

# Assessment and recommendations

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The Assessment and Recommendations present the main findings of the OECD Environmental Performance Review of the Slovak Republic. They identify 29 recommendations to help the country make further progress towards its environmental objectives and international commitments. The OECD Working Party on Environmental Performance discussed and approved the Assessment and Recommendations at its meeting on 24 January 2024.

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## 1. Towards sustainable development

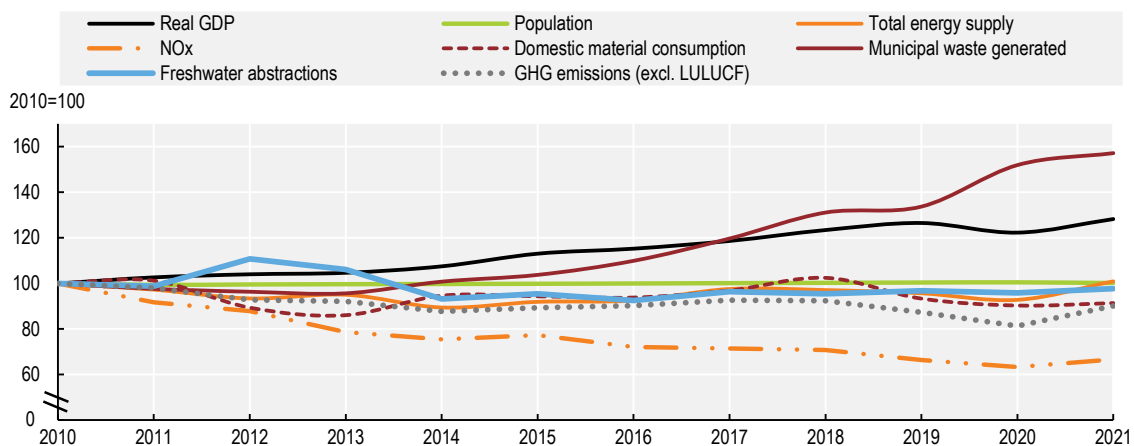
### Addressing key environmental challenges

*Slovakia has made progress on decoupling*

The Slovak Republic has a small, open economy that grew steadily between 2010 and 2019. After a deep contraction during the COVID-19 crisis, gross domestic product (GDP) rebounded in 2021 and has grown moderately since (OECD, 2023a). Despite heavy dependence on Russian energy imports, government measures helped reduce the impact of rising energy prices. The economy is projected to grow by 1.1% in 2023 driven by investment supported by EU funds, and by 1.8% in 2024 thanks to improved export performance, with high uncertainty on the outlook.

Over 2010-19, Slovakia reduced domestic material consumption, emissions of greenhouse gases (GHGs) and major air pollutants, and to a lesser extent, energy supply and freshwater abstractions (Figure 1). By contrast, despite low population growth, municipal waste generation grew faster than GDP, reflecting increased consumption levels. Since 2019, decoupling has been less clear. By 2021, energy supply and gross GHG emissions were above their pre-pandemic levels.

**Figure 1. Slovakia managed to decouple some environmental pressures from economic growth**



Note: LULUCF: land use, land-use change and forestry. NOx: nitrogen oxides.

Source: IEA (2023), IEA World Energy Statistics and Balances (database); OECD (2023), OECD Environment Statistics (database); OECD (2023), OECD Economic Outlook (database).

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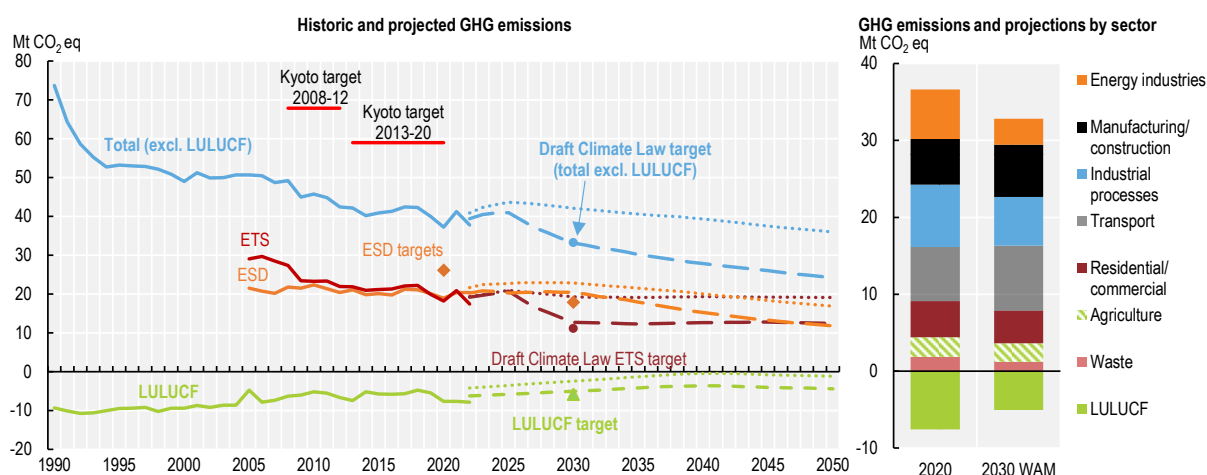
*The country needs to step up its ambition and efforts to achieve carbon neutrality by 2050*

