thus negatively affect protected species occurring in these sites. Slovakia's RRP includes a component on climate adaptation and biodiversity, pursuant to which investments are coupled with reforms in landscape planning, nature protection and water management contributing to the climate adaptation. Examples of investments include the renaturation of watercourses or wetlands and afforestation of forest land with native tree species. Among the first results of the RRP was that Slovakia passed an act reforming the system of national parks. The act established separate administration bodies for the nine national parks and started the process of transferring state-owned land located within the national parks to the administration bodies. However, the functioning of the national park administration bodies suffered a setback following the dismissal and departure of many staff members, including directors, under the current government. The plan to buy

([32]) EU Biodiversity Strategy Actions Tracker (https://dopa.jrc.ec.europa.eu/kcbd/actions-tracker/).

([33]) EU Biodiversity Strategy Dashboard (https://dopa.jrc.ec.europa.eu/kcbd/EUBDS2030-dashboard/?version=1).

([34]) Regulation (EU) 2024/1991 of the European Parliament and of the Council of 24 June 2024 on nature restoration and amending Regulation (EU) 2022/869 (OJ L, 2024/1991, 29.7.2024); see also the Commission web page on the law (The EU Nature Restoration Law (europa.eu)).

([35]) 335/2024 Z.z. - Zákon, ktorým sa mení a dopĺňa zákon č. 543/2002 Z. z. o ochrane prírody a krajiny v znení neskorších predpisov a ktorým sa dopĺňa zákon č. 79/2015 Z. z. o odpadoch a o zmene a doplnení niektorých zákonov v znení neskorších predpisov.

privately owned land located within national parks so that it could be managed for conservation by their administration bodies, funded by the RRP, was also abandoned by the government.

Overall, sufficient funding for biodiversity is lacking, and a broader financing plan for biodiversity, including activities identified in the Natura 2000 prioritised action framework (PAF), is missing.

The EU aimed to allocate to biodiversity objectives at least 7.5 % of annual spending under the EU budget in 2024, rising to 10 % in 2026 and 2027.

For more details on biodiversity financing and investments for Slovakia, see Chapter 5.

2025 priority action

- Submit to the Convention on Biological Diversity an updated NBSAP or national targets following the adoption of the GBF.

Nature protection and restoration – Natura 2000

Natura 2000 ([36]), the largest coordinated network of protected areas in the world, is key to the achievement of the objectives set out 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 complete and coherent Natura 2000 network; (ii) the designation of sites of community importance (SCIs) as special areas of conservation (SACs) ([37]); and (iii) effective management of all Natura 2000 sites through the setting of site-specific conservation objectives and measures.

Setting up a complete and coherent network of Natura 2000 sites

The setting up of a complete and coherent network of Natura 2000 sites is a cornerstone of the EU's international commitments, under the BDS and GBF, to legally protect a minimum of 30 % of its land area and 30 % of its sea area.

Meeting these commitments requires the full implementation of Article 3 of the Habitats Directive. The Natura 2000 network should represent a complete and coherent ecological network composed of sites hosting natural habitat types and species of community interest. The Natura 2000 network enables the natural habitat types and the species' habitats concerned to be maintained or, where appropriate, restored to a favourable conservation status in their natural range.

Slovakia hosts 66 habitat types ([38]) and 195 species ([39]) covered by the Habitats Directive. The country also hosts populations of 83 bird taxa listed in the Birds Directive Annex I ([40]).

As shown in Figure 9, in 2023, 30 % of Slovakia was covered by Natura 2000 sites (EU coverage: 18.5 %). Special protection areas (SPAs) classified under the Birds Directive covered 26.7 % (EU coverage: 12.8 %) and SCIs designated under the Habitats Directive covered 12.8 % of Slovak territory (EU coverage: 14.3 %).

Considering both Natura 2000 and other nationally designated protected areas, Slovakia reports that it legally protects 40.5 % of its territory (EU-27 average: 26.1 %) ([41]).

Following an infringement procedure, Slovakia has included additional areas in the network and protected habitats and species in existing sites. Consequently, the SCI part of Natura 2000 is now complete.

([36]) Natura 2000 comprises sites of community importance (SCIs), designated pursuant to the Habitats Directive, as well as special protection areas (SPAs), classified pursuant to the Birds Directive. Numbers of protected areas in Figure 9 do not add up to the total of SCIs plus SPAs, because some SCIs and SPAs overlap. An SAC is an SCI designated by a Member State.

([37]) SCIs are designated pursuant to the Habitats Directive, whereas SPAs are designated pursuant to the Birds Directive. Figures of coverage do not add up because some SCIs and SPAs overlap.

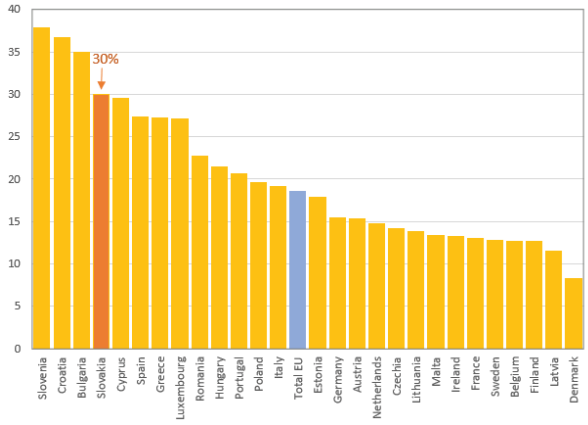
([38]) EEA, 'Number of habitats and species per Member State', Article 17 dashboard, Annex I total, 19 December 2019, https://www.eea.europa.eu/en/analysis/maps-and-charts/general-information-on-habitats-and-species-article-17-national-summary-dashboards-archived.

([39]) EEA, 'Number of habitats and species per Member State', Article 17 dashboard, 19 December 2019, https://www.eea.europa.eu/en/analysis/maps-and-charts/general-information-on-habitats-and-species-article-17-national-summary-dashboards-archived.

([40]) EEA, 'Number of bird species/populations per Member State', Article 12 dashboard, Annex I, last updated 11 May 2023, https://www.eea.europa.eu/en/analysis/maps-and-charts/general-information-on-bird-species-populations-article-12-national-summary-dashboards-archived. This counting only takes into account birds taxa for which information was requested.

([41]) Eurostat dataset env_bio4, terrestrial protected area percentage for 2022, March 2025, https://ec.europa.eu/eurostat/databrowser/view/env_bio4/default/table?lang=en.

Figure 9: Natura 2000 terrestrial protected area coverage per Member State (%), 2023



Source: EEA, 'Natura 2000 Barometer', 2023 data, accessed March 2025, https://www.eea.europa.eu/data-and-maps/dashboards/natura-2000-barometer.

Designating special areas of conservation and setting site-specific conservation objectives and measures

To ensure that SCIs contribute to the objectives of the Habitats Directive, Member States must designate them as SACs, setting site-specific conservation objectives based on the ecological needs of the species and habitats present on the sites. Such site-specific conservation should define attributes and targets that describe the habitats or species' condition as favourable or unfavourable, addressing key pressures and threats. Under Article 6 of the Habitats Directive Member States must establish and implement measures to achieve these objectives.

In 2023, Slovakia designated all its 644 SCIs as SACs in a single government act. It has also set site-specific conservation objectives for these sites and has committed itself to drafting the necessary conservation measures to ensure effective protection and restoration. This work is ongoing. The infringement procedure opened by the Commission against Slovakia in July 2019 ([42]) continued with the issuing of a reasoned opinion ([43]) and remains open.

EU financing can play a major role in the establishment of conservation objectives and measures. An integrated LIFE project (running until 2030) focuses on implementing Slovakia's current priority action framework. With a budget of over EUR 16 million, the project is meant to support conservation actions in various parts of Slovakia. These varied actions include close-to-nature forest management in the Muránska planina, introducing agroforestry systems in the Záhorie area, and managing peatlands in northern and central Slovakia.

Another integrated project, LIFE Living Rivers, aims to contribute to the implementation of the third river basin management plan. Running from 2023 to 2032, the project will also benefit nature by restoring degraded natural ecosystems and native fish populations as well as by improving management practices in water-dependent Natura 2000 sites.

In addition, Slovakia has a number of other LIFE Nature and Biodiversity projects. These include projects conserving dry grassland habitats, conserving the ground squirrel, the great bustard and the red-footed falcon, and developing best practices in butterfly conservation ([44])[45]

However, national co-funding previously provided by Slovakia for the operation of the projects LIFE Living Rivers, LIFE Steppe Birds and LIFE Metamorphosis was put on hold at the beginning of 2024, which effectively brought the implementation of these projects to a standstill. In October 2024, the Ministry of Environment decided to definitively refuse national co-funding for LIFE Steppe Birds and LIFE Metamorphosis, and to make national co-funding for LIFE Living Rivers conditional on the availability of sufficient funds in the state budget in 2025. These actions have seriously jeopardised the successful completion of these LIFE projects and undermine the compliance of Slovakia with key obligations of the nature legislation.

Recovery of species

One objective set by the BDS is that, by 2030, there should be no further deterioration in conservation trends or the status of any protected species. The BDS also states that Member States should ensure that at least 30 % of species not currently in favourable conservation status achieve that status or show progress towards doing so (e.g. by exhibiting positive population dynamics or stable or increasing range and habitat size), by 2030. According to the European Environment Agency (EEA), based on reporting required under Article 17 of the Habitats

([42]) European Commission, 'July infringements package: Key decisions', European Commission website, https://ec.europa.eu/commission/presscorner/detail/en/INF_19_4251.

([43]) European Commission, 'February infringements package: Key decisions', European Commission website, https://ec.europa.eu/commission/presscorner/detail/en/inf_22_601.

([44]) European Commission, 'LIFE programme in Slovakia', 2023, https://cinea.ec.europa.eu/system/files/2023-03/Slovakia_Update_EN_Final_March23.pdf.

Directive, a quarter of species in the EU were of good conservation status as of 2018 ([46]).

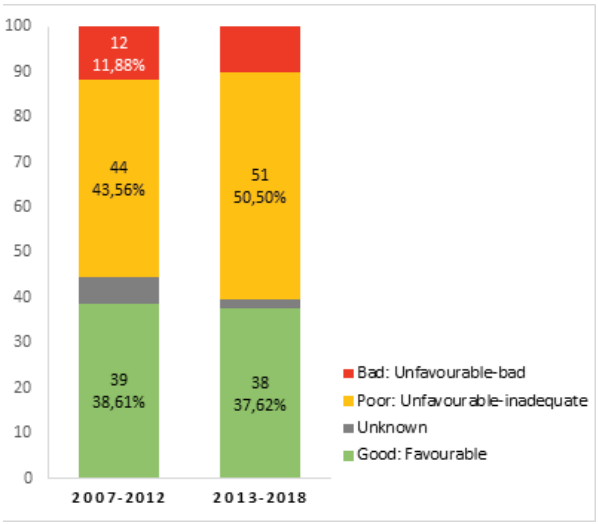
One of the primary objectives of the Habitats Directive is the maintenance of or restoration to favourable conservation status of all species of community interest. Moreover, the Birds Directive also aims to ensure that all wild birds in the EU enjoy a secure status. To achieve these objectives, it will be necessary to address key pressures and threats. The Birds Directive and the Habitats Directive lay down a framework of species protection rules and rules on the conservation of habitats and species in order to combat these threats.

According to the report submitted by Slovakia on the conservation status of habitats and species covered by Article 17 of the Habitats Directive for the period 2013–2018 ([47]), the share of assessments for habitats in good conservation status was nearly the same as in the previous reporting period, 2007–2012. The share of species in good conservation status increased from 20 % to 23 % between the two reporting periods ([48]). As far as birds are concerned, about 58 % of the breeding species showed short-term increasing or stable population trends, while the figure for wintering species was 67 %.

The share of habitats in bad conservation status decreased slightly to 10 %, while the share for species increased to 22 %. For most habitats and species, Slovakia also resolved the unknown classifications between the two reporting periods.

Under Article 17 of the Habitats Directive, Member States are required to report on the conservation status of habitats and species every six years. The current reporting cycle, covering 2019 to 2024, is due for submission in July 2025. Figures 10 and 11 show the latest available conservation status data.

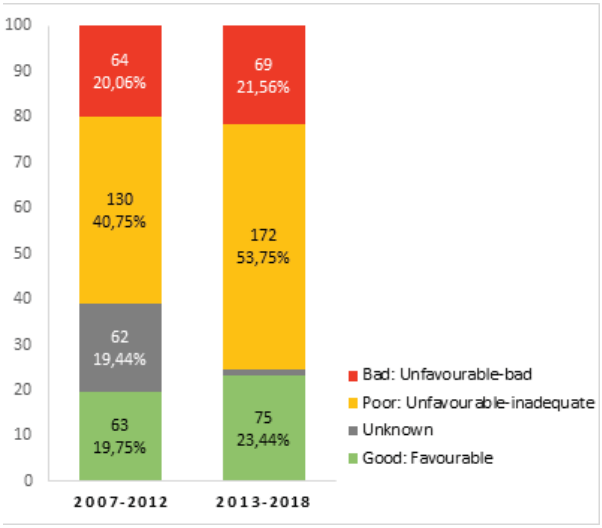
Figure 10: Assessments of conservation status of habitats for the 2007–2012 and 2013–2018 reporting periods



NB: The values shown for 2007–2012 and 2013–2018 are not necessarily directly comparable because changes in area conservation status in a Member State may result from changes to methods or use of better data, rather than reflecting genuine changes.

Source: EEA, 'Conservation status and trends of habitats and species', 19 December 2019, accessed December 2021, https://www.eea.europa.eu/themes/biodiversity/state-of-nature-in-the-eu/article-17-national-summary-dashboards/conservation-status-and-trends.

Figure 11: Assessments of conservation status of species for the 2007–2012 and 2013–2018 reporting periods



NB: The values shown for 2007–2012 and 2013–2018 are not necessarily directly comparable because changes in area conservation status in a

([46]) EEA, *State of Nature in the EU: Results from reporting under the Nature Directives 2013–2018*, Publications Office of the European Union, Luxembourg, 2020.

([47]) Černecký, J., Čuláková, J., Ďuricová, V. et al., *Správa o stave biotopov a druhov európskeho významu za obdobie rokov 2013 – 2018 v Slovenskej republike*, Banská Bystrica, ŠOP SR, 2020, https://www.sopsr.sk/natura/dokumenty/Monografia_reporting_art17_2013_2018.pdf.

([48]) EEA, *State of Nature Report*, 2021.

Member State may result from changes to methods or use of better data, rather than reflecting genuine changes.

Source: EEA, 'Conservation status and trends of habitats and species', 19 December 2019, accessed December 2021, https://www.eea.europa.eu/themes/biodiversity/state-of-nature-in-the-eu/article-17-national-summary-dashboards/conservation-status-and-trends.

Slovakia has taken the first steps ([49]) to address specific problems with sustainable forest management in protected areas. Slovak forests in Natura 2000 sites are facing high levels of logging, especially sanitary logging in reaction to forest disturbances such as bark beetle infestations or storm damage. Article 6(3) of the Habitats Directive requires that plans and projects not directly connected with or necessary to the management of a Natura 2000 site but likely to have a significant impact thereon undergo an appropriate assessment of their effects on the site before their implementation. According to the Commission, Slovak legislation still does not ensure that sanitary logging activities, which might have a significant impact on Natura 2000 sites, undergo these assessments. At the same time, forest management plans, which did not undergo such assessments in the past, are still in force. Therefore, in July 2020, the Commission decided to refer Slovakia to the Court of Justice of the European Union over failure to assess the impact of sanitary logging on Natura 2000 sites ([50]).

The infringement case also addresses the failure to take measures for the protection of a bird species in breach of Article 6(2) of the Habitats Directive concerning the need to avoid habitat deterioration and disturbance of a protected species. Since Slovakia joined the EU in 2004, the population of the capercaillie has decreased by half in the 12 SPAs classified for its protection under the Birds Directive. The main reason for this large decline is the disappearance of suitable habitats due to logging.

In June 2022, the Court of Justice of the European Union confirmed the position of the Commission ([51]) on all the above issues, and Slovakia needs to take steps to ensure compliance. So far, the implementation of measures to comply with the court ruling is slow, and only limited progress has been achieved by Slovakia.

As shown in Figures 10 and 11 on the conservation status of habitats and species, there were no major changes between the two reporting periods. Changes in status occurred mainly due to improved knowledge based on an established monitoring system and the redistribution of previously unknown status; the share of those with an unknown status fell to almost zero. The share of species with a bad conservation status increased, while that status for habitats slightly decreased between the two reporting periods. At the same time, the share of habitats with good conservation status hardly changed and the share of species with the same status increased. Natural processes, agriculture and alien species were the main pressures for habitats. Agriculture, the development, construction and use of infrastructure, urban development and natural processes were the most significant pressures for species.

Slovakia has made some progress in implementing the priority actions set out in the 2022 EIR. In 2023, Slovakia completed the SCI part of its Natura 2000 network and drafted conservation objectives for its sites. It also began work on establishing conservation measures for its sites, which will continue in the coming years. However, these measures were carried out only to a limited degree. Biodiversity considerations were to some degree integrated into its common agricultural policy (CAP) strategic plan (SP), which also includes an eco-scheme with biobelts to support bird and insect life in agricultural landscapes.

2025 priority actions

- Finalise the establishment of site-specific conservation objectives and measures for all Natura 2000 sites (including by adopting their management plans) and ensure their effective implementation.
- Strengthen the integration of biodiversity actions into other policies (e.g. on energy, agriculture, fisheries, forestry, urban and infrastructure planning and sustainable tourism) and promote communication between stakeholders.
- Reinforce action for habitats and species with unfavourable conservation status through, for example, restoration measures, increased connectivity, better policy coordination and integration, and increased funding.

([49]) Amended legislation entered into force in January 2022 strengthening the role of the national parks administration bodies (https://www.autora.sk/zz/2002/543/).

([50]) European Commission, 'Nature: Commission decides to refer Slovakia to the Court of Justice of the EU over failure to assess the impact of sanitary logging on Natura 2000 sites and failure to take measures for the protection of a bird species', European Commission website, https://ec.europa.eu/commission/presscorner/detail/en/ip_20_1232. https://ec.europa.eu/commission/presscorner/detail/EN/IP_20_1232

([51]) Court of Justice of the European Union, 'Protection of the capercaillie (*Tetrao urogallus*) and the Natura 2000 areas hosting the habitat of that wild bird: The court finds that Slovakia has infringed the Habitats Directive and the Birds Directive', Court of Justice of the European Union website, https://curia.europa.eu/jcms/upload/docs/application/pdf/2022-06/cp220107en.pdf.

Recovery of ecosystems

Agricultural ecosystems

The BDS works alongside the common agricultural policy (CAP) to support the transition to sustainable agriculture.

The strategy has set five common agriculture-related targets for 2030, namely to:

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

The "Vision for agriculture and food" ([52]), adopted by the European Commission in February 2025, sets a roadmap to an agri-food system that is attractive, competitive, sustainable and fair for current and future generations. To ensure a sustainable future for EU agriculture, it is crucial that these four priority areas are pursued together, and that public and private support are adequately targeted toward this objective.

The CAP and national CAP SPs are key instruments to facilitate and strengthen the efforts of European farmers to protect biodiversity and the environment at large. The Commission approved Member States' CAP SPs in 2022 for the programming period 2023–2027. The CAP is the largest source of funding for the implementation of EU environment policy, including biodiversity. SPs should continue playing a key role in the protection of soil, water, air quality and biodiversity.

While certain CAP result indicators focus on interventions favouring sustainable agriculture practices that regenerate ecosystems, the impact of these measures is difficult to assess. The uptake of eco-schemes is voluntary for farmers.

The utilised agricultural area in Slovakia increased from 1 927 450 ha in 2012 to 1 928 510 ha in 2013, and decreased to 1 849 190 ha in 2022 ([53]).

Landscape features are small fragments of non-productive and typically, but not exclusively, semi-natural vegetation present in or adjacent to agricultural land. They provide ecosystem services and support for biodiversity. The indicator 'share of agricultural land covered with landscape features' is the ratio between the area covered by landscape features and the area covered by agricultural land. Based on the Land Use/Cover Area Frame Survey landscape features estimates, the share of agricultural land covered by non-productive landscape features in Slovakia is 4 %, below the EU average. At the EU level, landscape features cover 5.6 % of agricultural land.

In 2024, the CAP basic regulations were amended ([54]) to simplify certain rules, including, inter alia, the standards for good agricultural and environmental condition of land. These changes removed the obligation for farmers benefiting from CAP area-related support to have a minimum share of 3–4 % of non-productive area or landscape features in their farms. The amended regulations do not remove the obligation under the good agricultural and environmental condition of land standard number 8 to retain existing landscape features, and set out an obligation for Member States to establish and provide support for eco-schemes covering practices for the maintenance of non-productive areas, such as land lying fallow, and for the establishment of new landscape features, on arable land.

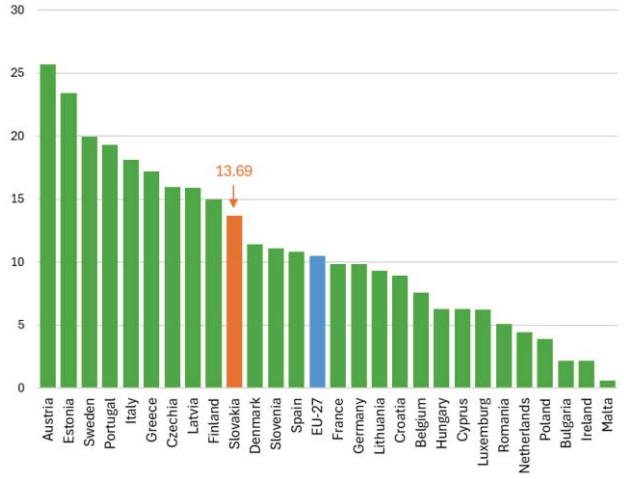
The recently adopted Nature Restoration Regulation ([55]) focuses on the restoration of agricultural ecosystems and requires Member States to put in place measures that aim to achieve an increasing trend at the national level in at least two out of three indicators for agricultural ecosystems ([56]). One of these indicators is the 'share of agricultural land with high-diversity landscape features'.