Following EU legislation, the Slovak Republic adopted the Integrated National Energy and Climate Plan for 2021 to 2030 (NECP) and the Low-Carbon Development Strategy until 2030 with a View to 2050 to contribute to meeting the EU's 2030 energy and climate goals and achieve carbon neutrality by 2050 (MoEco, 2019) (MoE, 2020a). In 2023, the Ministry of Environment (MoE) introduced a draft law to enshrine carbon neutrality in legislation and strengthen long-term strategic planning across political cycles. In line with international best practices, the draft law establishes monitoring and enforcement mechanisms and provides for regional and local climate action plans. It reflects the 2030 targets of the EU "Fit for 55

package” and adds targets for sectors not covered by the EU Emissions Trading System (ETS). These targets would help strengthen the accountability of the administrations responsible for these sectors, but their ambition and coherence need to be reviewed. The target for growth in emissions from transport seems incompatible with the overall national reduction target for non-ETS sectors, as such growth will not be offset by targeted reductions in other sectors like buildings, agriculture and waste.

Slovakia met its obligations under the first and second period of the Kyoto Protocol (Figure 2). The country also achieved its 2020 target for non-ETS sectors. However, national projections indicate the country is not on a net-zero pathway. Most of the emission reductions by 2030 are expected to come from energy industries and to a lesser extent from industrial processes, which are covered by the EU ETS. GHG emissions in non-ETS sectors, especially transport, are projected to increase over 2020-30, even with additional measures. The expected decline of net carbon removals puts at risk the achievement of the LULUCF Regulation target (Chapter 2), and of the net-zero goal. As Slovakia is revising its NECP, it should clarify and strengthen the measures envisaged to achieve its goals.

**Figure 2. Slovakia is not on a net-zero pathway**



Note: LULUCF: land use, land-use change and forestry. Dotted lines refer to national projections with existing measures. Dashed lines refer to projections with additional measures. ESD 2020 target: under the EU Effort Sharing legislation; 2030 target: under the EU amended Effort Sharing Regulation (EU 2023/857). ESD targets are calculated as a percentage change from the 2005 ESR base-year emissions, which differ slightly from the revised 2005 emissions. LULUCF 2030 target: under the LULUCF Regulation (EU 2023/839). ETS: emissions under the EU Emissions Trading System; 2022 data are estimates.

Source: MoE (2023), National Inventory Report 2022; EEA (2023), Member States' greenhouse gas (GHG) emission projections, 24 October.

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Although predominant, fossil fuels represent a smaller share of Slovakia's energy supply than the OECD average (60% vs. 78% in the OECD) due to the importance of nuclear energy. The country is committed to phase out coal mining and coal-fired power generation by 2023 and is increasing its nuclear capacity. Over the past decade, the energy mix has shifted progressively from coal to renewables (mainly biofuels and waste).

In 2020, renewable energy accounted for 17% of gross final energy consumption, above the target of 14% set by the EU Renewable Energy Directive for Slovakia. However, the country will have to raise its ambition to match the new renewable energy target of 42.5% for the whole European Union in 2030 (EU 2023/2413). The national target of 23% proposed by Slovakia is just enough to contribute to the previous EU target of 32%. Furthermore, the latest national projections with additional measures will only achieve 19% (MoEco, 2023).

Despite improvements in energy efficiency and economic restructuring, the Slovak economy is over 40% more energy intensive than the OECD Europe average due to its large industrial base. Slovakia has met its 2020 target under the EU Directive on Energy Efficiency but is not on track to meet the more stringent requirement for 2030 (EC, 2023a). Since 2014, energy consumption has risen steadily, except during the COVID-19 crisis, particularly in buildings and transport. The Recovery and Resilience Plan (RRP) should help develop and integrate renewable energies and support energy savings.

#### *Air pollution remains a health concern*

Despite significant improvements, average concentrations of fine particulates (PM<sub>2.5</sub>) in Slovakia remain among the highest in OECD Europe. The country has faced several EU infringement proceedings for failing to meet limit value for PM<sub>10</sub>. Solid fuel combustion for domestic heating, road transport and metal production are the main sources of this pollution (SHMU, 2021). In 2022, exceedances of EU air quality standards were recorded for PM<sub>2.5</sub>, PM<sub>10</sub>, benzo[a]pyrene and tropospheric ozone (SHMU, 2023). The 2023 Air Pollution Law, which strengthens competences of local authorities, including to introduce low-emission zones, is expected to improve air quality management.

Slovakia met its 2020-29 emission reduction commitments under the NEC Directive. It is on track to meet its 2030 targets, only with additional measures for ammonia emissions. However, the 2023 revision of the Air Pollution Charge Law left the tax rate on ammonia unchanged. The 2020 National Air Pollution Control Programme, to be updated in 2023, should model the effects of individual measures to identify the most cost-effective ones.

#### *Further expanding wastewater treatment coverage is a challenge*

Slovakia generally experiences low water stress, but climate change puts the southwest region, including the biggest drinking water reservoir, at severe risk of drought. Freshwater abstractions are low by OECD standards and have remained broadly stable in the past decade. Surface water quality seems better than the EU average, but there is some way to go to achieve good water status. Agriculture (use of fertilisers and pesticides), hydromorphological changes, untreated sewage, point sources of pollution and climate change are the most significant pressures on water bodies.

Slovakia has improved wastewater treatment, but its connection rate remains among the lowest in the OECD and individual sanitation systems are more common than in other EU countries. Complying with the more stringent requirements planned in the ongoing revision of the EU Urban Waste Water Treatment Directive (UWWTD) will be challenging. About 28% of the population live in municipalities with fewer than 2 000 inhabitants. Furthermore, the whole territory is designated as a sensitive area that needs advanced wastewater treatment.

As recommended by the OECD (OECD, 2019), Slovakia developed the National Programme for Implementing the UWWTD to set priorities. It estimates investment needs at nearly EUR 1.6 billion by 2027 (MoE, 2021a). The programme relies heavily on EU funds, yet almost half of these needs are not financed. Tariffs for water services are too low to recover the full costs of service provision and contribute to infrastructure financing needs, especially for small municipalities and regulated entities. The OECD recommended to incentivise connection to central sewer systems; further apply the polluter- and user-pays principles in the water sector and reflect at least part of the environmental and resource costs in tariffs for water supply and sanitation services and abstraction charges (OECD, 2019). The Water Policy Concept of the Slovak Republic plans a comprehensive reform of water pricing instruments by 2030 (Government of the Slovak Republic, 2022). Slovakia should also support municipalities with limited resources to build capacity to operate and maintain water infrastructure and to prepare and implement new investment projects. Consolidating municipal services would improve the sector's operational efficiency and financial sustainability.

### *Slovakia is lagging on waste management*

Slovaks generate slightly less municipal waste per capita than the OECD Europe average (500 kg vs. 520 kg in 2021). Although separate collection has improved, municipal waste generation has grown faster than GDP in the last decade and 41% of this waste still ends up in landfills (OECD, 2023b). Despite a relatively well-developed waste policy framework, Slovakia has missed most of its 2020 waste objectives and its apparent progress in recycling is questionable (EC, 2023b). The country is at risk of missing the 2025 target of 55% for the preparation for re-use and the recycling of its municipal waste, and the 2035 target to landfill no more than 10% of its municipal waste. The lack of economic incentives to sort recyclable waste and the fragmentation of municipal waste management have been hampering progress (EC, 2023b).

Although decoupled from economic growth, materials consumption is projected to increase by more than 50% by 2050 from 2017 levels on current trajectory. As recommended by the joint OECD-EC circular economy roadmap for the Slovak Republic, the country should strengthen use of economic instruments to promote sustainable consumption and production, including by further raising the landfill tax for municipal waste and reforming the distribution of its proceeds; improve extended producer responsibility schemes; extend the mandatory use of green public procurement criteria; and expand pay-as-you-throw systems (only used by 6% of municipalities in 2018) (OECD, 2022a). The roadmap also recommends promoting a circular construction sector and a circular food and bio-waste value chain.