Organic farming practices are highly beneficial to biodiversity. As shown in Figure 12, it is estimated that 13.69 % of Slovakia's land area is used for organic farming.

([52]) https://agriculture.ec.europa.eu/overview-vision-agriculture-food/vision-agriculture-and-food_en.
([53]) Eurostat, 'Utilised agricultural area by categories', tag00025, accessed 5 December 2024, https://ec.europa.eu/eurostat/databrowser/view/tag00025/default/table?lang=en.
([54]) Regulation (EU) 2024/1468 of the European Parliament and of the Council of 14 May 2024 amending Regulations (EU) 2021/2115 and (EU) 2021/2116 as regards good agricultural and environmental condition standards, schemes for climate, environment and animal welfare, amendment of the CAP strategic plans, review of the CAP strategic plans and exemptions from controls and penalties (OJ L, 2024/1468, 24.5.2024), http://data.europa.eu/eli/reg/2024/1468/oj.
([55]) Regulation (EU) 2024/1991 of the European Parliament and of the Council of 24 June 2024 on nature restoration and amending Regulation (EU) 2022/869 (OJ L, 2024/1991, 29.7.2024), http://data.europa.eu/eli/reg/2024/1991/oj.
([56]) The three indicators are 'grassland butterfly index', 'stock of organic carbon in cropland mineral soils' and 'share of agricultural land with high-diversity landscape features'.

This is above the EU average of 10.50 % ([57]). Slovakia is currently contributing above average to achieving the target of 25 % of the EU's agricultural land being used for organic farming by 2030.

Figure 12: Share of total utilised agricultural area occupied by organic farming per Member State (%), 2022



Source: Eurostat, 'Area under organic farming', sdg_02_40, accessed 5 December 2024, https://ec.europa.eu/eurostat/databrowser/view/sdg_02_40/default/table?lang=en.

In the 2022 EIR, Slovakia received priority actions to reduce pressure from the agricultural sector on natural resources, in particular via land management practices to improve water retention in soils, and to improve incentives for farmers to better protect biodiversity. Slovakia has made some progress. Measures under its CAP SP include allocating significant EU funds to eco-schemes and agri-environmental measures aimed at improving soil structure, reducing pesticides and promoting organic farming. Additionally, there are financial incentives to support biodiversity in areas facing natural constraints and Natura 2000 sites. However, challenges remain, as biodiversity loss due to agricultural intensification and climate impacts continues to be a concern.

2025 priority action

- Implement eco-schemes and agri-environmental measures and practices to address the environmental needs of Slovakia.

Soil ecosystems

Soil is an essential, finite and extremely fragile resource. Its increasing degradation poses a threat to EU food security and climate resilience, adaptation and mitigation.

The EU soil strategy, adopted in November 2021, aims to support soil protection, sustainable soil management and the restoration of degraded soils to achieve the Green Deal objectives as well as land degradation neutrality by 2030.

This entails:

— preventing further soil degradation;
— making sustainable soil management the new normal;
— taking action for ecosystem restoration.

The proposed directive on soil monitoring and resilience ([58]) aims to introduce the first comprehensive legislation on the protection of all soils in the EU. Should the directive be adopted, Member States will have to transpose it into national legislation and implement it, starting with putting in place the governance systems and a sound monitoring framework building on existing national soil monitoring frameworks. The objective of the proposed directive is to provide better and more comparable soil health data with the view of attaining healthy soils by 2050.

Degradation of soil ecosystems encompasses several aspects. The proposed directive requires Member States to assess soil health according to a set of common indicators and to define the necessary regeneration measures. The area of soil that is sealed is an important factor in monitoring land-use change and represents an important pressure on nature and biodiversity. Other soil issues related to land degradation are soil erosion, soil compaction, loss of soil organic carbon, soil contamination, soil salinisation and the presence in soil of nitrogen and phosphorus in excess. The impact assessment accompanying the proposal, which builds on the data available in the EU Soil Observatory, points to the following soil degradation issues in Slovakia ([59]).

([57]) This is based on the latest available information from Eurostat, which is currently under review; European Commission, *Agriculture biologique au sein de l'Union Européenne*, factsheet, Brussels, 2024, https://agriculture.ec.europa.eu/document/download/c67458ed-ec50-4762-ae68-341763ab93c2_fr?filename=factsheet-organic-farming_fr.pdf&prefLang=en.

([58]) Proposal for a directive of the European Parliament and of the Council on soil monitoring and resilience (Soil Monitoring Law), COM(2023) 416 final of 5 July 2023, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52023PC0416.

([59]) Commission staff working document – Impact assessment report: Annexes – Accompanying the proposal for a directive of the European Parliament and of the Council on soil monitoring and resilience (Soil Monitoring Law), SWD(2023) 417 final of 5 July 2023, https://environment.ec.europa.eu/system/files/2023-07/IMPACT ASSESSMENT REPORT ANNEXES SWD 2023 417 part4.pdf.https://environment.ec.europa.eu/system/files/2023-07/IMPACT ASSESSMENT REPORT ANNEXES SWD 2023 417 part4.pdf

The greatest contributor to Slovakia's unhealthy soils is loss of soil organic carbon in mineral soils ([60]), which affects 23 % of the land and 68 % of cropland and grassland areas. Unsustainable soil erosion by water, wind, tillage and harvest also impacts 22 % of the national territory and 62 % of cropland areas.

Grasslands

Grasslands are among the most diverse ecosystems in the EU; they can contain as many as 80 different plant species per square metre and are home to a large variety of animals, ranging from small insects, birds and rodents to large herbivores. Grasslands are essential for agriculture and livestock herding. Natural grasslands also play an important role in storing carbon. However, changes in agricultural practices and land uses have caused grasslands to disappear at an alarming rate, making them one of Europe's most threatened ecosystems.

Slovakia protects 15 grassland habitat types listed in Annex I to the Habitats Directive. Of these, only three have a favourable conservation status in at least one of the country's two biogeographical regions. Abandonment of grassland management, conversion to agricultural land and forest, and intensive grazing are some of the main threats to Slovakia's grasslands.

Wetlands/peatlands

Wetlands act as water sources and purifiers; they are the planet's greatest natural carbon stores and they are crucial to agriculture and fisheries. Peatlands are a special type of wetland dominated by peat-forming plants such as *Sphagnum* mosses. Nearly all peatlands in the EU are habitat types listed in Annex I to the Habitats Directive. Drained peatlands under intensive agricultural use constitute only 3 % of the EU's utilised agricultural area. At the same time, they are responsible for 25 % of GHG emissions from the EU's agricultural sector. Restoring peatlands brings multiple benefits, as peatlands improve water retention and quality, store carbon, reduce GHG emissions and increase biodiversity.

Slovakia protects six habitat types among bogs, mires and fens. The latest data show that none of the six habitat types in this group has a favourable conservation status. Natural succession, accumulation of organic material, the modification of hydrological flow, and abiotic natural processes are the biggest threats to these habitats.

Forest ecosystems

Forests are important carbon sinks, and conserving them is vital if the EU is to achieve climate neutrality by 2050. The EU forest strategy for 2030, adopted in July 2021, is a plan of actions to promote the many services that forests provide. Its key objective is to ensure healthy, diverse and resilient EU forests that contribute significantly to the achievement of the EU's biodiversity and climate ambitions. About 27 % of the forest area in the EU is covered by habitat types listed in Annex I to the Habitats Directive. Moreover, forests host several species protected under the Birds and Habitats Directives, including those for which there is a requirement to designate Natura 2000 sites and to protect breeding sites and resting places.

Several Commission guidelines on forestry management were published in 2023. They covered biodiversity-friendly afforestation, reforestation and tree planting; closer-to-nature forest management; and defining, mapping, monitoring and strictly protecting primary and old-growth forests. Further guidance on payment schemes for ecosystems services has also been published.

In 2023, the Commission proposed a new forest monitoring law ([61]) that aims to create a comprehensive forest knowledge base, address information gaps and enable a better response to growing pressures on forests.

Assessments show that, of the 27 % of EU forest area protected under the Habitats Directive, less than 15 % has favourable conservation status ([62]). The share of forested areas in the EU with a bad conservation status increased from 27 % in 2015 to 31 % in 2018.

In Slovakia, forests covered 40.1 % of the territory in 2020 ([63]); however, only a third of assessments show a

([60]) De Rosa, D., Ballabio, C., Lugato, E. et al., 'Soil organic carbon stocks in European croplands and grasslands: How much have we lost in the past decade?', *Global Change Biology*, Vol. 30, No 1, 2023, e16992, https://doi.org/10.1111/gcb.16992.

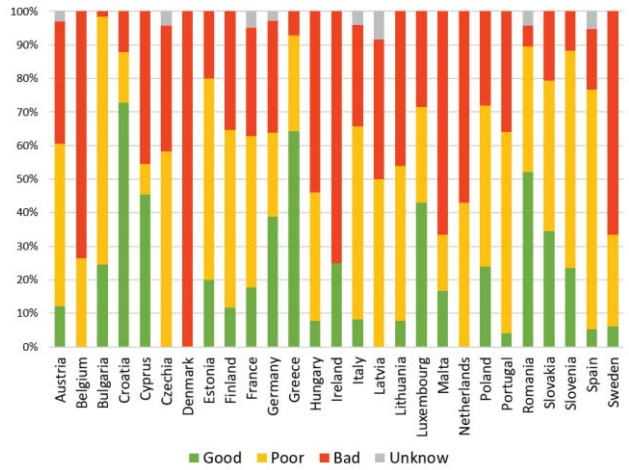
([61]) Proposal for a Regulation of the European Parliament and of the Council on a monitoring framework for resilient European forests, COM(2023)728, 22 November 2023, https://ec.europa.eu/transparency/documents-register/detail?ref=COM(2023)728&lang=en

([62]) EEA, *State of Nature in the EU: Results from reporting under the Nature Directives 2013–2018*, Publications Office of the European Union, Luxembourg, 2020, https://www.eea.europa.eu/publications/state-of-nature-in-the-eu-2020.

([63]) EEA, forest information system for Europe, 'Countries – FISE country factsheets', forest information system for Europe website, https://forest.eea.europa.eu/countries.

good conservation status ([64]).

Figure 13: Conservation status of forests protected under the Habitats Directive per Member State (% of assessments), 2013–2018



Source: Commission staff working document – New EU forest strategy for 2030, SWD(2021) 652 final of 16 July 2021, p. 24, eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021SC0652.

Among forest disturbances contributing to loss of forest integrity and related biodiversity loss, wildfires constitute a particular cause for concern. In 2022, the EU saw a record number (2 700) of wildfires affecting more than 30 ha, which led to the destruction of 785 605 ha of forest, the second highest annual figure recorded. Recent years have also witnessed the occurrence of widespread uncontrollable fires (so-called megafires), which are associated with loss of life and an enormous cost in terms of damage to the environment, businesses and society (over EUR 2 billion annually) and carbon dioxide (CO_2) emissions. Megafires are practically beyond suppression capacity and can be prevented only by an integrated risk management approach. Wildfires prevention is also essential to preserve resources for the bioeconomy.

The EU Timber Regulation (EUTR) ([65]) prohibits the placing on the EU market of illegally harvested timber. According to the EUTR, Member States' competent authorities must conduct regular checks on operators and traders and apply penalties for non-compliance.

On 29 June 2023, the Regulation on Deforestation-free Products (EUDR) ([66]) entered into force ([67]). The regulation seeks to guarantee that products in the EU that are made using any of seven listed commodities have no links to deforestation. The EUDR repeals the EUTR.

In the 2022 EIR, Slovakia received priority actions to improve incentives for foresters to better protect forests and biodiversity; to ensure sustainable forest management through effective planning, taking into account ecosystem services provided by forests; and to prevent the deterioration of Natura 2000 sites, including by ensuring that forest management plans are assessed in accordance with EU law. As Slovakia changed its legislation in response to the infringement proceedings ([68]), new forest management plans are currently generally subject to assessment in accordance with EU law, although problems remain with the assessment of salvage logging.

2025 priority action

- Improve the conservation status of forests by promoting sustainable forest management and ensuring compliance with the Habitats Directive before granting/renewing permits for forest logging.

Prevention and management of invasive alien species

Invasive alien species (IAS) are a major cause of biodiversity loss in the EU. Besides inflicting direct and indirect damage on nature and the economy, some IAS also carry and spread infectious diseases, posing a threat to humans and wildlife. Regulation (EU) No 1143/2014 (the IAS Regulation) aims to prevent, minimise and mitigate the adverse impacts of IAS on biodiversity. It focuses action on a list of IAS of EU concern (the 'Union list'), which is regularly updated ([69]).

([64]) European Commission: Joint Research Centre, *Mapping and assessment of primary and old-growth forests in Europe*, Publications Office of the European Union, Luxembourg, 2021, p. 13, https://publications.jrc.ec.europa.eu/repository/handle/JRC124671.

([65]) Regulation (EU) No 995/2010 of the European Parliament and of the Council of 20 October 2010 laying down the obligations of operators who place timber and timber products on the market (OJ L 295, 12.11.2010, p. 23), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32010R0995.

([66]) European Commission, 'Regulation on Deforestation-free Products', European Commission website, https://environment.ec.europa.eu/topics/forests/deforestation/regulation-deforestation-free-products_en.

([67]) The law will apply to large and medium-sized companies starting on December 30, 2025, and to micro and small enterprises starting on June 30, 2026.

([68]) Court of Justice of the European Union, 'Protection of the capercaillie (*Tetrao urogallus*) and the Natura 2000 areas hosting the habitat of that wild bird: The court finds that Slovakia has infringed the Habitats Directive and the Birds Directive', Court of Justice of the European Union website, https://curia.europa.eu/jcms/upload/docs/application/pdf/2022-06/cp220107en.pdf.

([69]) Commission Implementing Regulation (EU) 2016/1141 of 13 July 2016 adopting a list of invasive alien species of Union concern pursuant to Regulation (EU) No 1143/2014 of the European Parliament and of the Council (OJ L 189, 14.7.2016, p. 4), as amended by Commission Implementing Regulations (EU)

The third update of the Union list ([70]) entered into force on 2 August 2022. The fourth update is in preparation.

The IAS Regulation ([71]) currently lists 88 species subject to restrictions on keeping, importing, selling, breeding, growing and releasing into the environment. Member States are required to take measures to (i) prevent the introduction of IAS, (ii) ensure early detection and rapid eradication of IAS and (iii) manage species that are already widespread on their territory.

This aligns with target 6 of the GBF to reduce the introduction of IAS by at least 50 % by 2030 and minimise their impact.

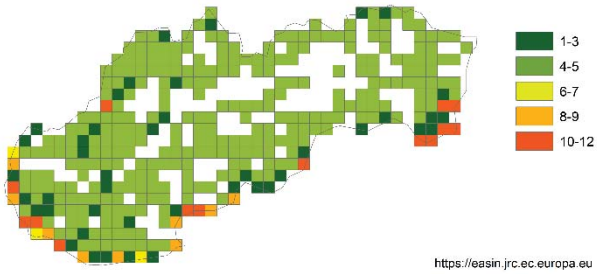
Preventing the introduction and spread of IAS, and managing them, including through eradication and control, can result in a substantial cost saving. Studies estimate that the total cost of IAS in Europe (damages and management) amounted to EUR 116.61 billion between 1960 and 2020 ([72]). More recent studies have put this cost at USD 28 billion per year in the EU, increasing to USD 148.2 billion by 2040 ([73]), and at USD 423 billion annually at the global level ([74]).

The total number of IAS of Union concern in Slovakia is 28.

This includes 20 species recorded in the 2022 EIR and 8 new additions. Of these new additions, 4 were already on the Union concern list in 2021, and 4 were added later under Commission Implementing Regulation (EU) 2022/1203.

The spread of IAS of Union concern can be seen in Figure 14.

Figure 14: Number of IAS of EU concern, based on available georeferenced information for Slovakia, 2024



In the 2022 EIR, Slovakia received a priority action to ensure compliance with the IAS Regulation. Slovakia has since ensured compliance, and the related infringement proceeding was closed.

2025 priority actions

- Step up implementation of the IAS Regulation, including with regard to enforcement and the capacity of inspection authorities.
- Ratify the International Convention for the Control and Management of Ships' Ballast Water and Sediments of 2004 (BWM Convention).

Ecosystem assessment and accounting

The BDS calls on Member States to better integrate biodiversity considerations into public and business decision-making at all levels and to develop natural capital accounting.

2017/1263, (EU) 2019/1262 and (EU) 2022/1203, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02016R1141-20220802&from=EN.

([70]) Commission Implementing Regulation (EU) 2022/1203 of 12 July 2022 amending Implementing Regulation (EU) 2016/1141 to update the list of invasive alien species of Union concern (OJ L 186, 13.7.2022, p. 10), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32022R1203.

([71]) 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 (OJ L 317, 4.11.2014, p. 35).

([72]) Haubrock, P. J., Turbelin, A. J., Cuthbert, R. N. et al., 'Economic costs of invasive alien species across Europe', *NeoBiota*, Vol. 63, 2021, pp. 153–190.

([73]) Henry, M., Leung, B., Cuthbert, R. N. et al., 'Unveiling the hidden economic toll of biological invasions in the European Union', *Environmental Sciences Europe*, Vol. 35, No 1, 2023, p. 43.

([74]) IPBES (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services), *Summary for Policymakers – Invasive alien species assessment*, Bonn, 2023, https://www.ipbes.net/document-library-catalogue/summary-policymakers-invasive-alien-species-assessment.

Similarly, target 14 of the GBF ([75]) aims to ensure the full integration of biodiversity and its multiple values into policy and planning and, as appropriate, national accounting. This requires effective and coherent biodiversity observation and reporting on ecosystem condition in the EU ([76]).

The amended Regulation (EU) No 691/2011 on European environmental economic accounts ([77]) introduces new requirements for Member States to report on the condition of ecosystems, including urban ecosystems, croplands, grasslands, forest and woodland, coastal beaches, dunes and wetlands. Data reported by the Member States will feed into the second European ecosystem assessment, due in 2027, and can also be used to support policy decisions.

An ecosystem assessment is an analysis of the condition of ecosystems and the pressures acting on them, as well as the benefits that they provide to people, either directly or indirectly through the economy.

An increasing number of platforms, networks and communities of practice involve businesses in protecting biodiversity, including the EU Business & Biodiversity Platform ([78]). These platforms and communities are key tools for promoting and facilitating natural capital assessments among businesses and financial services providers.

Natural capital assessments help private businesses to better understand both the negative and positive impacts that they have on nature, and to appreciate how nature contributes to their success. Such understanding contributes to the implementation of the EU's BDS.

There is still no Slovakian business network member of the EU Business & Biodiversity Platform.

In the 2022 EIR report, Slovakia received a priority action to continue supporting the mapping and assessment of ecosystems and their services, and ecosystem accounting development, through appropriate indicators for integrating ecosystem extent, condition and services (including some monetary values) into national accounts; and to continue supporting the development of national business and biodiversity platforms, including natural capital accounting systems, to monitor and value the impact of business on biodiversity. No progress has been recorded on these actions.

2025 priority action

- Support the development of the national business and biodiversity network.

([75]) Decision 15/4 adopted by the Conference of the Parties to the Convention on Biological Diversity: Kunming–Montreal global biodiversity framework (https://www.cbd.int/doc/decisions/cop-15/cop-15-dec-04-en.pdf).

([76]) European Commission: Joint Research Centre and EEA, *EU Ecosystem Assessment – Summary for policymakers*, Publications Office of the European Union, Luxembourg, 2021, https://op.europa.eu/en/publication-detail/-/publication/81ff1498-b91d-11eb-8aca-01aa75ed71a1/language-en.

([77]) Proposal for a regulation of the European Parliament and of the Council amending Regulation (EU) No 691/2011 as regards introducing new environmental economic accounts modules, COM(2022) 329 final of 11 July 2022, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2022:329:FIN.

([78]) The EU Business & Biodiversity Platform (https://green-business.ec.europa.eu/business-and-biodiversity_en) aims to promote the business case for biodiversity to businesses and financial institutions through workshops, seminars, reports and a cross-media communication strategy.

3. Zero pollution

Clean air

EU clean air policies and legislation have successfully reduced emissions of key air pollutants and significantly improved air quality, which is now moving towards the levels recommended by the World Health Organization (WHO). This has resulted in clear health benefits and reduced adverse impacts on ecosystems and biodiversity. However, to achieve the WHO-recommended levels, more efforts are needed, including full compliance with EU legislation. To guide these efforts, the EU zero pollution action plan sets targets for 2030 relative to 2005. These 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 policies ([79]). These set health-based EU air quality standards ([80]) and stipulate Member States' national emission reduction commitments ([81]) for several air pollutants.

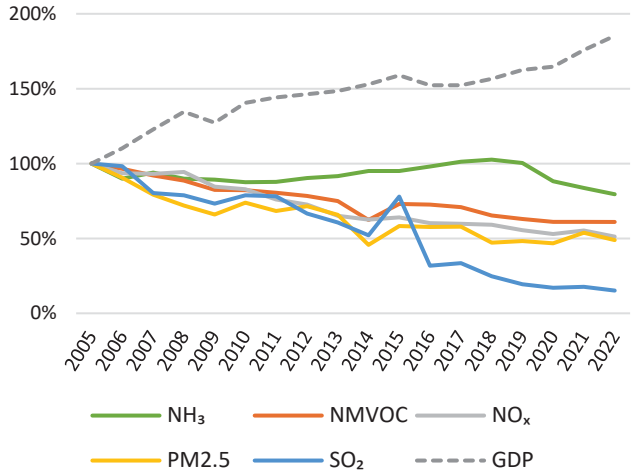
The air quality in Slovakia continues to give cause for concern in some parts of its territory.

The latest available annual estimates (for 2022) by the EEA ([82]) for Slovakia attribute 3 700 deaths each year (or 41 400 years of life lost (YLL)) to fine particulate matter ($PM_{2.5}$) ([83]); 260 deaths each year (or 2 900 YLL) to nitrogen dioxide (NO_2) ([84]); and 700 deaths each year (or 7 800 YLL) to ozone ([85]).

The emissions of several air pollutants have decreased significantly in Slovakia since 2005, while GDP growth has continued (see Figure 15). According to the inventories submitted under Article 10(2) of the National Emission Reduction Commitments Directive (NECD) ([86]) in 2024, Slovakia has met its emission reduction commitments for 2020–2029 for air pollutants nitrogen oxides (NO_x), non-methane volatile organic compounds (NMVOC), sulphur dioxide (SO_2), ammonia (NH_3) and $PM_{2.5}$. According to the latest projections submitted under Article 10(2) of the NECD, Slovakia is projected to meet its emission reduction commitments for 2030 onwards for NO_x, NMVOC, SO_2, NH_3 and $PM_{2.5}$.

Slovakia submitted its first national air pollution control programme (NAPCP) to the Commission on 9 March 2020. An update was due in 2024 but Slovakia has not submitted it by the publication date of this report.

Figure 15: Emission trends of main pollutants / GDP in Slovakia (%), 2005–2022



Source: EEA, 'National air pollutant emissions data viewer 2005–2022', 25 June 2024, https://www.eea.europa.eu/en/topics/in-depth/air-pollution/national-air-pollutant-emissions-data-viewer-2005-2022.

([79]) European Commission, 'Air', European Commission website, https://environment.ec.europa.eu/topics/air_en.

([80]) European Commission, 'EU air quality standards', European Commission website, https://environment.ec.europa.eu/topics/air/air-quality/eu-air-quality-standards_en.

([81]) European Commission, 'Reducing emissions of air pollutants', European Commission website, https://environment.ec.europa.eu/topics/air/reducing-emissions-air-pollutants_en.

([82]) EEA, *Harm to human health from air pollution in Europe: Burden of disease 2024*, briefing No 21/2024, Copenhagen, 2024, https://www.eea.europa.eu/en/analysis/publications/harm-to-human-health-from-air-pollution-2024.

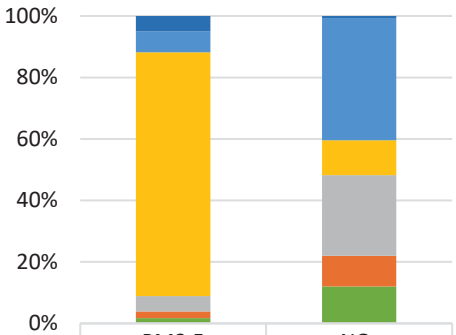
([83]) Particulate matter (PM) is a mixture of aerosol particles (solid and liquid) covering a wide range of sizes and chemical compositions. PM_{10} refers to particles with a diameter of 10 µm or less. $PM_{2.5}$ refers to particles with a diameter of 2.5 µm or less. PM is emitted from many human sources, including combustion.

([84]) Nitrogen dioxide (NO_2) here pertains to a group of gases called NO_x, which also comprises nitrogen monoxide (NO). NO_x is emitted during fuel combustion (e.g. from industrial facilities and the road transport sector).

([85]) Low-level ozone is produced by photochemical action on pollution. This year, for the first time, the impact of long-term exposure to ozone has also been taken into account. In previous analysis by the EEA, only the impact of short-term exposure was estimated.

([86]) Directive (EU) 2016/2284 of the European Parliament and of the Council of 14 December 2016 on the reduction of national emissions of certain atmospheric pollutants, amending Directive 2003/35/EC and repealing Directive 2001/81/EC (OJ L 344, 17.12.2016, p. 1), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2016.344.01.0001.01.ENG.

Figure 16: $PM_{2.5}$ and NO_x emissions by sector in Slovakia (%), 2022



	PM2.5	NO_x
Waste	5,03%	0,71%
Transport	6,78%	39,78%
Residential, commercial & institutional	79,27%	11,34%
Manufacturing and extractive industry	5,03%	26,21%
Energy supply	2,20%	9,97%
Agriculture	1,69%	11,99%

Source: EEA, 'National air pollutant emissions data viewer 2005–2022', 25 June 2024, https://www.eea.europa.eu/en/topics/in-depth/air-pollution/national-air-pollutant-emissions-data-viewer-2005-2022.

In 2023, exceedances above the limit values set by the Ambient Air Quality Directive (AAQD) ([87]) were registered for PM_{10} in one air quality zone ([88]) in Slovakia. Furthermore, the target values for ozone concentrations have not been met in two air quality zones, and the target values for benzo(a)pyrene concentrations have not been met in six air quality zones ([89]).

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 covering all Member States concerned, including Slovakia. The Court of Justice of the European Union has delivered a judgment concerning exceedances of PM_{10} limit values in 2023 (C-342/21) confirming Slovakia's non-compliance with Directive 2008/50/EC. The aim is that appropriate measures are put in place to bring all air quality zones into compliance.

In the 2022 EIR, Slovakia received two priority actions. The first priority action was to further reduce emissions in the context of the NAPCP. Slovakia has made substantial progress on this, as the latest reported data show that the 2020–2029 emission reduction commitments have been met and that Slovakia is projected to meet the 2030 onwards emission reduction commitments. The second priority action was to ensure full compliance with EU air quality standards and maintain downward emission trends. Based on the latest data, Slovakia has made some progress in this regard. However, exceedances above limit values and target values remain for PM_{10}, ozone and benzo(a)pyrene. Since 2019, downward emission trends have been reported for all main pollutants except $PM_{2.5}$. This situation requires further action.

2025 priority actions

- As part of the NAPCP, take action to reduce emissions of air pollutants.
- Ensure full compliance with the current AAQD standards, also in light of future stricter requirements under the revised AAQD.

Industrial emissions

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

(i) protect air, water and soil and to prevent harmful effects on human health and the environment;
(ii) prevent and manage waste;
(iii) improve energy and resource efficiency;
(iv) clean up contaminated sites.

The cornerstone of the policy is the Industrial Emissions Directive (IED), which was revised in 2024 ([90]). The revision improves the directive's contribution to the zero pollution objective. It has a strong focus on innovation, and builds solid links between depollution, decarbonisation and circularity, making it a key regulatory tool to accompany the green transformation of EU industry by 2050.

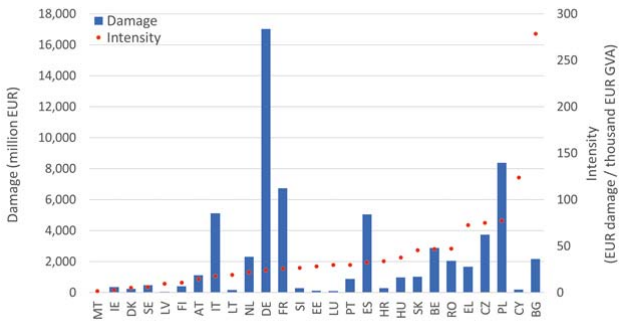
([87]) Directive 2008/50/EU of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe (OJ L 152, 11.6.2008, p. 1), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32008L0050.
([88]) Banskobystrický kraj.
([89]) EEA, Eionet Central Data Repository, https://cdr.eionet.europa.eu/.
([90]) Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial and livestock rearing emissions (integrated pollution prevention and control) (OJ L 334, 17.12.2010, p. 17), as amended by Directive (EU) 2024/1785 of the European Parliament and of the Council of 24 April 2024, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02010L0075-20240804&qid=1725983863299.

The overview of industrial activities regulated by the IED below is based on data reported to the EU Registry in 2022 ([91]).

In Slovakia, around 511 industrial installations were required to have a permit in accordance with the IED in 2022. The industrial sectors with the most installations covered by the IED were waste management (24 %), intensive rearing of poultry or pigs (21 %), treatment of metals (14 %) and chemicals (12 %).

Figure 17 shows the damage to health and the environment due to the main industrial air pollutants. As this depends on, among other factors, the size of the industrial sector in each Member State, the figure also shows the ratio between the damage and the industrial activity (expressed in gross value added (GVA)), which gives an indication of the emissions 'intensity'. Although Slovakia is in 13th place in terms of damage in the EU, it comes 7th for emissions intensity, above the EU average of EUR 27.5/EUR 1 000 GVA. The main industrial contributors to emissions to air ([92]) are the energy sector and the metals and mineral industry for NO_X emissions, the waste management sector and chemical industry for dust emissions, and the energy sector, metals sector and mineral sector for SO_2 and heavy metals.

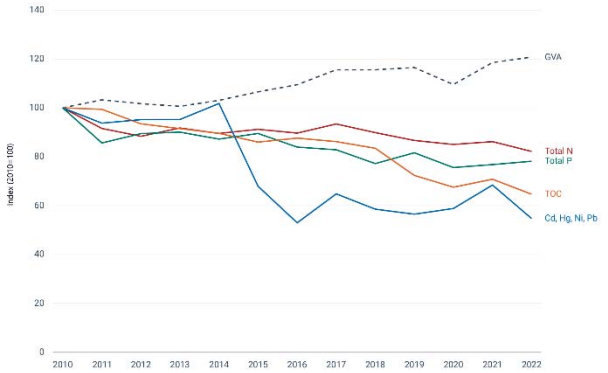
Figure 17: Industrial air pollution damage and intensity per Member State, 2021



Source: EEA, 'Industrial pollution intensity indicators – EU large industry air pollution damage costs intensity', European Industrial Emissions Portal, 2024, https://industry.eea.europa.eu/analyse/industrial-emissions-indicator.

Overall, industrial emissions to water in the EU have decreased over time for all the main pollutants. On average in the EU, they appear to be decoupled from industrial activity, which has increased over the same period (expressed in GVA), as shown in Figure 18.

Figure 18: Industrial releases of pollutants to water and industrial activity in the EU-27

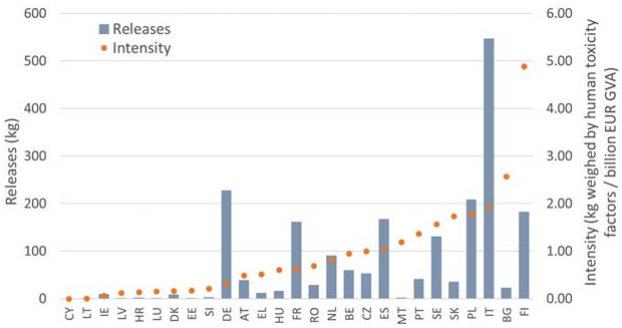


NB: Cd, cadmium; Hg, mercury; Ni, nickel; Pb, lead; TOC, total organic carbon; total N, total nitrogen; total P, total phosphorous.

Source: EEA, 'Industrial pollutant releases to water in Europe', 30 May 2024, https://www.eea.europa.eu/en/analysis/indicators/industrial-pollutant-releases-to-water.

Concerning Slovakia in particular, Figure 19 shows the industrial emissions of heavy metals to water, taking into account the human toxicity of each metal, as well as emissions intensity, based on its ratio with industrial activity (expressed in GVA). Slovakia has the 13th highest emissions of heavy metals to water and is in 4th position for emissions intensity (below the EU average of 0.864 kg/EUR 1 billion GVA).

Figure 19: Industrial releases and intensity of heavy metals to water per Member State, 2022



Source: EEA, 'Industrial pollution intensity indicators – EU large industry water pollution intensity', European Industrial Emissions Portal, 2024, https://industry.eea.europa.eu/analyse/industrial-emissions-indicator.

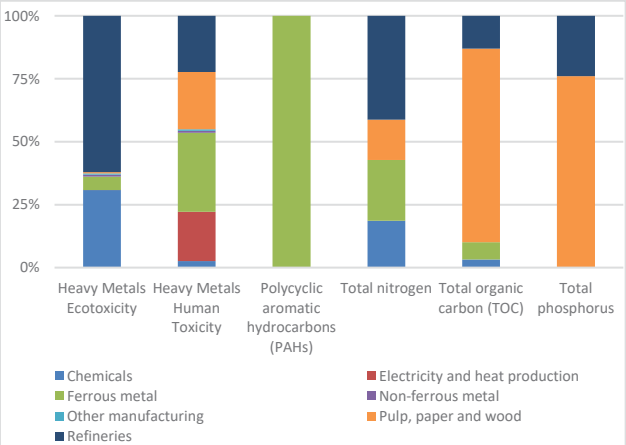
As shown in Figure 20, the main industrial contributors to emissions to water in Slovakia are the chemical sector for heavy metals, nitrogen and total organic carbon; the pulp and paper industry for phosphorus; and the metal

([91]) EEA, European Industrial Emissions Portal, https://industry.eea.europa.eu/, 2022 being the baseline year for all reports.

([92]) European Environment Agency, LRTAP, Air pollutant emissions data viewer (Gothenburg Protocol, LRTAP Convention) 1990-2022, https://www.eea.europa.eu/en/topics/in-depth/air-pollution/air-pollutant-emissions-data-viewer-1990-2022.

production and processing sector for polycyclic aromatic hydrocarbons.

Figure 20: Relative releases to water from industry in Slovakia (%), 2022



Source: EEA, 'Industrial reporting under the Industrial Emissions Directive 2010/75/EU and European pollutant release and transfer register Regulation (EC) No 166/2006 – ver. 12.0 Sep. 2024 (tabular data)', EEA Geospatial Data Catalogue, 13 September 2024, https://doi.org/10.2909/cf5e54c1-be99-4426-bcad-baa26c4f27a0.

IED provisions on public information and participation require Member States to adopt transposition legislation enabling members of the public to have access to relevant information and participate in the approval process for potentially polluting installations. Thus, the public and non-governmental organisations (NGOs), alongside competent authorities, play a role in ensuring compliance of these permits with EU legislation. The IED contains mandatory requirements on environmental inspections, requiring a site visit to take place at least every 1–3 years, using risk-based criteria. In addition, IED enforcement provisions require Member States to determine effective, proportionate and dissuasive penalties applicable to infringements of IED-based national provisions. In the revised directive, the provisions set that worst infringements can be sanctioned by fines of at least 3% of the annual EU turnover of the legal person. The revised IED also introduces a right to compensation for people whose health has been harmed by such infringements.

At the time of reporting, information for 2022 about the number of site visits carried out by Slovakia was available in the EU Registry. Out of over 511 installations covered by the IED, 233 site visits were reported ([93]).

The development of best available techniques (BATs), BAT reference documents and BAT conclusions ensures effective collaboration between stakeholders and enables better implementation of the IED.

Since the 2022 EIR, the Commission adopted BAT conclusions on (i) ferrous metal processing, (ii) the textiles industry, (iii) common waste gas management and treatment systems in the chemical sector and (iv) smitheries and foundries.

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

In 2022, Slovakia received the following priority actions: (i) review permits to ensure compliance with the new adopted BAT conclusions; (ii) strengthen checks and enforcement to ensure compliance with BAT conclusions; (iii) address emissions of heavy metals to air; (iv) address pollution from metal production and processing; and (v) improve reporting related to the European pollutant release and transfer register. Given the lack of recent data on most of the pollutants concerned, it is impossible to assess Slovakia's progress. Only partial data have been reported in the industrial emission portal, which show improvements as regards SO_x and nitrogen. SO_x emissions to air have reduced by 63.5 % since 2017, and total nitrogen releases to water have reduced by less than 20 %.

2025 priority actions

- Reduce industrial air pollution damage and intensity.
- Reduce industrial releases to water and their intensity.
- Engage with industry and environmental NGOs to ensure proper contribution to and implementation of BAT conclusions and ensure timely updates to permits following the publication of BAT conclusions.
- Ensure effective public participation and access to justice in relation to the IED.

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 the prevention of, preparedness for and response to major accidents.

The cornerstone of the policy is Directive 2012/18/EU (the

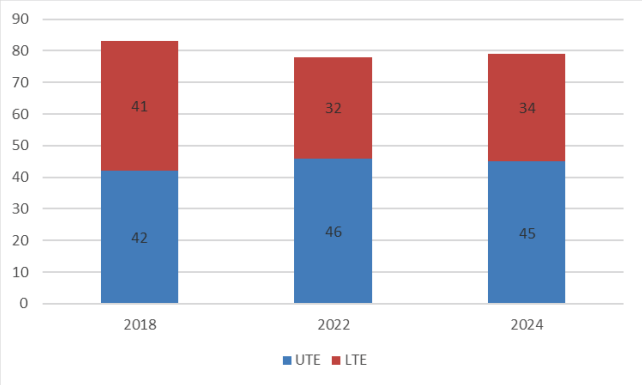
([93]) The Slovak Environmental Inspectorate publishes its reports on the national portal (https://www.enviroportal.sk/ipkz).

Seveso III Directive ([94])).

The overview below of industrial plants regulated by the Seveso III Directive ('Seveso establishments') is based on data reported on eSPIRS (e-Seveso Plants Information Retrieval System) for 2022–2024) ([95]) and the report by Slovakia on the implementation of the Seveso III Directive for 2019–2022 ([96]).

In Slovakia, in 2024, among the 79 Seveso establishments, 34 were categorised as lower-tier establishments (LTE) and 45 as upper-tier establishments (UTE), based on the quantity of hazardous substances likely to be present. UTEs are subject to more stringent requirements. The evolution of the number of Seveso establishments is presented in Figure 21.

Figure 21: Number of Seveso establishments in Slovakia, 2018, 2022 and 2024

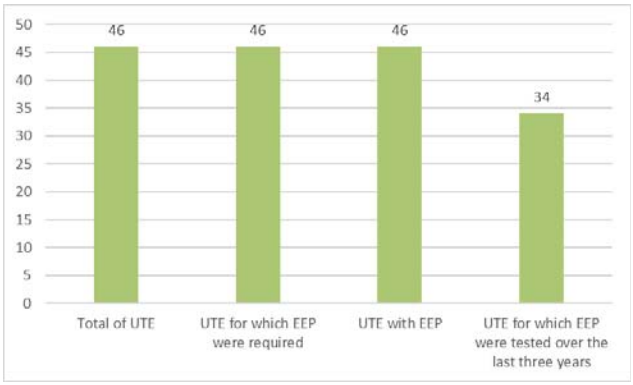


NB: LTE, lower-tier establishment.

Sources: European Commission: Directorate-General for Environment, *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)*, Publications Office of the European Union, Luxembourg, 2022, https://op.europa.eu/en/publication-detail/-/publication/94d57d74-735b-11ec-9136-01aa75ed71a1/language-en/format-PDF/source-search; eSPIRS data, extractions from 2022 and 2024; Analysis and summary of Member States' reports on implementation of Directive 2012/18/EU on the control of major accident hazards involving dangerous substances according to the format established by Commission Implementing Decision 2014/896/EU - Publications Office of the EU, https://op.europa.eu/en/publication-detail/-/publication/9bd73087-e9b8-11ef-b5e9-01aa75ed71a1/language-en.

Member States 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. In Slovakia, in 2022, an EEP was required for all 46 UTEs. In that year, they all had an EEP, and 34 of the plans had been tested within the previous three years. A summary is shown in Figure 22.

Figure 22: Situation regarding EEPs in Slovakia, 2022



Sources: European Commission: Directorate-General for Environment, *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)*, Publications Office of the European Union, Luxembourg, 2022, https://op.europa.eu/en/publication-detail/-/publication/94d57d74-735b-11ec-9136-01aa75ed71a1/language-en/format-PDF/source-search; eSPIRS data, extractions from 2022 and 2024; Analysis and summary of Member States' reports on implementation of Directive 2012/18/EU on the control of major accident hazards involving dangerous substances according to the format established by Commission Implementing Decision 2014/896/EU - Publications Office of the EU, https://op.europa.eu/en/publication-detail/-/publication/9bd73087-e9b8-11ef-b5e9-01aa75ed71a1/language-en.

The information for the public referred to in Annex V to the Seveso III Directive – in particular how members of the public concerned will be warned if there is a major accident; the appropriate behaviour in the event of a major accident; and the date of the last site visit to an establishment – are permanently available for 96 % of Seveso establishments in Slovakia.

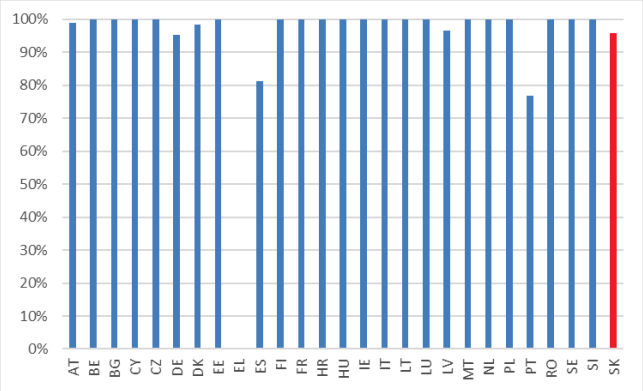
The shares of UTEs for which information on safety measures and requisite behaviours was actively made available to the public in 2022 for all Member States are presented in Figure 23. This provision on knowledge is an important provision of the Seveso III Directive, as public awareness of this information may ameliorate the consequences of a major industrial accident.

([94]) Directive 2012/18/EU of the European Parliament and of the Council of 4 July 2012 on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC (OJ L 197, 24.7.2012, p. 1), https://eur-lex.europa.eu/eli/dir/2012/18/oj.

([95]) https://espirs.jrc.ec.europa.eu/en/espirs/content; data extracted in September 2024.

([96]) As provided for by Article 21(2) of the Seveso III Directive.