### **Improving environmental governance and management**

*Slovakia has a vision for sustainable development, but policy integration needs to go beyond the strategic level*

Slovakia's Vision and Development Strategy 2030 is the reference framework for the implementation of the 2030 Agenda for Sustainable Development. The 2023 Voluntary National Review reports good performance on SDG 6 (clean water and sanitation) and SDG 7 (affordable and clean energy). However, progress is uneven on SDG 9 (industry, innovation and infrastructure), SDG 11 (sustainable cities and communities) and SDG 17 (partnerships for the goals) (Government of the Slovak Republic, 2023).

The Voluntary National Review notes that policy integration needs to go further than the strategic level to become a reality. Several inter-ministerial councils have been established, such as those for the European Green Deal (in charge of climate policy) and for the RRP. However, they do not seem to meet often. By mid-2023, the government was considering merging the councils for the 2030 Agenda, the European Green Deal and the Cohesion Policy to improve co-ordination on sustainable development. Slovakia could also envisage creating an independent body, such as the Council for Climate Accountability provided for in the draft Climate Law, or mandating an existing one, to assess and report on the consistency of sectoral policies with climate objectives. It is not clear how implementation of the Envirostrategy 2030 (MoE, 2019), which sets out various environmental commitments for all sectors, will be monitored. In 2022, the MoE elaborated an implementation plan but did not make it public.

Environment-related responsibilities are fragmented. The MoE oversees climate protection but lacks powers over energy policy and forestry. These competences are carried out by the Ministry of Economy and Ministry of Agriculture and Rural Development (MoA), respectively. Energy efficiency in the buildings sector falls under the authority of the Ministry of Transport. The district offices, which are local administration units of the state, include environmental protection departments responsible for implementing policy at local level. These departments are units of the Ministry of Interior but receive guidance from the MoE. Since the reform of public administration in 2013, specialised departments of the district offices have received less training and methodological support.

*The effect of the reform of environmental assessment and permitting is uncertain*

Slovakia is reforming environmental impact assessment (EIA) and environmental permitting to shorten the time for granting permits, including for renewables. The MoE planned to separate the permit under the Industrial Emissions Directive (IED) from the building permit, and to combine the EIA process with the IED permit. For simple constructions, the EIA and building permit would be integrated into a single process. These reforms were disrupted by the reform of the construction law, which also changed the EIA and IED permit processes. Although speeding up the granting of building permits is necessary (OECD, 2024a), a 2023 legislative amendment has been criticised for giving insufficient consideration to the environment, for limiting public participation and for lack of inter-ministerial consultation (President Zuzana Caputova, 2023) (MoE, 2023). The amendment was passed without the president's signature. The entry into force of the construction law and its amendments (due by April 2024) may be postponed due to the serious reservations expressed by stakeholders.

Slovakia has improved regulatory impact assessment (RIA) processes (OECD, 2020). Legislation introduced through the standard procedure is subject to mandatory economic, social and environmental impact assessments. The country compares well with other OECD countries in involving business in the development of laws and regulations, although the public and non-governmental organisations (NGOs) are less consulted. However, RIAs focus mainly on impacts on the budget and on business. In addition, an increasing number of laws have been enacted through a shortened procedure or directly by Parliament, which reduces the quality of legislation and impact assessments, and limits stakeholder participation. The establishment of analytical units in ministries is a good practice, but they are not systematically involved in decision making.

*Non-compliance with environmental legislation remains high*

Slovakia has a significant number of EU directive infringements, particularly in the areas of water and waste. The country was recently referred to the EU Court of Justice for exceeding air quality standards, failing to close non-compliant landfills and non-conformity with the Habitats and Birds directives.

The Slovak Environmental Inspectorate (SEI) and the district offices ensure compliance with national environmental legislation. In 2021, almost half of all SEI inspections found instances of non-compliance (SIŽP, 2022). Audit bodies have highlighted the insufficient capacity of the SEI. They have recommended enhancing risk-based planning of inspections and separating SEI's permitting and inspection roles (IMPEL, 2019) (SAO, 2020). Although fines provide SEI with increased revenue, they are often imposed at the lower end of legislative ranges, with little deterrent effect (Dráb, Engel' and Krištofóry, 2020).

The threshold of damages that differentiates administrative infringements from criminal cases can create uncertainty as to which authority is competent to deal with the offence (European Council, 2018). A national strategy to combat environmental illegal activities, which could help co-ordinating enforcement efforts and unifying procedures, has not yet been adopted (Mol, 2020) (MoE, 2022a). Since 2022, Slovakia has been reinforcing the police unit specialised in fighting environmental crime (EC, 2022a).