Figure 23: Share of UTEs for which information on safety measures and requisite behaviours were actively made available to the public per Member State (%), 2022



NB: No data available for Greece.

Sources: European Commission: Directorate-General for Environment, *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)*, Publications Office of the European Union, Luxembourg, 2022, https://op.europa.eu/en/publication-detail/-/publication/94d57d74-735b-11ec-9136-01aa75ed71a1/language-en/format-PDF/source-search; eSPIRS data, extractions from 2022 and 2024; Analysis and summary of Member States' reports on implementation of Directive 2012/18/EU on the control of major accident hazards involving dangerous substances according to the format established by Commission Implementing Decision 2014/896/EU - Publications Office of the EU, https://op.europa.eu/en/publication-detail/-/publication/9bd73087-e9b8-11ef-b5e9-01aa75ed71a1/language-en.

2025 priority actions

- Strengthen compliance with requirements on safety measures to prevent major accidents and ensure appropriate preparedness and response in relation to UTEs, in particular as regards reviewing, testing and updating EEPs, at intervals of no more than three years.
- Ensure access to transparent and clear information for citizens on risks and behaviour in the event of an accident.

Mercury Regulation

The Mercury Regulation establishes measures and conditions concerning the use and storage of and trade in mercury, mercury compounds and mixtures of mercury, the manufacture and use of and trade in mercury-added products and the management of mercury waste, in order to ensure a high level of protection of human health and the environment from anthropogenic emissions and releases of mercury and mercury compounds. The revision of the Mercury Regulation adopted in 2024 sets out rules to address the last intentional uses of mercury in the EU by phasing out the use of dental amalgam by 1 January 2025 except when deemed strictly necessary by the dental practitioner based on the specific medical needs of the patient, and prohibiting the manufacture and export of additional mercury-containing lamps from 1 January 2026 or 1 January 2027 (depending on the lamp category).

In 2019, 50 % of dental treatments were still using dental amalgam, which represented a challenge for Slovakia to phase out its use by 1 January 2025. However, measures should have been put in place to ensure a socially and economically sound phase-out, including an adequate reimbursement of the alternatives to dental amalgam through the health insurance scheme and the training of dental practitioners. The Commission is monitoring whether the phase-out has taken place under the terms and conditions of the regulation. Slovakia will also need to ensure that the manufacture and export of mercury-containing lamps are prohibited by the deadlines set out in the Mercury Regulation.

Noise

The Environmental Noise Directive ([97]) requires a common approach to avoid, prevent and reduce the harmful effects of noise. The designated authorities are responsible for making and approving noise maps and action plans for agglomerations, major roads, major railways and major airports. Member States decide on noise limits that are not set at the EU level. Nevertheless, the zero pollution action plan sets as a 2030 target a 30 % reduction compared with 2017 in the share of people chronically disturbed by transport noise.

Excessive noise from aircraft, 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 stress ([98]).

In Slovakia, environmental noise is estimated to cause at least around 140 cases of ischaemic heart disease

([97]) Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise – Declaration by the Commission in the Conciliation Committee on the directive relating to the assessment and management of environmental noise (OJ L 189, 18.7.2002, p. 12), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32002L0049.

([98]) WHO, *Environmental Noise Guidelines for the European Region*, Copenhagen, 2018, https://www.who.int/europe/publications/i/item/9789289053563.

annually ([99]) and some 19 000 people to suffer from disturbed sleep ([100]).

Based on the latest set of information analysed, Slovakia has not completed its noise mapping of agglomerations, roads and railways.

Since Slovakia has failed to report to the Commission all relevant information on the strategic noise maps, including noise exposure of the population, the Commission decided to open an infringement procedure against Slovakia.

Action plans for noise management for agglomerations, roads, railways and airports must be updated and submitted to the Commission every five years. The deadline for reporting noise action plans under the most recent reporting cycle was 18 January 2025; these have not been assessed as yet.

Slovakia received a priority action in the 2022 EIR to complete noise action plans. Given that reporting under the most recent reporting cycle for noise action plans was due in early 2025, these have not been assessed. Therefore, this priority action is maintained for the 2025 EIR and another one is added on noise mapping.

2025 priority actions

- Complete noise mapping.
- Complete and implement action plans on noise management.

Water quality and management

EU legislation and policy requires that the impact of pressures on transitional waters, coastal waters and fresh water (including surface waters and groundwater) be significantly reduced. Achieving, maintaining or enhancing a good status of waterbodies as defined by the Water Framework Directive will ensure that EU citizens and the environment 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 ([101]) is the cornerstone of EU water policy in the 21st century ([102]). The Water Framework Directive and other water-related directives ([103]) form the basis of sustainable and integrated water management in the EU. They aim to achieve a high level of protection of water resources, prevention of further deterioration and restoration to good status. These objectives are very important for the EU's competitiveness, strategic autonomy and security, yet have become even more challenging in the face of climate change affecting our precious water resources.

The Water Framework Directive establishes a procedural framework for reaching good surface water ecological and chemical status and good groundwater quantitative and chemical status. This implies monitoring and classification of all waterbodies, assessment of pressures and impacts and identification of the most cost-effective measures to achieve the objectives of the directive. The directive dates from 2000 and set an initial deadline of 2015 for achieving its objectives, with the option to extend the deadline to the end of 2027. Every six years, Member States must report their river basin management plans (RBMPs) to the Commission. They should cover river basin districts in their countries, some of which may be shared with other countries. The Commission has assessed the third cycle of RBMPs, which were to be submitted by March 2022, and reported its findings to the European Parliament and to the Council on 4th February 2025 ([104]).

([99]) These figures are an estimation by the EEA based on (i) the data reported by Member States on noise exposure covered by Directive 2002/49/EC for the round of noise mapping of 2022; (ii) European Topic Centre on Air Pollution, Transport, Noise and Industrial Pollution (ETC/ATNI), *Noise indicators under the Environmental Noise Directive 2021: Methodology for estimating missing data*, Eionet report ETC/ATNI No 2021/06, Kjeller, 2021, ; and (iii) the methodology for health impact calculations in European Topic Centre on Air Pollution and Climate Change Mitigation (ETC/ACM), *Implications of environmental noise on health and wellbeing in Europe*, Eionet report ETC/ACM No 2018/10, Bilthoven, 2018, https://www.eionet.europa.eu/etcs/etc-atni/products/etc-atni-reports/eionet_rep_etcacm_2018_10_healthimplicationsnoise.)

([100]) More information on the adverse health effects of noise pollution is available at: https://www.eea.europa.eu/themes/human/noise/noise-2

([101]) https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32000L0060.

([102]) https://environment.ec.europa.eu/topics/water_en.

([103]) These include the Groundwater Directive (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32006L0118), the Environmental Quality Standards Directive (https://eur-lex.europa.eu/eli/dir/2008/105/oj), the Floods Directive (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32007L0060), the Bathing Water Directive (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32006L0007), the Urban Wastewater Treatment Directive (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A31991L0271), the new Drinking Water Directive (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32020L2184), the Nitrates Directive (https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A31991L0676), the Marine Strategy Framework Directive (https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A32008L0056) and the IED (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32010L0075).

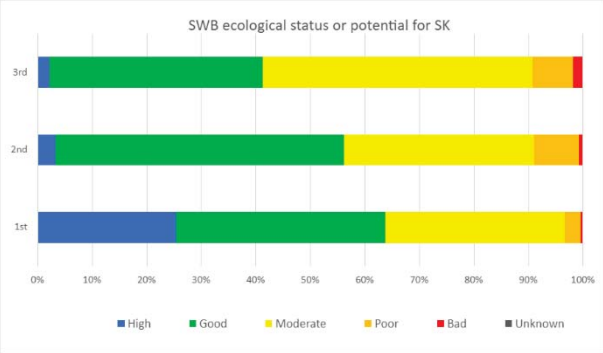
([104]) ENV - Bibliothèque

Slovakia has 1 351 surface waterbodies and 106 groundwater bodies, divided over two river basin districts (Vistula and Danube). Approximately 20 % of surface waters are designated as 'heavily modified' and about 4 % as 'artificial'. Heavily modified and artificial waterbodies must reach good ecological potential rather than good ecological status, which means that all measures must be taken to mitigate the adverse impact of the sustainable human development activities causing the waterbody to be heavily modified / artificial, while not significantly affecting these activities.

It follows from the assessment of the third RBMPs that there has been significant deterioration in the ecological status/potential and in the chemical status of surface waterbodies compared with the second RBMPs (covering 2015–2021). Regarding groundwater bodies, the monitoring network has been improved in extent and quality, and the status of all groudwater bodies is now known. There has been a significant improvement in the quantitative status and chemical status of groundwater bodies.

The figures below show the evolution of ecological status/potential and of chemical status of surface waters, and of quantitative and chemical status of groundwater in 2010, 2015 and 2021.

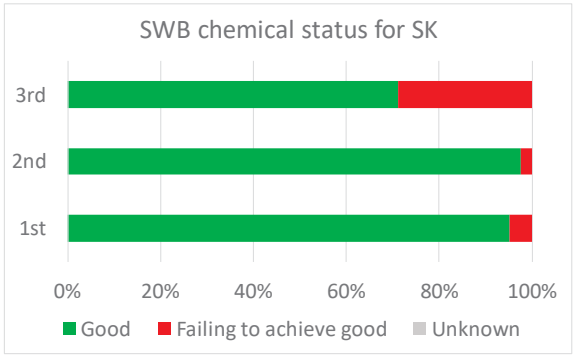
Figure 24: Ecological status/potential of surface waterbodies in each RBMP cycle (%)



Since the second RBMPs, the number of surface waterbodies with good or better ecological status/potential have decreased significantly, from 56 % to 41 %. By 2027, 67.7 % of surface waterbodies are expected to have good ecological status/potential, with many expected to have high status.

Although data suggest that nutrient pollution is decreasing, agricultural eutrophication still exerts high pressure on surface waterbodies. Hydromorphological alterations, such as disruption of longitudinal continuity, are another source of pressure. Emerging issues are invasive species, sediment management and fish management.

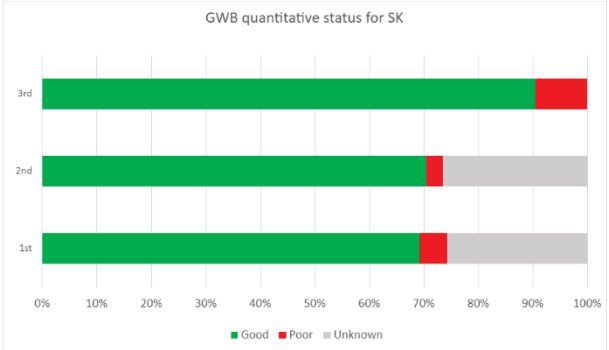
Figure 25: Chemical status of surface waterbodies in each RBMP cycle (%)



Since the second RBMPs, there has been a significant decrease in surface waterbodies with good chemical status, from 98 % to 71 %. This is reported to be mostly due to improved monitoring and increased confidence in classification.

Failure to achieve good chemical status is mostly due to ubiquitous persistent bioaccumulative and toxic substances, which are difficult to address and often have transboundary sources. In Slovakia, these are mainly mercury, polybrominated diphenyl ethers and polycyclic aromatic hydrocarbons. Pollution from industrial point sources is higlighted as a significant pressure, as well as organic pollution from municipal point sources and industry/agriculture.

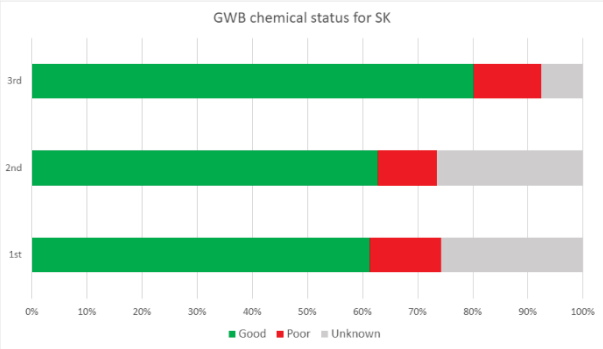
Figure 26: Quantitative status of groundwater bodies in each RBMP cycle (%)



90.6 % of groundwater bodies are reported to have good quantitative status, showing a significant improvement since the second RBMPs. The monitoring network has been improved in extent and quality, and there are now no groundwater bodies with an unknown status.

It has been reported that water scarcity can be considered an emerging issue due to climate change.

Figure 27: Chemical status of groundwater bodies in each RBMP cycle (%)



80.2 % of groundwater bodies are reported to have good chemical status, showing a significant improvement since the second RBMPs. The monitoring network has been improved in extent and quality, and fewer groundwater bodies have an unknown status now.

Although there has been an apparent improvement in status, a significant sustained upwards trend in concentrations of pollutants (nutrients and total organic carbon) has been reported.

In February 2022, the Commission continued the infringement procedure against Slovakia ([105]) as regards authorisation of small hydropower plants. The focus is on insufficient assessment of the Slovak strategic planning document as well as the lack of assessment of several constructed hydroelectric power plants causing deterioration of waterbodies. Slovakia needs to take all necessary mitigation measures to reduce the harmful impacts of (small) hydropower plants installed along the River Hron and other rivers.

Until the end of 2027, Member States can still apply time-related exemptions, subject to providing evidence of compliance with the strict criteria set out in the Water Framework Directive. After 2027, the possibilities for applying exemptions will be much more limited.

The 2022 EIR identified the following priority actions.

- Assess new physical modifications of waterbodies in line with Article 4(7) of the Water Framework Directive, and consider alternative options and adequate mitigation measures in these assessments.
- Continue current efforts to further reduce nitrate pollution from agriculture in groundwater.

Some progress has been made as a follow-up to these priority actions. In particular, significant progress has been achieved in relation to justifying Article 4(7) exemptions: the assessment of each exemption is very detailed; however, it is not entirely clear whether cumulative effects have been explicitly considered. With regard to nitrate pollution, much remains to be done.

A positive point is that there has been a very significant increase, more than a three-fold increase, in the number of monitoring sites for ecological status/potential of surface waterbodies, compared with the second RBMPs. The share of surface waterbodies that are monitored for chemical status has also increased, as has the number of groundwater bodies subject to monitoring to establish their quantitative status. Slovakia performs a sound monitoring of groundwater chemical status. Another positive aspect is the cooperation on the Danube. Slovakia is part of the international agreement and permanent cooperation body on the Danube international river basin district, which has developed in addition an international RBMP for the Danube.

2025 priority actions

Without prejudice to the list of recommended actions in the Commission report to the European Parliament and to the Council on the assessment of the third RBMPs, the following priority actions can be highlighted.

- Develop more robust programmes of measures, tackle obstacles identified in the implementation of measures, and ensure adequate financing for implementation, including through better use of cost recovery and polluter-pays principle.
- Reduce pollution from nutrients, chemicals, metals and saline discharges.
- Improve river continuity and ecological flows, boosting efforts on nature-based solutions to reduce hydromorphological pressures.
- Improve the classification of water bodies and strengthen monitoring systems.

Floods Directives

Every six years, following the same reporting cycle as the RBMPs, all Member States report their flood risk management plans (FRMPs), based on the flood hazard and risk maps and the preliminary flood risk assessments drawn up during the second cycle (2016–2021).

The Commission assessed the FRMPs and reported its findings to the European Parliament and to the Council on

([105]) https://ec.europa.eu/commission/presscorner/detail/en/inf_22_601.

4th February 2025, together with the assessment of the RBMPs.

Regrettably, Slovakia failed to comply with its legal obligation and did not report the second flood hazard risk maps and the second FRMPs in time. As a result of this failure, the Commission was not in a position to assess the plans and include such assessment in its report to the European Parliament and to the Council.

As a consequence, the EIR report could not be updated for Slovakia with respect to the implementation of the Floods Directive, and reference is made to the previous EIR report for an overview of the main issues ([106]).

The failure to review and adopt the second FRMPs is subject to infringement. Slovakia was referred to the Court of Justice of the European Union in April 2024. Slovakia informed the Commission on 18 March 2025 that the FRMPs were submitted on 6 March 2025.

Drinking Water Directive

The recast Drinking Water Directive is now applicable, and Member States were required to transpose its provisions into their national legal systems by 12 January 2023. Since the entry into force of the recast directive, the Commission has adopted several delegated and implementing acts establishing (i) a watch list of substances and compounds of concern for drinking water ([107]), (ii) a methodology for measuring microplastics in drinking water ([108]) and (iii) an EU system for testing and approving materials that will be allowed to be in contact with drinking water ([109]). Member States will have to take these various Commission acts into account when implementing the recast directive.

Finally, the Commission has now received data from Member States on the quality of drinking water in 2017–2019. The quality of drinking water (supplied by large water suppliers) in Slovakia does not give rise to concern ([110]).

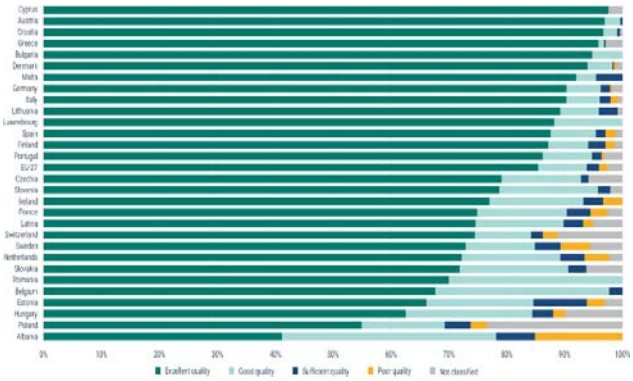
From January 2026, the European quality standards for per- and polyfluoroalkyl substances in drinking water will apply, ensuring harmonised Member States' reporting of per- and polyfluoroalkyl substance monitoring data in the future.

Bathing Water Directive

The Bathing Water Directive requires Member States to monitor and assess bathing water. It requires that, during the bathing season, Member States disseminate to the public information on bathing water quality actively and promptly. In particular, notices banning or advising against bathing should be rapidly and easily identifiable.

Figure 28 shows that in 2023, out of 32 Slovak bathing waters, 71.9 % were of excellent quality, 18.8 % were of good quality and 3.1 % were of sufficient quality. No bathing waters were found to be of poor quality. Detailed information on Slovak bathing waters is available from a national portal ([111]) and through an interactive map viewer of the EEA ([112]).

Figure 28: Bathing water quality per Member State, Albania and Switzerland (%), 2023



Source: EEA, *European Bathing Water Quality in 2023*, briefing No 04/2024, Copenhagen, 2024, https://www.eea.europa.eu/publications/european-bathing-water-quality-in-2023/.

([106]) https://environment.ec.europa.eu/law-and-governance/environmental-implementation-review_en - country-reports.

([107]) https://environment.ec.europa.eu/publications/implementing-decision-drinking-water-directive-watch-list_en.

([108]) Commission Delegated Decision (EU) 2024/1441 of 11 March 2024 supplementing Directive (EU) 2020/2184 of the European Parliament and of the Council by laying down a methodology to measure microplastics in water intended for human consumption (notified under document C(2024) 1459) (OJ L, 2024/1441, 21.5.2024), http://data.europa.eu/eli/dec_del/2024/1441/oj.

([109]) OJ L, 2024/365, 23.4.2024, http://data.europa.eu/eli/dec_impl/2024/365/oj; OJ L, 2024/367, 23.4.2024, http://data.europa.eu/eli/dec_impl/2024/367/oj; OJ L, 2024/369, 23.4.2024, http://data.europa.eu/eli/reg_del/2024/369/oj; OJ L, 2024/368, 23.4.2024, http://data.europa.eu/eli/dec_impl/2024/368/oj; OJ L, 2024/370, 23.4.2024, http://data.europa.eu/eli/reg_del/2024/370/oj; OJ L, 2024/371, 23.4.2024, http://data.europa.eu/eli/reg_del/2024/371/oj; see the Commission web page on all six delegated acts for more information (https://environment.ec.europa.eu/publications/delegated-acts-drinking-water-directive_en).

([110]) In summary, the compliance for all parameter groups in Slovakia was at least 99.47 % in 2017, 99.59 % in 2018 and 99.49 % in 2019.

([111]) https://www.uvzsr.sk/index.php?option=com_content&view=category&layout=blog&id=167&Itemid=65.

([112]) EEA, 'State of bathing water', EEA website, 2024,

Nitrates Directive

The Nitrates Directive ([113]) aims to protect water quality across Europe by preventing nitrates from agricultural sources polluting groundwater and surface waters and by promoting the use of good farming practices.

The latest Commission report on the implementation of the Nitrates Directive ([114]), dating back to 2021, warns that nitrates are still causing harmful pollution to water in the EU. Excessive nitrates in water are harmful to both human health and ecosystems, causing oxygen depletion and eutrophication. Cleaning of waters by national authorities or farmers, where it has been undertaken, has had a positive impact on the drinking water supply and on biodiversity. It has also benefited the sectors – such as fisheries and tourism – that depend on biodiversity and on a good supply of drinking water. Nevertheless, excessive fertilisation remains a problem in many parts of the EU. The report on the implementation of the Nitrates Directive covering 2020–2023 will be available in 2025.

The analysis of Slovakia's RBMPs has identified nutrients from agriculture as an important pressure on groundwater / surface waters that is impacting these waters' good status and as one of the main factors in not meeting the Water Framework Directive objectives.

In 2022, Slovakia received a priority action on tackling nutrient pollution, especially from agriculture, through the implementation of the Nitrates Directive. Since the report on the implementation of the Nitrates Directive covering 2020–2023 will not be available until 2025, the 2022 EIR priority action cannot be assessed and is repeated.