Progress of the state programme on contaminated sites 2016-21 has been slow (SAO, 2022). More than EUR 1 billion is needed for remediation by 2027, of which 21% will be covered by EU funds. The main obstacles include the difficulty for district authorities to identify polluters or liable entities; insufficient state budget allocations; lack of legislative deadline to decide which ministry will ensure remediation; and the length of public procurement processes.

## **Promoting investment and economic instruments for green growth**

*Climate is a priority of the recovery plan, but price support limits incentives to save energy*

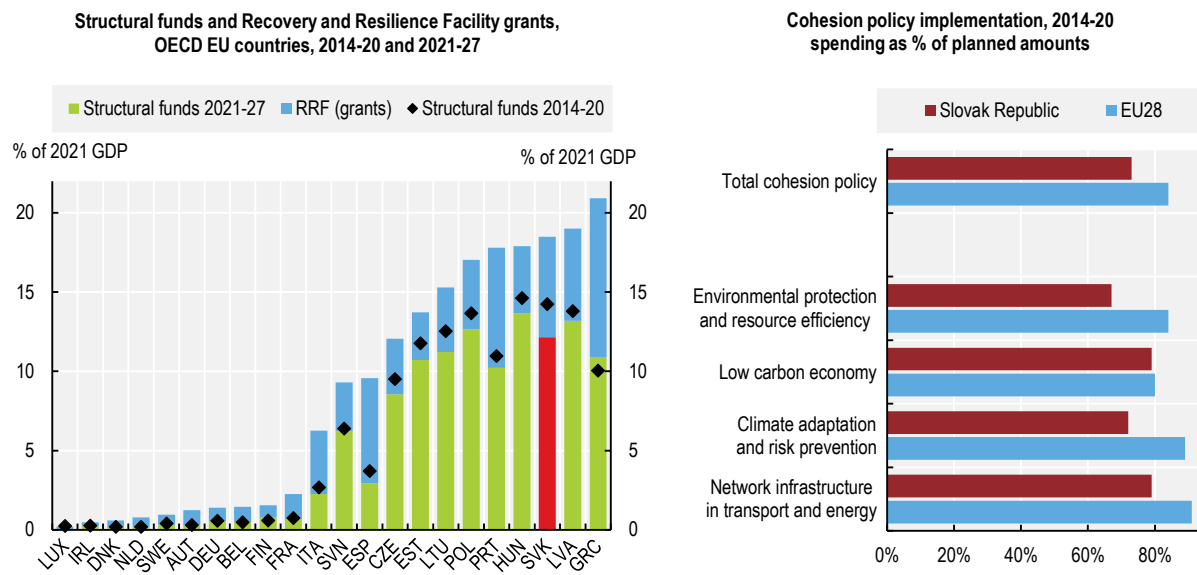
Slovakia submitted its RRP to boost its economy with Next Generation EU funds over 2021-26. The RRP consists of reforms and investments supported by EUR 6.4 billion in grants<sup>1</sup> (about 6.4% of 2021 GDP). Slovakia dedicated 45% of its RRP budget to climate objectives, well above the EU requirement of 37%. Energy efficiency and sustainable transport are key priorities. This is positive as investment in rail infrastructure has been significantly lower than investment in roads (0.2% of GDP vs. 1.1% in 2021). Slovakia has been among the EU countries with the fastest progress in implementation of the RRP. However, it should ensure sufficient administrative capacity and effective involvement of local and regional authorities for its successful implementation (EC, 2023a).

Between 2022 and 2023, to mitigate the effects of the energy crisis, the government adopted measures amounting to 3.3% of GDP, a level above the EU average (OECD, 2023c). They mainly consist of untargeted energy price support measures (a cap on electricity and gas prices for businesses, and on electricity, gas and heating supply prices for households). These measures are partly financed by taxes on windfall profits of energy suppliers and unspent EU cohesion funds for 2014-20. However, they remain costly to the budget and limit the incentive to save energy. From an environmental and fiscal point of view, it would be justified to keep the price signal and support the most vulnerable households with support unrelated to energy consumption. This requires identifying those most in need. In 2023, the Regulatory Office for Network Industries set up an inter-ministerial group to agree on an operational definition of energy poverty<sup>2</sup> and propose measures to combat it (URSO, 2023).