2025 priority action

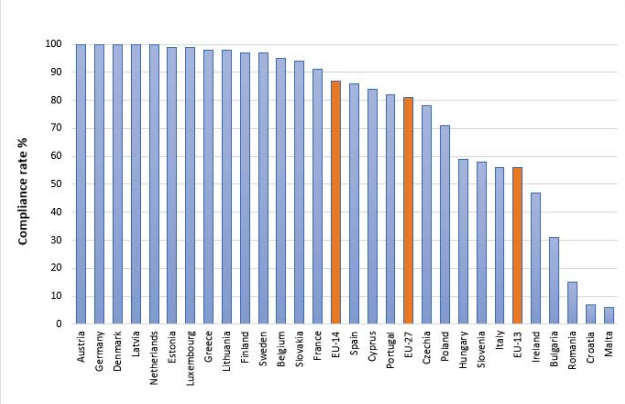
- Tackle nutrient pollution, especially nitrates from agriculture, through the implementation of the Nitrates Directive.

Urban Wastewater Treatment Directive

The Urban Wastewater Treatment Directive (UWWTD) aims to protect human health and the environment from the effects of untreated urban waste water. It therefore requires Member States to collect and treat (secondary or biological treatment) waste water in all urban areas of more than 2 000 people, and to apply a more stringent treatment than secondary, with nitrogen and/or phosphorus removal, to the waste water generated in urban areas, also known as agglomerations, of more than 10 000 people, before they are discharged into waters and their catchments, when they are sensitive to nitrogen and/or phosphorus (i.e. eutrophic or tending to become eutrophic).

In Slovakia, 319 agglomerations complied with the requirements of the directive in 2020. Thirty-seven agglomerations, generating 246 150 population equivalent of urban waste water, did not comply with the requirements of the directive.

Figure 29: Proportion of urban waste water that fully complies with the UWWTD (%), 2020



Source: European Commission, *12th UWWTD Implementation Report*, 2024.

Despite the improvement in compliance throughout the years, for which the use of EU funding has been fundamental, the incomplete implementation of the UWWTD led to an infringement case being opened against Slovakia in 2021, in addition to the one initiated in 2016 ([115]). Both infringement cases are advancing, and it is likely that they will reach the court. It is essential that Slovakia takes the necessary measures to fully comply with the requirements of the directive, as there is still a significant implementation gap.

This is all the more important as the directive has been revised ([116]). The revised directive builds on the current *acquis*, strengthens existing treatment standards and establishes a new additional treatment of micropollutants in urban waste water. Other new requirements relate to moving towards energy neutrality of the sector, establishing an EPR system to ensure sustainable financing of micropollutant treatment by the most polluting industries and ensuring access to sanitation, especially for vulnerable and marginalised groups. Slovakia has until

([113]) https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1561542776070&uri=CELEX:01991L0676-20081211.

([114]) https://environment.ec.europa.eu/topics/water/nitrates_en.

([115]) https://ec.europa.eu/commission/presscorner/detail/en/inf_21_6201.

([116]) Directive (EU) 2024/3019 of the European Parliament and of the Council of 27 November 2024 concerning urban wastewater treatment (recast).

31 July 2027 to transpose the new directive into its national legal system.

Despite some progress made, Slovakia has not fully implemented the UWWTD.

2025 priority action

- Take the necessary measures to ensure full implementation of the current UWWTD, taking into account the new requirements of the recast directive.

Chemicals

The EU seeks to ensure that chemicals are produced and used in a way that minimises any significant adverse effects on human health and the environment. In October 2020, the Commission published its chemicals strategy for sustainability towards a toxic-free environment ([117]), which led to some systemic changes in EU chemicals legislation. The strategy is part of the EU's zero pollution ambition – a key commitment of the European Green Deal.

The EU's chemicals legislation ([118]) provides a baseline protection for human health and the environment. It also ensures stability and predictability for businesses operating in the internal market.

Since 2007, the Commission has gathered information on the enforcement of the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) Regulation and the Classification, Labelling and Packaging (CLP) Regulation. In December 2020, the Commission assessed the Member States' reports ([119]) on the implementation and enforcement of these regulations ([120]). It is apparent from the Commission's report that there are still many disparities in the implementation of the REACH and CLP Regulations, notably in the area of law enforcement. Recorded compliance levels in Member States, generally quite stable over time, appear to be getting slightly worse. This may be because (i) enforcement authorities are becoming more effective in detecting non-compliant products/companies and (ii) more non-compliant products are being placed on the EU market.

In August 2021, the Commission published a measurable assessment of the enforcement ([121]) of the two main EU regulations on chemicals using a set of indicators on different aspects of enforcement. Since 2021, the list of chemicals subject to restrictions has been expanded as new entries have been added to Annex XVII to the REACH Regulation ([122]).

In 2023, new hazard classes were added to the CLP Regulation, and the revision of the regulation was tabled (published on 20 November 2024) ([123]). The new hazard classes cover endocrine disruptors and persistence-related hazards while the revision of the regulation encompasses new rules on online sales to better tackle non-compliances observed over the years. Also in 2023, the Conference of the Parties of the Stockholm Convention (COP) decided to include, in its Annex A (which

([117]) Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – Chemicals strategy for sustainability: Towards a toxic-free environment, COM(2020) 667 final of 14 October 2020, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2020%3A667%3AFIN; Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (OJ L 353, 31.12.2008, p. 1), https://publications.europa.eu/resource/cellar/c6b6a31d-8359-11ee-99ba-01aa75ed71a1.0004.02/DOC_2.

([118]) Namely, Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the registration, evaluation, authorisation and restriction of chemicals (REACH) establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (OJ L 396, 30/12/2006, p. 1), https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A32006R1907; Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (OJ L 353, 31.12.2008, p. 1), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02008R1272-20221217.

([119]) European Commission, *Technical assistance to review the existing Member States reporting questionnaire under Articles 117(1) of REACH and 46(2) of CLP – Final report*, Publications Office of the European Union, Luxembourg, 2020, https://circabc.europa.eu/ui/group/8ee3c69a-bccb-4f22-89ca-277e35de7c63/library/a4abce8c-8425-455f-b7e6-0ead917bde6b/details.

([120]) In line with Article 117(1) of the REACH Regulation and Article 46(2) of the CLP Regulation.

([121]) European Commission, Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, REACH and CLP Enforcement: EU-level enforcement indicators, Publications Office of the European Union, Luxembourg, 2021, https://op.europa.eu/en/publication-detail/-/publication/e5c3e461-0f85-11ec-9151-01aa75ed71a1/.

([122]) These are substances in tattoo inks and permanent make-up, *N*,*N*-dimethylformamide, formaldehyde (and formaldehyde releasers), lead in PVC (polyvinyl chloride), siloxanes (D4, D5, D6) and, finally, microplastics.

([123]) Regulation (EU) 2024/2865 of the European Parliament and of the Council of 23 October 2024 amending Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, OJ L, 2024/2865, 20.11.2024, p.1 (Regulation - EU - 2024/2865 - EN - EUR-Lex).

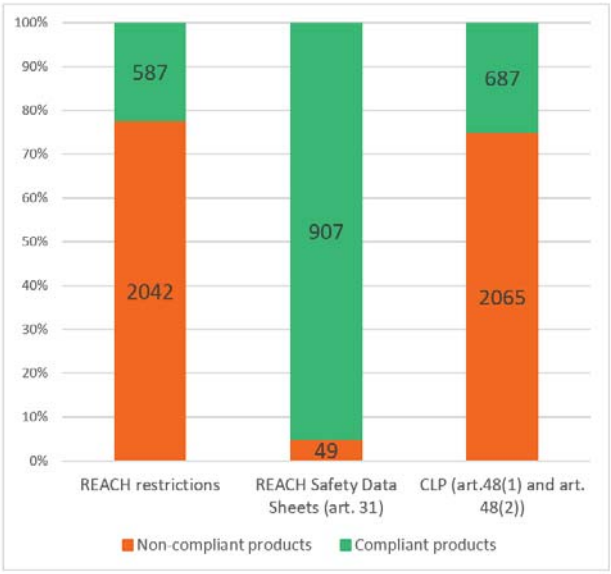
lists banned substances), three new chemicals ([124]). The Commission is working on the delegated acts to include these substances in Annex I to the Persistent Organic Pollutants Regulation by 2025 at the latest.

The Member States' reporting exercise set out in Article 117 of the REACH Regulation and Article 46 of the CLP Regulation is conducted every five years. The results of the coming one are expected in 2025, hence the absence of new country-specific data on enforcement since 2022.

In the previous report, it was indicated that Slovakia had allocated 17 staff to enforcement of the REACH and CLP Regulations ([125]).

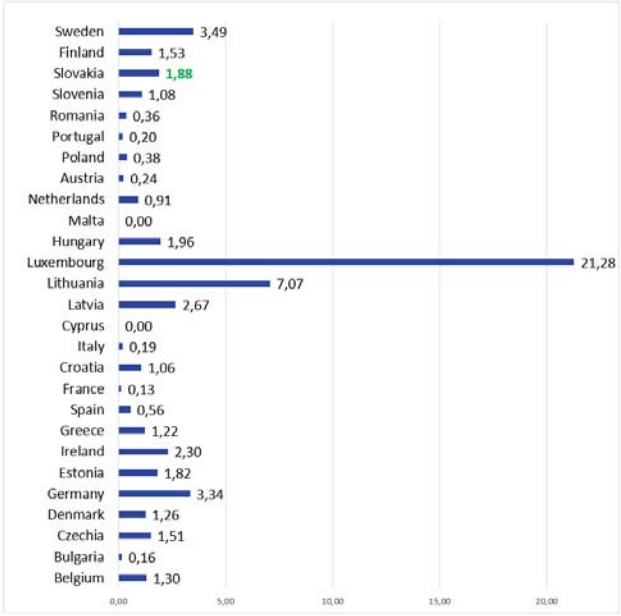
In 2020, Slovakia participated in an EU-coordinated enforcement project on products sold online, called the REACH-EN-FORCE (REF)-8 project ([126]). The report was adopted in November 2021, so it could not be taken into account in the previous EIR.

Figure 30: Compliance of imported products – results of the REF-8 project (%)



A risk approach was used for the targeting of control measures in order to maximise the chances of identifying non-compliances. Therefore, the non-compliance rates presented above cannot be considered the average non-compliance rates of products in the EU. However, the proportion of non-compliance cases found in the REF-8 project are of concern.

Figure 31: Number of REF-8 checks performed per 100 000 inhabitants (EU average = 1.24)



Slovakia's participation in the coordinated enforcement project (REF-8) was above the EU average, which is rather low because of the lack of involvement of certain large Member States.

From this project and others conducted with the help of the European Chemicals Agency (ECHA) in recent years, online sales have been proved to correspond consistently to higher non-compliance rates in checks performed across the EU, in particular when related to imported products.

In 2022, Slovakia received a priority action related to upgrading the administrative capacities in implementation and enforcement to move towards a policy of zero tolerance of instances of non-compliance. In the absence of reporting since 2022, no progress has been reported

([124]) These are methoxychlor, dechlorane plus and UV-328. In the case of the pesticide methoxychlor, there are no exemptions from the ban. However, for the two plastic additives, dechlorane plus and UV-328, the COP decision lists some time-limited specific exemptions.

([125]) European Commission, *Technical assistance to review the existing Member States reporting questionnaire under Articles 117(1) of REACH and 46(2) of CLP – Final report*, Publications Office of the European Union, Luxembourg, 2020, p. 75, https://circabc.europa.eu/ui/group/8ee3c69a-bccb-4f22-89ca-277e35de7c63/library/a4abce8c-8425-455f-b7e6-0ead917bde6b/details.

([126]) European Chemicals Agency, *REF-8 project report on enforcement of the CLP, REACH and BPR duties related to substances, mixtures and articles sold online*, Helsinki, p. 20, https://echa.europa.eu/documents/10162/17088/project_report_ref-8_en.pdf/ccf2c453-da0e-c185-908e-3a0343b25802?t=1638885422475.

and this priority action remains valid in 2025. This is also because of the experience with the REF-8 project.

2025 priority actions

- Upgrade the administrative capacities in implementation and enforcement to move towards a policy of zero tolerance of non-compliance.
- Increase involvement in the activities of the Forum for Exchange of Information on Enforcement of the European Chemicals Agency, including in the coordinated enforcement projects, called REF projects.
- Increase customs checks and checks of products sold online with regard to compliance with chemicals legislation.

4. Climate action

The impacts of climate change have continued to increase in recent years, inflicting damage and suffering in the EU and around the world. Globally, 2023 was the hottest year on record, while Europe has been warming twice as quickly as the global average, and is now the fastest-warming continent. The frequency and severity of extreme climate events are also increasing. Against this backdrop, the EU has demonstrated its determination to implement the European Green Deal and to become climate neutral and resilient by 2050, ensuring sustainable competitiveness and supporting EU industry in the net-zero transition. The European Climate Law is the EU's response to the need for action. It sets the objective of achieving climate neutrality by 2050 and a midterm target of a reduction in GHG emissions of at least 55 % by 2030, and outlines the adaptation efforts necessary to adjust to climate change's present and future impacts. Almost all the 'Fit for 55' proposals set out in the European Green Deal have been agreed in law, and the European Commission recommended a new intermediate climate target of a 90 % reduction in emissions by 2040. In 2024, the Member States submitted updated national energy and climate plans for 2021–2030, reflecting the increased ambition of the revised EU legislation. In 2024, the European Commission also released, jointly with the EEA, the first-ever European climate risk assessment.

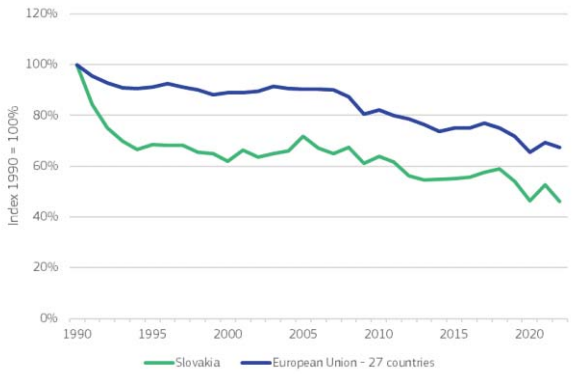
Over the last three decades, since 1990, the EU has achieved steady decreases in its emissions, reaching a running total in 2022 of –32.5 % ([127]). However, the EU and its Member States need to step up their implementation efforts and accelerate emissions reduction to stay on track to reach their targets of a 55 % reduction in net GHG emissions by 2030 and climate neutrality by 2050. Between 1990 and 2022, net GHG emissions of Slovakia decreased by 54 %, making it one of the countries with an above-average decrease.

The 'Fit for 55' legislative package reflects the need to speed up the green transition. It includes (i) strengthening and expanding the EU emissions trading system (ETS), with the creation of a new, second, ETS for transport and buildings together with a dedicated Social Climate Fund to help citizens during the transition; (ii) increasing targets under the effort sharing regulation; and (iii) a revised regulation for Land Use, Land Use Change and Forestry ([128]). The package has been fully adopted, and the Member States have been implementing the legislation.

The key strategic document at country level is the National Energy and Climate Plan (NECP) ([129]). Slovakia had not submitted the NECP by the end of March 2025. The legal deadline for the submission was in June 2024, as set by the Regulation on the Governance of the Energy Union and Climate Action ([130]).

To minimise the impacts of climate policies on vulnerable people and sectors, Slovakia is using the Just Transition Fund, Modernisation Fund and will use Social Climate Fund from 2026 (for more information, see Chapter 5 (Financing)).

Figure 32: Total GHG emissions (excluding international aviation) (%), 1990–2022



The EU emissions trading system

The EU ETS is the key tool for reducing GHG emissions cost-effectively across all Member States. It is the world's biggest carbon market, covering around 40 % of the EU's total GHG emissions from electricity and heat generation, the manufacturing industry, aviation within Europe ([131]) and, from 2024, maritime transport also.

The system sets a limit or cap on the total amount of GHGs that can be emitted at the EU level. Within this limit, companies buy emissions allowances (one allowance gives the right to emit 1 tonne of CO_2 eq

([127]) EU net domestic emissions, including the land use, land-use change and forestry (LULUCF) sector and excluding international aviation.

([128]) A full overview of the Fit for 55 package is available at https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/delivering-european-green-deal/fit-55-delivering-proposals_en.

([129]) More information about NECP is on the dedicated website https://energy.ec.europa.eu/topics/energy-strategy/national-energy-and-climate-plans-necps_en.

([130]) Article 14 of Regulation 2018/1999 on the Governance of the Energy Union and Climate Action

([131]) Flights between the EU Member States including departing flights to Norway, Iceland, Switzerland and the United Kingdom.

(carbon dioxide equivalent)), in auctions or through trading allowances with others. The cap is reduced annually to ensure that overall emissions in the sectors covered decrease over time.

The emissions under the ETS decreased by 41 % from 2005 to 2023.

In 2023, about a fifth of the greenhouse gases emitted by Slovakia's ETS installations came from power generation, significantly less than the EU average (57 %). Of the total emissions from all industry sectors, cement and lime production emitted a fifth, 9 % and 7 % came from the chemical industry and refineries, respectively, 40 % came from the metals industry, and 24 % were attributed to other industries. Between 2019 and 2023, the power sector reduced emissions by 33 %, while those of the industry sectors declined by 9 %. Since 2013, greenhouse gas emissions have declined by 44 % in power generation and by 14 % in the industry sectors – with a large decrease (39 %) in the metals industry and a slight increase in cement and lime production (7 %) – leading to a total greenhouse gas emissions reduction of 22 % in this period.

From 2027, a new emissions trading system, called ETS2, for buildings, road transport and additional sectors, (mainly industry not covered by the current ETS) will become fully operational ([132]). Member States should have notified full transposition the provisions of the revised EU ETS directive related to the new ETS2 into national law by 30 June 2024. Slovakia did not communicate full transposition into national law by this deadline. The Commission therefore opened an infringement procedure against Slovakia on 25 July 2024, by sending a letter of formal notice for failing to fully transpose the provisions into national law.

Slovakia has since partially notified transposition of the relevant provisions of the ETS 2 Directive to the Commission. The monitoring and reporting requirements and the obligation to hold a permit to carry out activities under ETS2 will commence on 1 January 2025.

The Commission also opened infringement procedures against Slovakia on 25 January 2024, by sending a letter of formal notice for failing to fully transpose previous revisions of ETS directive ([133]) into national law. Slovakia has since notified partial transposition of either one or both revisions to the Commission. In the absence of a complete transposition, the Commission may decide to issue a reasoned opinion.

Effort sharing

The Effort Sharing Regulation (ESR) ([134]) covers GHG emissions from domestic transport (excluding CO_2 emissions from aviation), buildings, agriculture, small industry and waste. Emissions from these sectors account for around 60 % of the EU's domestic emissions. The regulation sets the EU-wide target to reduce emissions from the effort sharing sectors by 40 % by 2030 compared to 2005 levels. This overall target for the EU translates to binding national emission reduction targets for each Member State. Slovakia's target is – 22.7 %.

In addition to the 2030 targets, Member States have annual GHG emissions limits (annual emission allocations), reducing every year until 2030.

There is some flexibility to take account of annual fluctuations in emissions, by trading emissions and transfers from the ETS and LULUCF.

Based on historical emissions and the most updated projections Slovakia will need to implement new measures and/or use available flexibilities to achieve its 2030 ESR target. Projected gap is 11.1 percentage points to the 2030 target.

The largest contributor is the domestic transport sector, which accounted for 39 % of all effort sharing emissions in 2022. The sector is a very high concern for Slovakia because emissions have increased by 1.5 % since 2005. Slovakia still has progress to make on its transition to sustainable mobility. In 2022, battery electric vehicles accounted for 0.2 % of Slovakia's passenger vehicle fleet (EU average is 1.2 %). Its 2 100 publicly accessible charging points provided one charging point for every four e-vehicles, above the EU average of 1:10. Passenger cars accounted for 83 % of the total distance travelled by passengers (just below the EU average of 85 %). The share of freight transported by road is relatively low, however, at 55 % (EU average: 75 %), with rail (27 %) and pipelines (15 %) having a more significant role. Only 44 % of the rail network is electrified (EU average: 56 %).

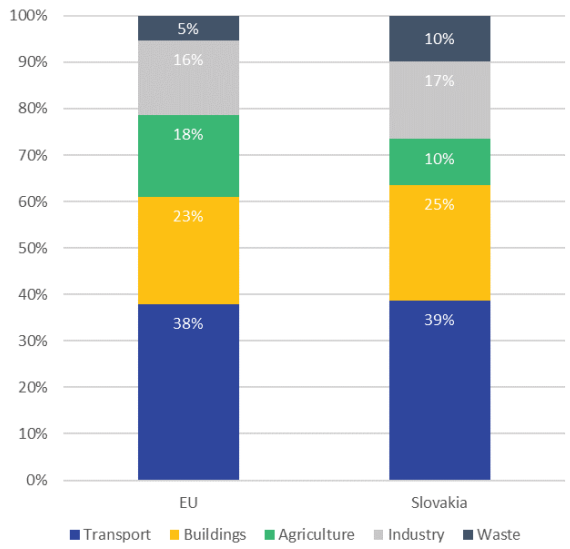
Buildings accounted for 25 % of all effort sharing emissions in 2022. Emissions of the sector are stagnating with no significant development since 2015. Energy performance of buildings is below the EU average and renovation, especially of the non-residential building sector, has been slow.

([132]) Directive (EU) 2023/959 (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2023.130.01.0134.01.ENG)

([133]) Directive - 2023/959 - EN - EUR-Lex and Directive - 2023/958 - EN - EUR-Lex

([134]) Regulation (EU) 2018/842 (https://eur-lex.europa.eu/eli/reg/2018/842).

Figure 33: Effort-sharing emissions by sector (%), 2022



Land use, land use change and forestry

The Land Use, Land-Use Change and Forestry (LULUCF) sector plays a significant role in achieving the EU's climate neutrality goal. In the EU, this sector absorbs more GHGs than it emits, removing significant volumes of carbon from the atmosphere. Thus, it is the only sector with negative emissions.

Removals by Slovakia's LULUCF sector have increased considerably since 2018.

Slovakia's target in 2030 is to enhance land removals by additional –0.5 Mt of CO_2 equivalent compared to the yearly average of the period 2016–2018. The latest available projections show a gap to target of 1.9 Mt of CO_2 equivalent in 2030. Therefore, Slovakia needs to apply additional measures to reach its 2030 target.

Adaptation to climate change

Halting all greenhouse gas emissions would still not prevent climate impacts that are already occurring. Therefore, adaptation to climate change is also a key component of climate policy.

Slovakia has no regions identified as a hotspots of climate risks most affected by climate change ([135]).

A high climate protection gap related to floods call for monitoring. Slovakia has continued to make progress on climate adaptation. Enhanced climate observation tools inform decision-making in specific sectors.

Slovakia adopted its national adaptation strategy in 2014 and updated it in 2018. A crucial step was the approval of the national adaptation plan in 2021. This plan outlined the priorities for adaptation in vulnerable sectors, notably water management, agriculture, forestry, nature, health, and urban planning. An evaluation of progress made in implementing the plan was submitted to the government. A comprehensive assessment of Slovakia's vulnerability to climate impacts is being planned as part of preparations for a climate law and an updated adaptation strategy, but this may take time. Although guidelines exist for adaptation monitoring and evaluation, information on spending and results in this area is incomplete. The main barriers to successful implementation are a lack of financial resources, low awareness at regional and local level, and inadequate inter-ministerial cooperation, in particular on mainstreaming adaptation into sectoral policies and plans.

European Commission identified ten priority actions in the 2022 edition of the review.

There is no progress in transport sector and emissions are rising.

There is some progress in energy efficiency of buildings, but the renovation rate of public buildings remains very low and overall energy performance of buildings is below the EU average.

Financial schemes for the renovation of housing have been merged into a single funded vehicle as part of the Recovery and resilience plan, which is helping to increase renovation rate and awareness.

It is very difficult to assess the actual quality of the energy performance certificate system. Professional association is in charge of expert's accreditation. Slovakia has a quality control scheme based on random checks.

Slovakia did not take significant steps in implementing reforms to accelerate the deployment of renewables. Overall share of renewables is growing very slowly in recent years.

Slovakia's Recovery and resilience plan includes some investments measures supporting sustainable production of biomass.

Slovakia has been proactive in addressing climate-change impacts and continued to make progress between 2021 and 2023, but further efforts are required to enhance the climate resilience of infrastructure and relying more on adaptation solutions that benefit both people and nature. There are some important reforms and

([135]) European Climate Risk Assessment (EUCRA). 2024. Available at European Climate Risk Assessment (europa.eu)

investments included in the Slovakia's Recovery and resilience plan, but progress is slow. No progress has been achieved on the priority action concerning property realignment in key areas of national parks.

Upskilling and reskilling rates in energy-intensive sectors are increasing. In energy-intensive industries, workers' participation in education and training increased from 4.0 % in 2015 to 12.1 % in 2023, and it is now above the EU average (10.9 %).

2025 priority action

- As Slovakia had not submitted its final national energy and climate plan (NECP) plan by the end of March 2025, the European Commission encourages Slovakia to submit it. The plan will be assessed and the assessment will be available on the Commission website.([136])

([136]) https://commission.europa.eu/energy-climate-change-environment/implementation-eu-countries/energy-and-climate-governance-and-reporting/national-energy-and-climate-plans_en.

Part II: Enabling framework – implementation tools

5. Financing

The EU budget supports climate investment in Slovakia with significant amounts in 2021–2027, with revenues from the ETS also feeding into the national budget. During 2020–2022, Slovakia's revenues from auctioning reached EUR 861 million in total, with 15 % spent on climate and energy.

In addition, the annual investment needed to meet its environmental objectives in the areas of pollution prevention and control, the circular economy and waste, water protection and management, and biodiversity and ecosystems is estimated to be EUR 2.9 billion per year in Slovakia.

These four environmental areas currently receive total funding of around EUR 1.8 billion per year; thus, there is a gap of EUR 1.1 billion per year.

Of the annual environmental investment gap, EUR 0.4 billion concerns biodiversity and ecosystems, EUR 0.3 billion pollution prevention and control and EUR 0.2 billion water and circular economy.

Climate finance landmarks

EU funding for climate action

The EU budget supports climate action in the EU-27 with EUR 657.8 billion in the 2021–2027 budgetary period across the various programmes and funds, representing an overall 34.3 % contribution level. Of this, cohesion policy provides EUR 120 billion (over half of it through the European Regional Development Fund (ERDF)), the RRF 275.7 billion and the CAP 145.9 billion ([137]).

In Slovakia, the EU cohesion policy (considering the EU contribution amount) provides EUR 4 billion for climate action in 2021–2027 (with more than half of this via the ERDF), with a further 7.5 million from the European Maritime, Fisheries and Aquaculture Fund ([138]).

The RRF contributes to climate finance in Slovakia with EUR 3.1 billion up to 2026, representing 47.7 % of the RRP ([139]).

The European Investment Bank (EIB) provided EUR 109.9 billion financing across the EU-27 between 2021 and mid 2024 to support energy, transport and industry projects that are aligned with the EU's climate objectives. Of this amount, EUR 41.2 million was assigned to Slovakia in the reference period ([140]).

National financing, including EU emissions trading system revenues

Revenues from the auctioning of emission allowances under the EU ETS, which feed directly into national budgets, amounted to EUR 242 million in 2020, EUR 276 million in 2021 and EUR 343 million in 2022 in Slovakia, totalling EUR 861 million in the three-year period. In Slovakia, all auctioning revenues are earmarked and go to the Environmental Fund, which also receives money from other sources. The values reported as spent represent the funding of climate change and energy projects known at the time of reporting. Part of unspent revenues are carried over to later years ([141]).

From the remaining part of the EU ETS revenues that feed into the Innovation Fund and the Modernisation Fund, further support is available to climate action at the EU level.

It should be noted that investment in climate action also supports the environment and, therefore, the environmental investments described in the following sections cannot be regarded as entirely additional to climate investment ([142]).

([137]) European Commission, *Statement of Estimates of the European Commission – For the financial year 2025*, Publications Office of the European Union, Luxembourg, 2024, pp. 94–96, https://commission.europa.eu/document/download/7a0420e1-599e-4246-9131-ccb7d505d6d9_en?filename=DB2025-Statement-of-Estimates_1.pdf.

([138]) See the Cohesion Open Data Platform ().

([139]) European Commission datasets and the Recovery and Resilience Scoreboard (https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard/index.html).

([140]) A list of financed projects is provided by the EIB (https://www.eib.org/en/projects/loans/index.htm).

([141]) European Commission: Directorate-General for Climate Action, *Progress Report 2023 – Climate action*, Publications Office of the European Union, Luxembourg, 2023, https://climate.ec.europa.eu/news-your-voice/news/climate-action-progress-report-2023-2023-10-24_en.

([142]) NB: Indirect investments (from climate and other policies) in support of the environment are accounted for via the tracking.

Environmental financing and investments

This section describes Slovakia's investment needs, current financing and gaps as they relate to the four environmental objectives beyond climate objectives, namely tackling pollution, the circular economy and waste, water protection and management, and biodiversity and ecosystems ([143]).

The environment overall

Investment needs

The overall environmental investment needs to be sufficient to enable Slovakia to meet its objectives in the areas of pollution prevention and control, the circular economy and waste, water protection and management, and biodiversity and ecosystems. The required investment is estimated to be EUR 2.9 billion per year (in 2022 prices).

Around EUR 781 million per year can be attributed to the need to support biodiversity and ecosystems. For pollution prevention and control, the annual investment needs are estimated to be EUR 780 million, for water EUR 506 million and for the circular economy EUR 809 million (in 2022 prices).

Current investments

To implement the environmental investments needed, the available financing is estimated to currently reach an annual EUR 1.8 billion in Slovakia from EU and national sources combined (in 2022 prices).

Total environmental funding from the multiannual financial framework (MFF) is estimated to reach around EUR 4.3 billion for Slovakia in total, during 2021–2027 (or EUR 617.0 million per year).

Table 1: Key environmental allocations from EU funds to Slovakia (million EUR), 2021–2027

Instrument	Allocations
Cohesion policy	**3 198.3** ([a])
ERDF	1 983.1
Cohesion Fund	1 104.4
Just Transition Fund	110.8
CAP	**937.1** ([b])
European Agricultural Guarantee Fund	582.8
European Agricultural Fund for Rural Development	354.3
European Maritime, Fisheries and Aquaculture Fund	**2.1**
Other MFF sources	181.1 ([c])
RRF ([d]) (2021–2026)	**1 479**

([a]) European Commission, 2021-2027 cohesion policy (planned) allocations in *EU amount* excluding national co-financing, based on the tracking in the Common Provisions Regulation (CPR, 2021) Annex I. Please note potential data changes that may have arisen between the EIR preparation cut-off date (31 October 2024) and its publication date. Source and further information: https://cohesiondata.ec.europa.eu/2021-2027-Categorisation/2021-2027-Planned-finances-detailed-categorisation/hgyj-gyin/about_data.

([b]) Regulation (EU) 2021/2115 of the European Parliament and of the Council of 2 December 2021 establishing rules on support for strategic plans to be drawn up by Member States under the common agricultural policy (CAP strategic plans) and financed by the European Agricultural Guarantee Fund (EAGF) and by the European Agricultural Fund for Rural Development (EAFRD) and repealing Regulations (EU) No 1305/2013 and (EU) No 1307/2013 (OJ L 435 6.12.2021, p. 1), Annex XI, https://eur-lex.europa.eu/eli/reg/2021/2115.

Note that 2021-2027 combines factual data for 2021 and 2022 and expenditure under the relevant specific objectives (SOs) of the CAP strategic plans from 2023, using the EU biodiversity tracking methodology (https://commission.europa.eu/system/files/2023-06/Biodiversity%20tracking%20methodology%20for%20each%20programme%202023.pdf). Source: European Commission.

([c]) Space Fund, Horizon Europe, financial instrument for the environment and the Connecting Europe Facility.

([d]) Outside the MFF. Note that the RRF applies a similar environmental tracking scheme (set in the RRF Regulation, Annex VI) as the EU's cohesion policy. RRF dataset version used: July 2024, prior to 2025 revisions. Data source: European Commission.

Slovakia, in addition to receiving EU funds earmarked specifically for it in 2021–2027, can also benefit from funding programmes that can be accessed at the EU level and which are open to all Member States. These include the financial instrument for the environment (LIFE) programme ([144]) (EUR 5.4 billion), Horizon Europe ([145]) (EUR 95.5 billion), the Connecting Europe Facility ([146]) (EUR 37.7 billion) and the InvestEU programme ([147]).

([143]) Research, development and innovation is accounted for under each environmental objective. The financing needs, baselines and gaps estimates are based on the Directorate-General for Environment's internal analysis (of 2024). Throughout this chapter, specific references are provided to the most important data sources used.

([144]) https://cinea.ec.europa.eu/programmes/life_en.

([145]) European Commission, Horizon Europe, https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe_en.

([146]) The Connecting Europe Facility (transport) also includes EUR 11.3 billion transferred from the Cohesion Fund, of which 30 % 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.

([147]) 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 EIB group and others.

Slovakia's RRP supports climate objectives through funding of EUR 3.1 billion (48 % of total), which also contribute to the environmental objectives.

The EIB provided around EUR 16.5 million in environment-related financial contributions to Slovakia from 2021 to mid 2024, all of which was in the area of sustainable energy, transport and industrial projects, which provides significant co-benefits to reducing air pollution, environmental noise and other pollution.

The EU's total national expenditure on environmental protection (operating plus capital expenditure) was EUR 298 billion in 2020 and EUR 321 billion in 2021, representing around 2.2 % of EU-27 GDP. In Slovakia, the total national environmental protection expenditure was EUR 1.8 billion in 2020 and EUR 1.9 billion in 2021, representing 2 % and 1.9 % of GDP, respectively.

Of the total environmental expenditure, the national capital expenditure (investment) on environmental protection amounted to EUR 54.5 billion in 2020 and EUR 59.9 billion in 2021 in the EU-27, representing around 0.4 % of the EU's GDP. In Slovakia, the national environmental protection investment reached EUR 287 million in 2020, rising to EUR 263 million in 2021, representing around 0.3 % of GDP.

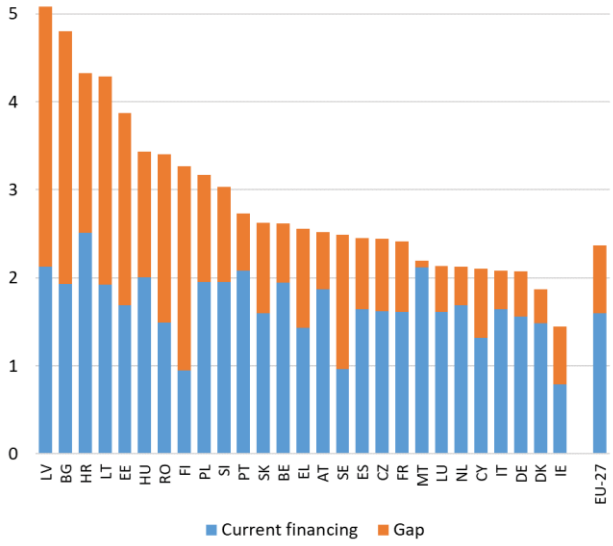
Splitting by institutional sector, 48 % of Slovakia's national environmental protection investment (capital expenditure) comes from the general government budget, with 45 % coming from specialist private-sector producers (of environmental protection services, such as waste and water companies) and 8 % from the general business sector, whose environmental activities are usually ancillary to its main activities. At the EU level, 38 % of environmental protection investment comes from governments, 40 % from specialist private-sector producers and 22 % from the general business sector ([148]).

Slovakia's total financing for environmental investment reaches an estimated EUR 1.8 billion per year (in 2022 prices), including EU funding and national public and national private expenditure. Of the total, the share of EU funds (including EIB funds) reaches 44 %, with around 56 % national financing. The total public financing (EU plus national public) represents 71 % of the total.

The gap

To meet its four environmental objectives beyond climate change, the additional investment need over the current levels (i.e. the gap) reaches an estimated EUR 1.1 billion per year in Slovakia, representing around 1.02 % of the national GDP, being higher than the EU average (0.77 %).

Figure 34: Environmental financing, needs and gaps per Member State (% of GDP)



Source: Analysis of Directorate-General for Environment.

The following table provides the distributions of Slovakia's environmental investment gap (expressed in various forms) by environmental objective.

Table 2: Summary of environmental investment gaps in Slovakia per year, 2021–2027

Environmental objective	Investment gap per year		
	Million EUR (2022 prices)	% of total	% of GDP
Pollution prevention and control	289	25.9	0.26
Circular economy and waste	189	16.9	0.17
Water management and water industries	223	20.0	0.20
Biodiversity and ecosystems	416	37.3	0.38
Total	**1 117**	**100.0**	**1.02**

Source: Directorate-General for Environment analysis.

([148]) Eurostat, 'Environmental protection expenditure accounts', env_ac_epea.

Pollution prevention and control

Investment needs

In pollution prevention and control, Slovakia's investment needs are estimated to reach EUR 780 million per year (including baseline investments) in 2021–2027. Most of this, EUR 466 million, relates to air pollution control, to comply with the clean air requirements for the five main air pollutants under the NECD by 2030. The estimated needs to reduce environmental noise reach EUR 166 million per year, most of which is delivered by the (same) sustainable energy and transport investments that also benefit clean air ([149]). Protection from radiation requires an estimated EUR 0.3 billion per year, while industrial site remediation requires an estimated EUR 20 million per year. Microplastics pollution and the chemicals strategy require around EUR 10–20 million per year (each) ([150]).

Current investments

The current investment levels supporting pollution prevention and control reach an estimated EUR 491 million per year in Slovakia in 2021–2027. Most of the financing concerns clean air (EUR 411 million per year). Protection from environmental noise receives around EUR 141 million per year, with a further EUR 40 million spent on site remediation.

In Slovakia, the EU MFF provides an estimated 44 % of the clean air financing (mostly via cohesion policy), with a further 37.3 % from the RRF, adding up to 81.3 % of the total. EIB financing contributes 0.5 % and national sources reach 18.3 % ([151]).

The gap

To meet its environmental objectives concerning pollution prevention and control (towards zero pollution), Slovakia needs to provide an additional EUR 289 million per year (0.26 % of GDP), mostly related to protection from radiation, clean air and noise. The adequate implementation of the NECP with the investments included for sustainable energy and transport would largely deliver this, while in many Member States additional measures and investments may be required to comply with the ammonia reduction requirements.

According to the latest (2023) NAPCP review report ([152]), Slovakia complied with ammonia reduction requirements in 2020 and 2021, and it is not at risk of non-compliance with ammonia concerning the NECD's 2030 emission reduction commitments, based on the policies and measures in its NAPCP that take into account climate, energy and CAP plans and financing baselines.

Circular economy and waste

Investment needs

Slovakia's investment needs in circular economy and waste reach EUR 809 million per year (including baseline investments). Most of this, around EUR 678 million per year, relates to circular economy measures in the mobility, food and built environment systems, with a further EUR 132 million necessary for waste management (municipal and packaging waste), covering waste collection, biowaste treatment, recycling reprocessors, waste-sorting facilities, and digitalisation of the waste registry. The amount for waste excludes the investments needed for the uptake of circularity and waste prevention across the economy ([153][154].

Current investments

Circular economy investments across the economy reach around EUR 515 million per year in Slovakia in 2021-2027,

([149]) 2021 Phenomena project assessment (https://op.europa.eu/en/publication-detail/-/publication/f4cd7465-a95d-11eb-9585-01aa75ed71a1) and the Commission's 2023 Environmental Noise Directive implementation report (https://environment.ec.europa.eu/system/files/2023-03/COM_2023_139_1_EN_ACT_part1_v3.pdf).

([150]) European Commission, *Third Clean Air Outlook*, Brussels, 2022, https://environment.ec.europa.eu/topics/air/clean-air-outlook_en. See also the impact assessment for the revision of the AAQD available from the Commission web page on the proposed revision ().

([151]) Through the tracking of EU funds, EIB projects and national expenditure (EPEA accounts, Eurostat). Note that the bulk of clean air financing is provided as a contribution from climate (energy and transport) measures, as per the tracking schemes in the Common Provisions Regulation Annex I and the RRF Regulation Annex VI. Further information on clean air tracking: https://commission.europa.eu/document/download/0a80484e-2409-4749-94c6-3b23bc6bae8f_en?filename=Clean%20air%20methodology_0.pdf

([152]) European Commission, 'National air pollution control programmes and projections', European Commission website, https://environment.ec.europa.eu/topics/air/reducing-emissions-air-pollutants/national-air-pollution-control-programmes-and-projections_en.

([153]) See Systemiq and Ellen MacArthur Foundation, *Achieving 'Growth Within'*, 2017, https://www.ellenmacarthurfoundation.org/achieving-growth-within; and European Commission: Directorate-General for Environment, *Study on waste management investment needs in the waste sector and on the financing of municipal waste management in Member States*, Publications Office of the European Union, Luxembourg, 2019, https://op.europa.eu/en/publication-detail/-/publication/4d5f8355-bcad-11e9-9d01-01aa75ed71a1.

with a further EUR 106 million provided for waste management that does not constitute circular economy.

Around 6.7 % of this combined financing for circularity and waste comes from the EU MFF, with no further contribution from the RRF. The share of national sources is absolutely overwhelming, reaching 93 % of the total financing ([155]).

The gap

To meet its environmental objectives concerning the circular economy and waste, Slovakia needs to increase circular economy investments by an estimated EUR 163 million per year, with an additional EUR 25 million concerning waste management actions, not considered as circular economy. Combined, this amounts to EUR 189 million per year, representing 0.17 % of Slovakia's GDP.

Of the circular economy gap, EUR 43 million relates to recent initiatives, such as the eco-design for sustainable products, packaging and packaging waste, labelling and digital tools, CRM recycling, and measures proposed under the amendment of the Waste Framework Directive, and EUR 121 million relates to further investment needs to unlock Slovakia's circular economy potential.

Water protection and management

Investment needs

The annual water investment needs reach an estimated EUR 506 million (in 2022 prices) in Slovakia. This comprises investment needs both for the water industry and for the protection and the management of water. Of the total annual need, EUR 231 million relates to the management of waste water (also including additional costs associated with the revised UWWTD). A further EUR 157 million is necessary for drinking water-related investments and around EUR 116 million for the protection and management of water ([156]).

Current investments

Water investments in Slovakia are estimated to be around EUR 282 million per year (in 2022 prices) in 2021–2027. Of this, EUR 127 million supports wastewater management, EUR 114 million drinking water and around EUR 41 million the other aspects of the Water Framework Directive (water management and protection).

Of the total financing, 38 % is provided by the EU MFF (mostly through cohesion policy), 2.8% from the RRF, while the bulk of financing comes from national sources (59 %) ([157]).

The gap

To meet the various environmental targets under the Water Framework Directive and the Floods Directive, Slovakia's water investment gap reaches EUR 223 million per year (0.2 % of GDP), with EUR 105 million linked to wastewater measures. Drinking water measures require an additional EUR 43 million per year and the other aspects of the Water Framework Directive around EUR 75 million per year over the existing levels of financing.

Biodiversity and ecosystems

Investment needs

The investment needs for biodiversity and ecosystems are estimated to be EUR 781 million per year (in 2022 prices) in Slovakia in 2021–2027. This includes the following financing needs:

- Slovakia's PAF ([158]), concerning the Natura 2000 areas: EUR 250.4 million per year, mostly running costs;
- additional BDS costs ([159]): EUR 328.4 million per year on top of the PAF;
- sustainable soil management costs ([160]): EUR 202.1 million per year.

([155]) Waste management and circular economy expenditure tracking in the EU funds, EIB projects and in the national expenditure (Eurostat). Datasets: EPEA accounts (env_epi) and circular economy private investments (cei_cie012).