*Effective use of EU funds is key for green investment*

Around 70% of spending on environmental protection (mainly capital expenditure) is financed by EU funds (MoE/SEA, 2023). Slovakia is among the largest beneficiaries of EU funds per unit of GDP, but using these funds remains a challenge (Figure 3). Several factors explain the low absorption rate of funds for environmental infrastructure and climate adaptation over 2014-20. These comprise the lack of flexibility in reallocation; the large number of small, demand-oriented projects affected by the COVID-19 pandemic and rising construction prices; implementation difficulties within the MoE; and lengthy public procurement procedures (MIRDI, 2023).

**Figure 3. Slovakia receives large amounts of EU funds, but their absorption is low**



Note: In left panel, data refer to total allocations (excluding national co-financing) in current prices as a percentage of 2021 GDP. Structural funds: European Regional Development Fund, Cohesion Fund, European Social Fund; 2021-27: including Just Transition Fund; 2014-20: including Youth Employment Initiative. Recovery and Resilience Facility (RRF) grants: including REPowerEU grants.

Source: EC (2023), Cohesion Open Data Platform, period covered up to 30 June 2023; EC (2023), Consolidated Regulation (EU) 2021/241 establishing the Recovery and Resilience Facility, 28 February; EC (2022), RRF: Update of the maximum financial contribution, June.

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Slovakia has streamlined the governance and management of EU funds for 2021-27 with a single operational programme – “Programme Slovakia” – implemented by a single managing authority. It has amended its legislation to simplify and accelerate public procurement procedures. Strengthening capacities, particularly at local and regional level, could bolster implementation of reforms and investment (EC, 2021). The ongoing investment management reform should help to better plan projects and prioritise those with the highest social return (Haluš et al., 2023). Slovakia has made progress in identifying the municipalities most vulnerable to climate hazards (OECD, 2023d). It should build on this work to prioritise investment in adaptation.

The Environmental Fund finances around 10% of public investment in the environment, particularly water. The Fund has recently improved its strategy, management and project evaluation. However, budget planning has been hampered by limits set by the Ministry of Finance on the use of proceeds from the auctioning of EU ETS allowances for environmental purposes. Only 22% of these revenues were spent on environmental action over 2015-22, well below the 50% required by the ETS Directive<sup>3</sup> (EC, 2023c). A 2023 legislative update adjusted the minimum requirements for the use of proceeds from the auctioning of EU ETS allowances. This is expected to increase the share of revenue spent on environmental action.

### *The green tax reform should be pursued*

The Envirostrategy 2030 has pledged for a fiscally neutral green tax reform. In 2021, the government has committed to strengthen the role of environmental taxes and review subsidies to promote environmentally friendly behaviour. In real terms, revenue from environmentally related taxes (ERT) increased until 2019, driven by road fuel consumption while fuel tax rates were eroded by inflation. It then remained broadly stable before falling in 2022 with the surcharge on electricity.<sup>4</sup> As a share of GDP, revenue from ERT was above the OECD Europe average in 2021 (2.5% vs. 2.1%). Taxes on energy products dominate, while



revenue from taxes on motor vehicles, and on pollution and resources, was well below the OECD Europe average.

Carbon prices are low compared to EU countries. With an average net effective carbon rate (ECR<sup>5</sup>) of EUR 55 per tonne of CO<sub>2</sub>, Slovakia ranked in the bottom third of EU members in 2021 (OECD, 2022b). Although it priced about 80% of its GHG emissions, only 21% of these emissions were priced at a net ECR above EUR 60 per tonne of CO<sub>2</sub>, the midpoint benchmark for carbon costs in 2020. In addition, ECR do not provide consistent incentives to cut GHG emissions across fuels and sectors. The tax on diesel is well below that on petrol, despite the higher carbon content of diesel and its local air pollution cost. Households<sup>6</sup> benefit from tax exemptions on electricity, natural gas and coal. Energy sources used to generate electricity and combined heat and power are untaxed.

Slovakia can be praised for removing subsidies for electricity produced from domestic coal in 2023. Over 2011-21, the country supported the use of fossil fuels at an average rate of EUR 308 million per year and this aid mainly benefited coal (Hricišínová and Boros, 2022). The country has mapped fossil fuel subsidies and identified those for reform: regulated energy prices, subsidies for electricity generation from domestic coal, and energy tax exemptions for households and energy-intensive businesses. It should build on this work to drive the reform forward.