([156]) See European Commission, 'Estimating water investment needs and financing capacities for water-related investment in EU Member States', 28 May 2020, https://commission.europa.eu/news/estimating-investment-needs-and-financing-capacities-water-related-investment-eu-member-states-2020-05-28_en; and OECD, *Financing Water Supply, Sanitation and Flood Protection: Challenges in EU Member States and policy options*, OECD Publishing, Paris, 2020, https://www.oecd-ilibrary.org/environment/financing-water-supply-sanitation-and-flood-protection_6893cdac-en.

([157]) Water investment levels are estimated through tracking EU funds, EIB projects and national expenditure (EPEA accounts, Eurostat).

([158]) European Commission, 'Financing Natura 2000 – Prioritised action frameworks', European Commission website, https://environment.ec.europa.eu/topics/nature-and-biodiversity/natura-2000/financing-natura-2000_en.

([159]) European Commission: Directorate-General for Environment, *Biodiversity Financing and Tracking – Final report*, Publications Office of the European Union, Luxembourg, 2022, https://op.europa.eu/en/publication-detail/-/publication/793eb6ec-dbd6-11ec-a534-01aa75ed71a1/language-en.

([160]) Proposal for a directive of the European Parliament and of the Council on soil monitoring and resilience (Soil Monitoring Law) COM(2023) 416 final of 5 July 2023, https://environment.ec.europa.eu/publications/proposal-directive-soil-monitoring-and-resilience_en.

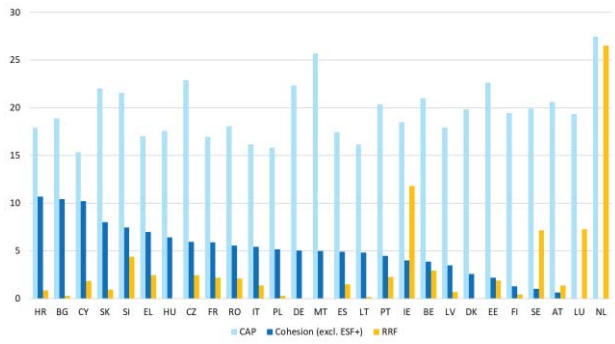
Current investments

The current level of biodiversity financing is estimated to be EUR 364 million per year (in 2022 prices) in 2021–2027. 80.2 % of this is considered direct financing to biodiversity and ecosystems, with a 100 % coefficient in the tracking schemes.

19.4 % of the total financing is estimated to come from EU cohesion policy, 34.4 % from the CAP, 3.1 % from Horizon Europe, around 1.2 % from LIFE and none from the European Maritime, Fisheries and Aquaculture Fund. The EU MFF altogether accounts for 58.5 % of the financing and the RRF for 2.2 %, adding up to a total of 60.7 % from the EU budget. The rest, 39.3 %, comes from national sources ([161]).

Slovakia has programmed a relatively high share of its CAP budget (22 %) and cohesion policy funds (8 %, considering EU contribution amounts, disregarding ESF+) in measures supporting biodiversity for 2021–2027 – both well above the EU average. However, only 0.9 % of RRF financing is envisaged to support biodiversity in Slovakia (see Figure 35).

Figure 35: 2021–2027 contributions to biodiversity from the main EU instruments per Member State (% of policy total)



NB: ESF+, European Social Fund Plus.

The gap

To meet the environmental objectives concerning the protection and restoration of biodiversity and ecosystems and other relevant cross-cutting measures, Slovakia's investment gap is estimated to be around EUR 416 million per year, corresponding to 0.38 % of its GDP.

Public financial management

Green budgeting practices

Green budgeting refers to the use of budgetary tools to achieve climate and environmental goals. Some Member States already use some green budgeting practices ([162]). Green budgeting practices provide increased transparency on the environmental implications of budgetary policies.

The Commission has developed a non-mandatory green budgeting reference framework that brings together methodologies for assessing the impacts of budgets on climate and environmental goals ([163]).

To help Member States develop national green budgeting and thereby improve policy coherence and support the green transition, the Commission facilitated a technical support instrument (TSI) project on green budgeting from 2021 to 2024 ([164]). Slovakia participated and has also been selected for the next round of TSI projects on green budgeting, starting in 2025, where the country will expand peer-to-peer learning through civil servants' exchanges.

Beyond green budgeting, to improve policy outcomes, the Commission has also drawn up climate-proofing and sustainability-proofing guidance ([165]) as tools to assess project eligibility and compliance with environmental legislation and criteria.

Green taxation and tax reform

Total environmental taxes amounted to EUR 2.7 billion in Slovakia in 2022, representing 2.5 % of its GDP (EU average: 2.0 %). Energy taxes formed the largest component of environmental taxes, accounting for 2.3 % of GDP, which is higher than the EU average of 1.6 %. Transport taxes, at 0.19 % of GDP, were below the EU average (0.4 %), while taxes on pollution and resources, at 0.02 %, were below the EU average (0.08 %). In 2022, environmental taxes in Slovakia accounted for 7.1 % of

([161]) Based on biodiversity tracking in the EU budget () and national expenditure into biodiversity from the Classification of the Functions of Government accounts.

([162]) European Commission, *Green Budgeting in the EU. Key Insights from the 2023 European Commission Survey of Green Budgeting Practices*, 2023, https://economy-finance.ec.europa.eu/economic-and-fiscal-governance/national-fiscal-frameworks-eu-member-states/green-budgeting-eu_en#:~:text=European%20Commission%20Green%20Budgeting%20Survey%C2%A0.

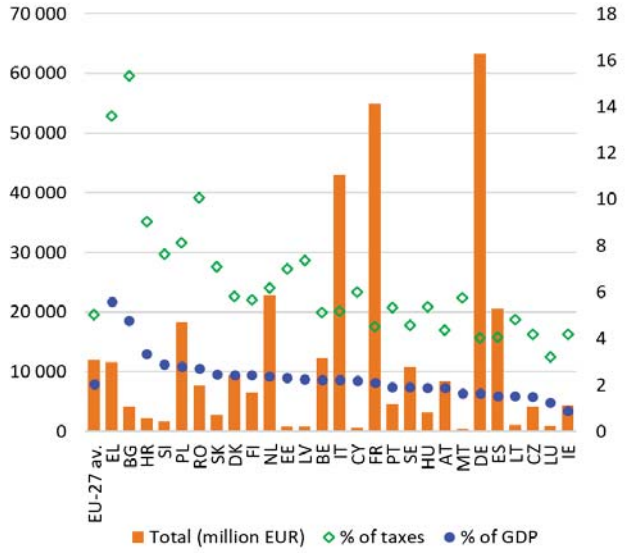
([163]) European Commission, 'European Union green budgeting reference framework', 2022, https://economy-finance.ec.europa.eu/economic-and-fiscal-governance/green-budgeting-eu_en.

([164]) https://reform-support.ec.europa.eu/what-we-do/revenue-administration-and-public-financial-management/supporting-implementation-green-budgeting-practices-eu_en.

([165]) Commission notice – Technical guidance on the climate proofing of infrastructure in the period 2021–2027 (OJ C 373, 16.09.2021, p. 1), https://op.europa.eu/en/publication-detail/-/publication/23a24b21-16d0-11ec-b4fe-01aa75ed71a1/language-en.

total revenues from taxes and social security contributions (above the EU average of 5.0 %) ([166]).

Figure 36: Environmental taxes per Member State, 2022



The EU Green Deal emphasises the role of well-designed tax reforms (e.g. shifts from taxing labour to taxing pollution) to boost economic growth and resilience, and to foster a fairer society and a just transition through the right price signals. The Green Deal promotes the 'polluter-pays principle', which makes polluters bear the costs to prevent, control and remedy pollution.

According to a 2024 study ([167]), Slovakia applies emission charges (various categories of charges for emissions to water and air, plus a solid waste disposal to landfill fee), product charges (collection and disposal of batteries, collection and disposal of electric and electronic products, levies on aluminium sheets and strips, levies on tyres) and user charges (volumetric charges for water abstraction, charges for mineral extraction).

Green bonds and sustainable bonds

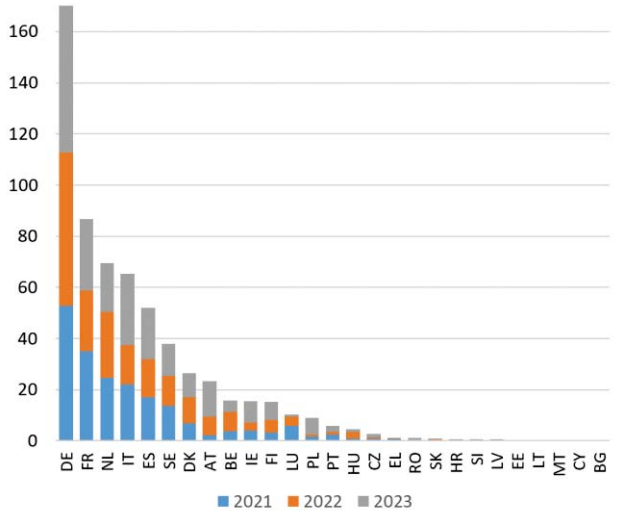
In 2023, the total value of green bonds issued by Member States was USD 245 billion (EUR 227 billion), up from USD 234 billion (EUR 198 billion) in 2021.

During 2021–2023 combined, Slovakia issued green bonds worth USD 1.1 billion (EUR 0.9 billion). Of this, the issuance in 2023 amounted to USD 318 million (EUR 0.3 billion) ([168]).

During 2014–2023, 83 % of the green bonds issued by European countries (excluding supranational entities) served objectives in energy, buildings or transport, while 5 % supported objectives in water, 5.1 % related to land use (with links to nature and ecosystems) and 3.8 % applied to waste management. By 2023, the combined share of energy, buildings and transport had decreased to 73 %, the shares of waste management and land use had increased (to 5.9 % and 8.4 %, respectively) and the share of water had remained around 5 %.

In 2021–2023, 31.7 % of the European green bonds (excluding supranational issuances) was issued by financial corporates, 29.1 % by sovereign governments and 23.1 % by non-financial corporates. 8.3 % of the issuances was linked to government-backed entities, 6.4 % to development banks and 1.4 % to local governments.

Figure 37: Value of green bonds issued per Member State (billion EUR), 2021, 2022 and 2023



Data source: Climatebonds.net, with some additional data from national sources (e.g. Croatia, Slovenia).

Environmentally harmful subsidies

Addressing and phasing out environmentally harmful subsidies, in particular fossil fuel subsidies (FFS), is a further step towards achieving the eighth environment action programme objectives and the enabling

([166]) Eurostat, 'Environmental taxes accounts', env_eta.

([167]) European Commission, *Candidates for Taxing Environmental Bads at National Level*, Publications Office of the European Union, Luxembourg, 2024, Annexes 1 and 2, .

([168]) Climate bonds initiative (). NB. Additionally (and not included in this), national sources indicated EUR 544.8 million issuance for Croatia, in 2022-2023, and a slightly higher amount for Slovenia (+0.27 billion) during 2021-2023 in total.

conditions ([169]). FFS are costly for public budgets and make it difficult to achieve European Green Deal objectives.

The overall downward trend of FFS mentioned in past EIRs was disrupted from 2022 due to the European response to the 2021 energy crisis and subsequent increase in energy prices.

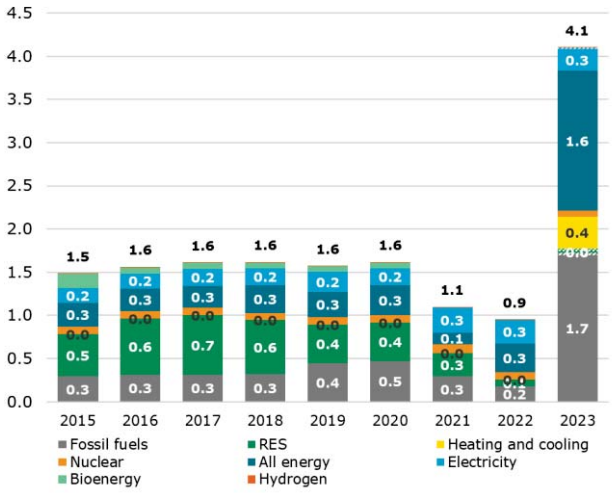
As a direct consequence, annual FFS in the EU increased to EUR 109 billion in 2023 from EUR 57 billion in 2020. From 2021 to 2023, there was a marked increase in annual FFS of 72 % in the EU ([170]).

For the majority of the Member States (16) the year 2022 saw a peak in the amount of overall FFS. A decline was then observed in 2023 ([171]). In particular, FFS for coal and lignite, natural gas and oil increased in 2022 and a strong increase was observed for natural gas subsidies.

In Slovakia, the energy subsidies were stable between 2015 and 2020, dropping observably in 2021 and 2022, followed by a sharp increase in 2023. During 2015–2022, FFS reached its maximum in 2020 (EUR 0.5 billion), while the overall increasing trend in 2023 saw FFS scaled up as well, to EUR 1.7 billion.

As a share of GDP, FFS in 2022 ranged from 1.8 % in Croatia to less than 0.1 % in Denmark and Sweden. Slovakia's value reached 0.2 %, below the EU average (0.8 %) ([172]).

Figure 38: Energy subsidies by energy carrier in Slovakia (billion EUR), 2015–2023



NB: RES, renewable energy source.

Source: analysis of Directorate-General Energy

For Slovakia, the EIR 2022 priority actions included the following.

- Devise an environmental financing strategy to maximise opportunities for closing environmental implementation gaps, bringing together all relevant administrative levels.
- Ensure an increased level of financing for the environment, including from private sources (currently lower than a third), to cover investment needs across the environmental objectives and to close investment gaps.
- Continue the phasing out of environmentally harmful subsidies.
- Enhance the use of economic instruments to make polluters pay.

Overall, Slovakia has a similar level of environmental investment gaps to that at the time of the 2022 EIR (at around 1 % of GDP), which is above the EU average.

2025 priority action

- Use more national funding (for instance by increasing taxes in favour of the environment and reducing environmentally harmful subsidies), EU funding and private funding to help close the investment gap.

([169]) Article 3(h) and 3(v) of the eighth environment action programme.

([170]) European Commission, 2024 Report on Energy Subsidies in the European Union, COM(2025). https://ec.europa.eu/transparency/documents-register/detail?ref=COM(2025)17&lang=en

([171]) 16 Member States: BE, EE, IE, EL, ES, FR, HR, IT, CY, LT, HU, NL, AT, PT, RO and SE.

([172]) European Commission, 2024 Report on Energy Subsidies in the European Union, COM(2025). https://ec.europa.eu/transparency/documents-register/detail?ref=COM(2025)17&lang=en

6. Environmental governance

Information, public participation and access to justice

Citizens can more effectively protect the environment if they rely on the three 'pillars' of the Aarhus Convention: (i) access to information, (ii) public participation in decision-making and (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 effectively ([173]). 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 environment, safeguard the rights of citizens and ensure accountability of authorities ([174]). It includes the right to bring legal challenges ('legal standing') ([175]).

Environmental information

This section focuses on the implementation of the Infrastructure for Spatial Information in the European Community (Inspire) Directive. The Inspire Directive aims to set up a European spatial-data infrastructure for sharing environmental spatial information between public authorities across Europe. It is expected that this will help policymaking across boundaries and facilitate public access to this information. Geographical information is needed for good governance at all levels and should be readily and transparently available.

Slovakia's performance in implementing the Inspire Directive is substantial and has been reviewed based on its 2023 country fiche ([176]) (see Table 3).

Table 3: Slovakia dashboard on the implementation of the Inspire Directive, 2016–2023

	2016	2023
Effective coordination and data sharing		
Ensure effective coordination	■	■
Data sharing without obstacle	■	■
Inspire **performance indicators**		
(i) Conformity of metadata	■	■
(ii) Conformity of spatial datasets	■	■
(iii) Accessibility of spatial datasets through view and download services	■	■
(iv) Conformity of network services	■	■

Legend

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

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

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

Source: European Commission, 'Slovakia', Inspire Knowledge Base, https://knowledge-base.inspire.ec.europa.eu/slovakia_en.

In 2022, Slovakia received a priority action on the need to make spatial data more widely accessible and prioritise the environmental datasets ([177]). Slovakia has made good progress on accessibility of spatial data, but more efforts are needed.

([173]) The Aarhus Convention (https://unece.org/environment-policy/public-participation/aarhus-convention/text), the Access to Environmental Information Directive (Directive 2003/4/EC) (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32003L0004) and the Inspire Directive (Directive 2007/2/EC) (https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32007L0002) together create a legal foundation for the sharing of environmental information between public authorities and with the public.

([174]) These guarantees are explained in the European Commission's 2017 notice on access to justice in environmental matters (https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:52017XC0818(02)) and a related 2018 citizen's guide (https://op.europa.eu/en/publication-detail/-/publication/2b362f0a-bfe4-11e8-99ee-01aa75ed71a1/language-en/format-PDF).

([175]) This EIR focuses on the means used by Member States to guarantee rights of access to justice and legal standing and to overcome other major barriers to bringing cases on environmental protection.

([176]) European Commission, 'Slovakia', Inspire Knowledge Base, https://knowledge-base.inspire.ec.europa.eu/slovakia_en.

([177]) See the European Commission's list of high-value spatial datasets (https://github.com/INSPIRE-MIF/need-driven-data-prioritisation/blob/main/documents/eReporting_PriorityDataList_V2.1_final_20201008.xlsx).

Public participation

Public involvement at both the planning and the project phase maximises transparency and social acceptance of programmes and projects. Consultation with the public (including NGOs) and environmental, local and regional authorities is a key feature of an effective impact assessment procedure. Such consultation also provides an opportunity for public authorities and project promoters to engage with the public actively and meaningfully by making information on the likely significant effects widely available. If carried out with due diligence and taking into consideration useful public input, this process leads to better-informed decision-making and can promote public acceptance. Making information available increases stakeholder involvement, thus lessening resistance and preventing (or minimising) litigation. On the other hand, it is paramount that the procedure is effective.

This section examines how public involvement and transparency are ensured under two instruments, namely the Environmental Impact Assessment (EIA) Directive ([178]) and the Strategic Environmental Assessment (SEA) directive ([179]).

EU law provides for a flexible framework concerning EIAs. The aim of this framework is to ensure the application of the necessary environmental safeguards, while enabling speedy approval of projects. The Commission has contributed to simplifying and accelerating permitting for renewable energy projects and continues to support the Member States in this regard ([180]). Slovakia has taken some steps aimed at accelerating permit-issuing procedures in line with the broad flexibilities offered by the EU legal framework, namely in the form of accelerated deadlines for issuing permits for renewable energy projects. The option of a one-stop-shop for issuing permits has not been considered in Slovakia yet.

The average speed in the EU for issuing permits involving an EIA procedure is 20.6 months, with a minimum duration of 11.4 months and a maximum duration of 75.7 months ([181]). The duration of each step in an EIA process (screening, scoping, EIA report, public consultation, reasoned conclusion, development consent) varies considerably between Member States and projects. The available data for Slovakia does not cover all EIA steps and thus it is impossible to draw exact conclusions; however, it can be concluded that the average speed of the EIA process in Slovakia is slower than the EU average. As regards the screening step, Slovakia is among six Member States that reported an average exceeding three months, which is above the legal deadline of 90 days provided in the EIA Directive. As regards the reasoned conclusion step, Slovakia reported the longest average duration of all Member States (11.8 months, compared with the EU average of 3.5 months).

Effective use of EU procedures can positively influence the timely approval of activities underpinning the decarbonisation of the economy on the way to net zero by 2050.

A new report is not yet available on the application and effectiveness of the SEA Directive in the EU. Nevertheless, a support study has been published with information by Member State ([182]).

Slovakia's Ministry of Environment provides a dedicated web page on the EIA and SEA processes ([183]). There is comprehensive information on the applicable legislation, step-by-step details of both procedures, guidance documents and contact point details, and an information system providing full documentation on current and past EIA and SEA procedures ([184]). Information on how to submit comments by the public, to whom and within which time frame, is available in the document with which the EIA/SEA project is notified. However, individuals would generally need to have detailed information on the permitting process of concern already in order to locate the documentation.

([178]) Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment (OJ L 26, 28.1.2012, p. 1), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32011L0092.

([179]) Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment (OJ L 197, 21.7.2001, p. 30), https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32001L0042.

([180]) Commission Staff Working Document (SWD/2022/0149 final), 18 May 2022, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52022SC0149&qid=1653034229953.

([181]) European Commission: Directorate-General for Environment, *Collection of information and data on the implementation of the revised Environmental Impact Assessment (EIA) Directive (2011/92/EU) as amended by 2014/52/EU)*, Publications Office of the European Union, Luxembourg, 2024, Tables 5 and 6, https://op.europa.eu/en/publication-detail/-/publication/8349a857-2936-11ef-9290-01aa75ed71a1/.

([182]) European Commission: Directorate-General for Environment, Lundberg, P., McNeill, A., McGuinn, J., Cantarelli, A. et al., *Study supporting the preparation of the report on the application and effectiveness of the SEA Directive (Directive 2001/42/EC) – Final study*, Publications Office of the European Union, 2025, https://data.europa.eu/doi/10.2779/1615072

([183]) https://www.enviroportal.sk/eia-sea. https://www.enviroportal.sk/environmentalne-temy/starostlivost-o-zp/eia-sea-posudzovanie-vplyvov-na-zp.

([184]) https://www.enviroportal.sk/sk/eia.

There is no summary information available on participation in EIA and SEA processes, although such information is available for individual cases.

An infringement process has been ongoing since 2019. Despite making several commitments to comply, Slovakia has failed to correct all the deficiencies identified by the Commission ([185]).

In the 2022 EIR, Slovakia received two priority actions related to EIA and SEA: (i) to collate and publish information on public participation in EIA and SEA processes in order to monitor whether public engagement is increasing or decreasing; and (ii) to complete transposition of the revised EIA Directive. There is no information on clear progress on the first priority action. No progress has been made on the second priority action, given that the infringement proceeding launched in 2019 is still ongoing.

Access to justice

Access to justice, guaranteed by Article 19(1) of the Treaty on the European Union and Article 47 of the EU Charter of Fundamental Rights, is a fundamental right and part of the democratic process. It is vital to ensure the full application of EU law in all Member States and the legal protection of the rights of individuals, including in environmental matters. Access to justice is essential to enable judicial review of the decisions of public authorities and to allow the correction of any wrongdoing committed by these authorities.

This section provides a snapshot of the state of play of access to courts by the public, particularly when it comes to challenging plans, or the non-adoption of plans, under EU law, in the areas of water, waste, air quality, nature and noise, irrespective of the form of the legal act (i.e. regulatory act or administrative decision).

Both NGOs and concerned individuals in general have standing in administrative judicial proceedings when challenging administrative decisions. However, there are some difficulties in challenging both plans and programmes and – in particular – their non-adoption. When plans or programmes are adopted as a regulatory act by a government resolution, no access to justice is granted to the public, as government resolutions are not subject to judicial review. There is no provision in Slovak legislation that explicitly gives individuals or NGOs access to justice with regard to 'concepts, plans or programmes'. They can be challenged only when adopted by a municipality as a 'general binding regulation of a municipality'. Inactivity of public administration bodies (e.g. omissions) cannot be challenged by the public at all.

The Commission launched an infringement case against Slovakia in February 2024, as it does not ensure with clarity and precision that members of the public can challenge before a court all decisions or omissions of national authorities falling within the scope of EU environmental law ([186]). Furthermore, it appears that public participation has also been limited for sectoral assessment, such as assessment of exceptions at the project level under the Water Framework Directive, as a result of the amendment to the Water Act in 2021.

The Commission has identified several non-conformity issues in Slovakia's transposition of the amended EIA Directive. The shortcomings relate to access to information, lack of clarity on the nature and timeliness of decisions taken, failure to incorporate environmental considerations into the decisions made, timeliness of the decisions, and possible conflicts of interest. Slovakia committed to addressing these gaps in the planned amendment to the Slovak EIA Act.

However, the recent proposals to amend the relevant legislation (i.e. the EIA Act and Building Act) show a deterioration of the EU legal standards for effective public participation and access to justice.

Any streamlining of the permit-issuing system (EIA Act or Building Act) in Slovakia should not lower the level of environmental protection but rather use the flexibilities offered by EU environmental legislation. The Commission will carefully assess the conformity of adopted legislation with EU law and take further action if EU standards are breached.

In 2022, there were two priority actions addressed to Slovakia on access to justice, namely to (i) better inform the public about their rights on access to justice and (ii) improve access to courts by the public concerned when it comes to challenging administrative or regulatory decisions. There has been no progress.

2025 priority actions

- Make spatial data more widely accessible and prioritise environmental datasets in implementing the Inspire Directive, especially those identified as high-value spatial datasets for implementing environmental legislation.

([185]) https://ec.europa.eu/commission/presscorner/detail/en/inf_19_5950.

([186]) https://ec.europa.eu/commission/presscorner/detail/en/inf_24_301.

- Ensure that relevant information on EIA and SEA procedures (including on public participation opportunities and on publication of final decisions) is electronically accessible in a timely manner, through at least a central portal or easily accessible points of access, at the appropriate administrative level.
- Improve access to courts in national environmental cases by the public concerned and eliminate practical barriers, such as length of proceedings and excessive costs in some Member States.
- Ensure correct transposition of the revised EIA Directive.

Compliance assurance

Environmental compliance assurance covers all work undertaken by public authorities to ensure that industries, farmers and others fulfil their obligations to protect water, air and nature, to manage waste ([187]) and to remedy any environmental damage. It includes measures such as (i) compliance promotion, (ii) compliance monitoring (i.e. inspections and other checks), (iii) enforcement, that is, steps taken to stop breaches and impose sanctions, and (iv) ensuring damage prevention and remediation in line with the polluter-pays principle.

Compliance promotion, monitoring and enforcement

Non-compliance with environmental obligations may occur for different reasons, including poor understanding or lack of acceptance of the rules, opportunism or even criminality. Compliance promotion activities help duty-holders to comply by providing information, guidance and other support. This is particularly important in areas where new and complex legislation is put in place.

When inspections and other control activities identify problems, a range of responses may be appropriate, including the use of administrative and criminal enforcement tools.

The latest annual report on the state of the environment from 2024 ([188]) provides some summary data on environmental crimes, with the estimated number of environmental cases in 2023 amounting to 980, of which only 238 had an identified offender, and the total environmental damage amounting to EUR 33 321 000.

As of 1 February 2022, as part of the first payment request for the Slovak RRP, a new police unit called Enviro was established, with 201 police officers, for the detection and investigation of environmental crime. This is a specialised and independent body focused on ensuring effective results against environmental crime. It is established at national as well as regional level. However, it has been discussed that a possible reorganisation of Enviro could take place in the near future, hindering the specialisation and effectiveness of investigations on environmental crime. This decision appears not to have been confirmed yet.

In November 2023, a regional conference dedicated to strengthening the fight against crime affecting the environment was held, which representatives from Albania, Bosnia and Herzegovina, Bulgaria, Croatia, France, Greece, Kosovo, Montenegro, North Macedonia, Serbia, Slovakia, Slovenia, Poland and Romania attended ([189]).

The 2022 EIR recommended that Slovakia (i) improves the availability of practical information for farmers and other land managers on steps to take to improve implementation of the Nature and Nitrates Directives; (ii) collects and makes available up-to-date statistics on environmental crimes, including on action taken and penalties imposed; and (iii) continues to develop a strategic approach to combat environmental crime. Concerning compliance promotion, monitoring and criminal and administrative enforcement, the 2022 priority actions are not assessed here due to a lack of systematic information. Similarly, the Commission is not aware if information is easily accessible online at the national level for farmers regarding compliance with the Nitrates and Nature Directives, and hence the 2022 priority action is not assessed.

The new EU Environmental Crime Directive

The EU has recently strengthened its legal framework on tackling the most serious breaches of environmental obligations, notably by the adoption of the new Environmental Crime Directive (ECD) ([190]) and new sectoral legislation with stronger provisions on compliance monitoring, enforcement and penalties. Issues important for the transposition and the implementation of the relevant new instruments are

([187]) The concept is explained in detail in the European Commission's 2018 communication on EU actions to improve environmental compliance and governance (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52018DC0010) and the related Commission staff working document (https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018SC0010).

([188]) https://www.enviroportal.sk/spravy/detail/11203.

([189]) https://www.selec.org/strengthening-the-fight-against-crimes-that-affect-the-environment-in-southeast-europe/

([190]) Directive 2024/1203/EU on the protection of the environment through criminal law https://eur-lex.europa.eu/eli/dir/2024/1203/oj/eng.

highlighted below; a detailed assessment of these topics will be included in the next EIR once more implementation measures are put in place and more systematic information is available.

The new ECD replaced the 2008 ECD and introduced several new offence categories, such as unlawful ship recycling, unlawful water abstraction, and serious breaches of EU legislation on chemicals, mercury, fluorinated GHG and IAS of EU concern. It also covered the establishment of qualified offences, subject to more severe penalties where one of the offences defined in the directive leads to serious widespread and substantial damage or destruction of the environment. Concrete provisions on the types and levels of penalties for natural and legal persons who commit an offence were also introduced. Other provisions will help considerably to improve the effectiveness in combating environmental crime of all actors along the enforcement chain. These include obligations to ensure adequate resources and investigative tools, specialised regular training and the establishment of cooperation mechanisms within and between Member States as well as national strategies on combating environmental crime.

Member States are required to transpose the new ECD into national law by 21 May 2026 and to take additional measures to more effectively combat environmental crime, in particular through training, coordination, cooperation and strategic approaches. The Commission will provide support, including by facilitating the identification and sharing of good practices. Member States are expected to ensure the necessary resources and specialised skills required and they are invited to encourage their authorities to support and cooperate with the recognised EU-level networks of environmental enforcement practitioners, such as the EU Network for the Implementation and Enforcement of Environmental Law ([191]), EnviCrimeNet ([192]), the European Network of Prosecutors for the Environment ([193]) or the EU Forum of Judges for the Environment ([194]). The European Union Agency for Law Enforcement Cooperation and European Union Agency for Criminal Justice Cooperation mechanisms for cooperation on cross-border cases should be used more systematically for environmental offences.

Environmental Liability Directive

The Environmental Liability Directive (ELD) ([195]) aims to ensure that environmental damage is remediated in kind at the expense of those who have caused it, in line with the polluter-pays principle. It helps to halt the net loss in biodiversity, as well as reducing the number of contaminated sites and protecting the environmental quality of groundwater and surface waters. The ELD is a cross-cutting tool and a key enabler for better implementation of EU environmental law.

The ELD addresses cases of significant environmental damage to protected species and natural habitats, and, when caused by operators carrying out certain potentially hazardous activities, also damages to water and to soil. The Commission has the legal obligation to periodically evaluate the ELD. The ELD has undergone the second evaluation ([196]), which will be finalised in 2025, and which was supported by an external study ([197]), containing evidence, views, reports and other relevant information gathered from different stakeholder groups, including Member States.

One of the most relevant indicators in assessing implementation and enforcement of the ELD is the number of environmental damage cases handled under the ELD, especially when this number is compared with the previous reporting period. Fewer ELD cases were reported in the second reporting period (2013–2022) than in the first one (2007–2013). However, the downward tendency in the number of ELD occurrences and their overall low number do not necessarily mean that the ELD has achieved its objectives, as it needs to be compared with the overall number of environmental damage cases, some of which may have been handled under the other liability instruments.

The ELD has not always been effective in ensuring that the polluter pays, because the liable operators often lack financial capacity to carry out remediation measures. While the ELD does not provide for a mandatory financial

([191]) https://www.impel.eu/en.
([192]) LIFE+SATEC project (https://webgate.ec.europa.eu/life/publicWebsite/project/LIFE20-PRE-ES-000001/fight-against-environmental-crime-at-a-strategic-level-through-the-strengthening-of-envicrimenet-network-of-experts-in-environmental-criminal-investigations).
([193]) https://www.environmentalprosecutors.eu.
([194]) https://www.eufje.org/index.php?lang=en.
([195]) Directive 2004/35/EC on environmental liability with regard to the prevention and remedying of environmental damage https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02004L0035-20190626.
([196]) Commission staff working document - Evaluation of the Environmental Liability Directive, forthcoming 2025.
([197]) European Commission, Study in support of the evaluation of the Environmental Liability Directive and its implementation https://op.europa.eu/en/publication-detail/-/publication/006d90e5-980a-11ef-a130-01aa75ed71a1/language-en.

security system, it explicitly calls for Member States to encourage the development of financial security instruments and markets, with the aim of enabling operators to use financial guarantees to cover their responsibilities under this directive.

From 1 May 2013 to 30 April 2022, Slovakia reported four occurrences of an imminent threat and two occurrences of environmental damage under the ELD (one water damage occurrence and one biodiversity damage occurrence). During this period, the Slovak Environment Agency, in co-operation with the Ministry of Environment, assessed approximately 50 further environmental damage cases on a case-by-case basis to determine if they were ELD occurrences. The agency determined that none of the cases were ELD cases. In the previous reporting period, no environmental damage cases were reported under the ELD.

Slovakia is one of five EU Member States that has introduced mandatory financial security for ELD liabilities. There are no exceptions to the mandatory financial security system. Eight insurers offer environmental insurance policies in Slovakia, which provide cover for all ELD liabilities, but only if the environmental damage is caused by pollution. They do not provide cover for other types of environmental damage. Only two insurers provide cover for remediating pollution on an insured site and for gradual pollution. The only type of insurance in Slovakia that satisfies mandatory financial security requirements for ELD liabilities is an environmental insurance policy, depending on the wording of the policy.

2025 priority action

- Encourage the use of training programmes provided by the Commission (or developed at the national level) covering the ELD and its interactions with the other national liability-related instruments, to ensure more efficient ELD implementation, improve the expertise of the competent authorities and raise awareness among all stakeholder groups.

EU-supported environmental capacity building

The Commission's 2023 Compact ([198]) initiative to enhance the administrative space identifies the capacity to lead the green transition as one of three key pillars, along with the public administration skills agenda and the capacity for Europe's Digital Decade. Compact also recognises the role of the EIR reporting tool in improving environmental governance. The two main capacity-building opportunities for the environment provided by the European Commission are the TSI ([199]) and the TAIEX-EIR PEER 2 PEER tool ([200]). The technical assistance available through the cohesion policy is subject to shared management and is not dealt with in this subsection.

The Commission's technical support instrument

The TSI provides Member States with tailor-made technical expertise on the design and implementation of reforms. The support is demand driven and does not require national co-financing.

The TSI had annual calls in 2021, 2022, 2023, 2024 and 2025. The following environment-related projects have been selected for Slovakia:

- Integration of environmental dimensions in public finances – implementing the 'do no significant harm' (DNSH) principle in public funding programmes; beneficiary: Ministry of Investments, Regional Development and Informatisation (2023);
- Revision and update of the national strategy on adaptation to climate change in Cyprus and Slovakia; beneficiary: Ministry of Environment (2023);
- Building policy coherence for sustainable development (PCSD) at the central and regional level; beneficiary: Ministry of Investments, Regional Development and Informatisation (2024);
- Support for the preparation of Social Climate Plans; beneficiaries: Government Office, Ministry of Environment (2024).

The Commission's TAIEX-EIR PEER 2 PEER tool

The Commission launched the TAIEX-EIR PEER 2 PEER tool in 2017. It aims to facilitate peer-to-peer learning among Member States' environmental authorities through workshops (single or multi-country), expert missions (where a delegation of experts travels to the requesting institution) and study visits (where a delegation from the requesting institution travels to a host country). Flagship multi-country workshops are those requested by the

([198]) See the European Commission web page on Compact (https://reform-support.ec.europa.eu/public-administration-and-governance-coordination/enhancing-european-administrative-space-compact_en).

([199]) See the European Commission web page on the TSI (https://commission.europa.eu/funding-tenders/find-funding/eu-funding-programmes/technical-support-instrument/technical-support-instrument-tsi_en).

([200]) See the European Commission web page on the TAIEX PEER 2 PEER tool (https://environment.ec.europa.eu/law-and-governance/environmental-implementation-review/peer-2-peer_en). TAIEX: Technical Assistance and Information Exchange.

Commission to present new and upcoming environmental legislation and policy in all Member States ([201]).

Workshops involving Slovakia are as follows:

- Future challenges for air protection in Europe (24 November 2022), in collaboration with the Czech EU presidency;
- Decentralised biowaste recycling in Austria (9 – 11 October 2023);
- Measures to reduce air pollution in transport and residential energy (11–13 June 2024);
- New aspects in the cross-border cooperation against environmental crime (19–20 November 2024).

2025 priority action

- Improve overall national environmental governance, in particular administrative capacity to support the green transition and coordination at the regional and local levels.

([201]) Flagship multi-country workshops in the reporting period are Recast Drinking Water Directive (3 April 2025); Environmental compliance and governance (18 March 2025); Planning of Renewable Energy Projects (20 February 2025); Air Quality: Implementation of the revised Air Quality Directive (16 January 2025); Industrial safety awareness raising of emerging risks linked with climate change and decarbonation (12 December 2024); Air quality: implementation of the NEC Directive to further mainstream air and broader pollution reduction in agricultural policy (25 September 2024); Industrial emissions transposition and implementation of the revised directive (12 September 2024); Noise: progress towards meeting Member States' noise limit values and EU reduction targets (5 June 2024); Best practice use of environmental footprint methods on the EU market (30 May 2024); Sustainable finance (9 November 2023); Textile waste separate collection, treatment and markets (3 October 2023); EU environmental funding and support (13 June 2023); Advisory service for businesses to go circular (24 April 2023); Digital product passport implementation (6 December 2022); Public involvement in planning and approval of renewable energy projects (17 November 2022); Environmental compliance and governance (14 November 2022); Biowaste management (19–20 September 2022); and Renewable energy projects: permitting granting processes (13 June 2022). NB: The first flagship workshop on zero pollution for air, water and soil took place on 9 February 2022.

Annex

2025 priority actions

Circular economy and waste management

Transitioning to a circular economy

- Speed up the transition to a circular economy by implementing an updated national strategy and the EU framework and recommendations, in particular to complement it with upstream circularity measures.
- Adopt measures to increase the CMUR.

Waste management

- Invest in waste prevention measures to reduce the total amount of waste generated.
- Implement, harmonise and gradually increase landfill taxes to phase out landfilling of recyclable and recoverable waste.
- Increase reuse of products and scale up waste recycling infrastructure associated with the higher steps of the waste hierarchy. In particular, improve collection and increase treatment capacity for bio-waste.
- Complete the closure of non-compliant landfills.
- Improve municipal waste preparation for reuse and recycling.
- Expand waste treatment infrastructure associated with the higher levels of the waste hierarchy (in particular, increasing the treatment capacity for biowaste and supporting home composting), support the treatment of separately collected biowaste and establish a quality management system for compost/digestate from biowaste.
- Implement and expand the pay-as-you-throw scheme for businesses and households.
- Improve the data quality management system on packaging waste to present coherent and verifiable datasets.
- Ensure the achievement of the 2025 waste targets, following the recommendations made by the Commission in the early warning reports where applicable.

Biodiversity and natural capital

Global and EU biodiversity frameworks

- Submit to the Convention on Biological Diversity an updated NBSAP or national targets following the adoption of the GBF.

Nature protection and restoration – Natura 2000

- Finalise the establishment of site-specific conservation objectives and measures for all Natura 2000 sites (including by adopting their management plans) and ensure their effective implementation.

Recovery of species

- Strengthen the integration of biodiversity actions into other policies (e.g. on energy, agriculture, fisheries, forestry, urban and infrastructure planning and sustainable tourism) and promote communication between stakeholders.
- Reinforce action for habitats and species with unfavourable conservation status through, for example, restoration measures, increased connectivity, better policy coordination and integration, and increased funding.

Recovery of ecosystems

- Implement eco-schemes and agri-environmental measures and practices to address the environmental needs of Slovakia.
- Improve the conservation status of forests by promoting sustainable forest management and ensuring compliance with the Habitats Directive before granting/renewing permits for forest logging.

Prevention and management of invasive alien species

- Step up implementation of the IAS Regulation, including with regard to enforcement and the capacity of inspection authorities.
- Ratify the International Convention for the Control and Management of Ships' Ballast Water and Sediments of 2004 (BWM Convention).

Ecosystem assessment and accounting

- Support the development of the national business and biodiversity network.

Zero pollution

Clean air

- As part of the NAPCP, take action to reduce emissions of air pollutants.
- Ensure full compliance with the current AAQD standards, also in light of future stricter requirements under the revised AAQD.

Industrial emissions

- Reduce industrial air pollution damage and intensity.
- Reduce industrial releases to water and their intensity.
- Engage with industry and environmental NGOs to ensure proper contribution to and implementation of BAT conclusions and ensure timely updates to permits following the publication of BAT conclusions.
- Ensure effective public participation and access to justice in relation to the IED.

Major industrial accidents prevention – Seveso

- Strengthen compliance with requirements on safety measures to prevent major accidents and ensure appropriate preparedness and response in relation to UTEs, in particular as regards reviewing, testing and updating EEPs, at intervals of no more than three years.
- Ensure access to transparent and clear information for citizens on risks and behaviour in the event of an accident.

Noise

- Complete noise mapping.
- Complete and implement action plans on noise management.

Water quality and management

- Develop more robust programmes of measures, tackle obstacles identified in the implementation of measures, and ensure adequate financing for implementation, including through better use of cost recovery and polluter-pays principle.
- Reduce pollution from nutrients, chemicals, metals and saline discharges.
- Improve river continuity and ecological flows, boosting efforts on nature-based solutions to reduce hydromorphological pressures.
- Improve the classification of water bodies and strengthen monitoring systems.
- Tackle nutrient pollution, especially nitrates from agriculture, through the implementation of the Nitrates Directive.
- Take the necessary measures to ensure full implementation of the current UWWTD, taking into account the new requirements of the recast directive.

Chemicals

- Upgrade the administrative capacities in implementation and enforcement to move towards a policy of zero tolerance of non-compliance.
- Increase involvement in the activities of the Forum for Exchange of Information on Enforcement of the European Chemicals Agency, including in the coordinated enforcement projects, called REF projects.
- Increase customs checks and checks of products sold online with regard to compliance with chemicals legislation.

Climate action

- As Slovakia had not submitted its final national energy and climate plan (NECP) plan by the end of March 2025, the European Commission encourages Slovakia to submit it.

Financing

- Use more national funding (for instance by increasing taxes in favour of the environment and reducing environmentally harmful subsidies), EU funding and private funding to help close the investment gap.

Environmental governance

- Make spatial data more widely accessible and prioritise environmental datasets in implementing the Inspire Directive, especially those identified as high-value spatial datasets for implementing environmental legislation.
- Ensure that relevant information on EIA and SEA procedures (including on public participation opportunities and on publication of final decisions) is electronically accessible in a timely manner, through at least a central portal or easily accessible points of access, at the appropriate administrative level.
- Improve access to courts in national environmental cases by the public concerned and eliminate practical barriers, such as length of proceedings and excessive costs in some Member States.
- Ensure correct transposition of the revised EIA Directive.
- Encourage the use of training programmes provided by the Commission (or developed at the national level) covering the ELD and its interactions with the other national liability-related instruments, to ensure more efficient ELD implementation, improve the expertise of the competent authorities and raise awareness among all stakeholder groups.
- Improve overall national environmental governance, in particular administrative capacity to support the green transition and coordination at the regional and local levels.