Since 2023, the one-off registration tax has partly reflected vehicles' emissions (EURO standard) rather than its age. This is a positive move to rejuvenate the fleet and shift towards cleaner vehicles. However, the annual motor vehicle tax rate does not vary with emissions (although electric vehicles are exempted) and only businesses pay it. As in other OECD countries, the favourable tax treatment of the personal use of company cars encourages their use (EC, 2022b). Distance-based charges depending on vehicle emissions and the place of driving are the best option to address local air pollution (van Dender, 2019). Only heavy goods vehicles pay a toll based on the distance travelled and their emissions on specific sections of motorways (ACEA, 2022). The system could be extended to cars, which pay a flat rate.

Slovakia has reformed the landfill tax (2018 and 2022 for industrial and construction waste), introduced a charge for the use of light plastic bags (2018) and a deposit-refund system for single-use PET bottles and cans (2022). It has also increased air pollution tax for certain pollutants. However, the environmental impacts of these changes remain to be assessed. There is still some way to go to implement a green tax reform shifting the tax burden from labour – which is heavily taxed in Slovakia – to environmentally harmful activities.

## Recommendations on sustainable development

### Addressing key environmental challenges

- Enshrine climate neutrality in national law with consistent sectoral pathways, with a view to strengthening long-term integrated strategic planning, preventing infringements and avoiding the future costs of inaction.
- Consolidate municipal water and waste services to improve operational efficiency and financial sustainability.
- Implement circular economy approaches in the construction sector and the food and bio-waste value chain.

### Improving environmental governance and management

- Enhance inter-ministerial co-ordination on sustainable development by, for example, merging existing related councils; consider establishing an independent body to assess and report on the consistency of sectoral policies with environmental and climate objectives.
- Strengthen vertical co-ordination in environmental policy making and implementation; build capacity of district offices and improve their environmental guidance.
- Ensure a high level of public participation in environmental impact assessment and permitting procedures as part of the reform of the construction law; reinforce the environmental aspect and public consultation in regulatory impact assessments; systematically use available analytical capacity in conducting assessments.
- Further promote compliance with environmental requirements by adopting a government-wide strategy to combat environmental illegal activities; strengthen capacity of the Slovak Environmental Inspectorate, separating its permitting and inspection roles and enhancing risk-based planning of inspections; increase sanctions and ensure fines have a real deterrent impact.
- Accelerate the clean-up of contaminated sites by securing adequate financial resources.

### Promoting investment and economic instruments for green growth

- Accelerate the absorption of EU funds to boost environmental investment; simplify and accelerate public procurement procedures, ensuring proper safeguards and transparency; strengthen project preparation capacity of recipients, particularly at local level, including by developing intermunicipal co-operation.
- Systematically screen actual and proposed subsidies, including tax provisions, to identify and reform those that are not justified on economic, social and environmental grounds.
- Further improve the management and planning of the Environmental Fund, ensuring its expenditure is aligned with Slovakia's environmental and climate objectives and needs.
- Pursue the green tax reform, planning a regular and transparent adjustment of rates with inflation; reflect the carbon content of fuels in energy taxes and pursue efforts to phase out fossil fuel subsidies (e.g. energy tax exemptions for households); further apply the polluter- and user-pays principles in the water and waste sector (e.g. raising the landfill tax and reforming the distribution of its proceeds).
- Agree on a multi-dimensional and operational definition of energy poverty and gather the relevant data to target support to the most vulnerable, while encouraging energy saving.

- Limit car dependency: shift investment from road to rail; remove preferential tax treatment for company cars; link the annual motor vehicle tax to vehicle emissions and extend it to private cars; extend distance-based charges to passenger cars on motorways.

## 2. Biodiversity and forests in the context of climate change

### ***Biodiversity status and trends***

#### *Slovakia's rich biodiversity is under threat*

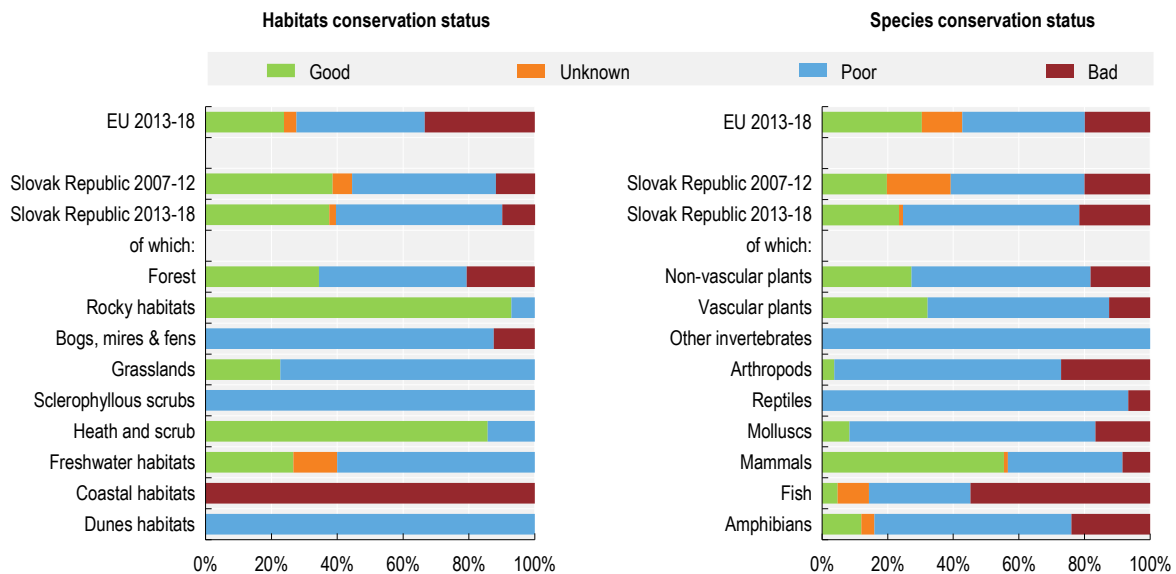
Slovakia spans two biogeographic regions: the Carpathian Mountains and the Pannonian Lowlands. Forests cover approximately 40% of Slovakia's territory, making it among the most forested countries in Europe. The other dominant ecosystem types are cropland and grassland (Černecký et al., 2021).

The conservation status of Slovakia's species and habitats is unfavourable. Approximately 75% of species and 60% of habitats of European interest in Slovakia are in a poor or bad state (EEA, 2021) (Figure 4). However, the share of species and habitats with unfavourable status did not significantly change between 2007-12 and 2013-18. Almost 25% of vertebrates and 7% of invertebrates are threatened with extinction. Approximately 12% of non-vascular plants (e.g. mosses) and 15% of vascular plants are threatened (OECD, 2023b).

Key pressures on biodiversity include unsustainable agricultural practices; invasive alien species (IAS) and other problematic species; forestry (e.g. the high volume of incidental logging in some forest areas); fragmentation of habitats and soil sealing, mainly through development of residential, commercial, industrial and transport infrastructure; and natural processes such as secondary ecological succession.<sup>7</sup> These pressures are expected to persist (Černecký et al., 2020).

Slovakia's biodiversity is expected to face increasing pressure from climate change. Average annual air temperature has increased by 1.7°C since 1881. Precipitation has decreased in the south and increased in the north, while the risk of droughts and floods is increasing (MoE, 2022b). Observed and expected impacts on biodiversity include shifts in vegetation zones and species distributions, phenological changes, extinction risk to species with a narrow ecological niche, and increased risk of IAS and pest outbreaks (e.g. bark beetle infestation). Montane pine forests, swamps in the foothills, and mountains and other aquatic systems are among the most vulnerable ecosystems (MoE, 2022b).

Figure 4. A significant share of habitats and species are in an unfavourable state



Note: The new report for 2013-18 is based primarily on data from KIMS (Complex Information Monitoring System). While the number of habitats and species with unfavourable conservation status increased between 2007-12 and 2013-18, this may be due to data improvements. Sclerophyllous scrubs: *Juniperus communis* formations on heaths or calcareous grasslands; Coastal habitats: inland salt meadows and pannonic salt steppes and salt marshes; Dune habitats: pannonic inland dunes.

Source: EEA (2021), Conservation status of habitat types and species: datasets from Article 17, Habitats Directive 92/43/EEC reporting.

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### *Data and knowledge on biodiversity have improved, but gaps remain*

Biodiversity monitoring addresses mainly species and habitats of European interest. Biodiversity data are recorded in Slovakia's Comprehensive Information and Monitoring System, which is accessible to the public and integrates a breadth of environmental information. Between 2007-12 and 2013-18, monitoring helped address data gaps, reducing the share of habitats and species with unknown status. However, knowledge and data gaps remain for freshwater habitats, fish and, to a lesser degree, amphibians and small mammals of European interest. Slovakia should address these gaps and ensure long-term systematic monitoring of priority habitats and species. Furthermore, the monitoring scope should extend to cover species and habitats that are not of European interest.

Slovakia lags other OECD countries in mapping ecosystems and valuing their services. However, important progress has been made in recent years with the publication of the *Catalogue of Ecosystem Services of Slovakia* (Mederly and Černecký, 2019) and *The Value of Ecosystems and their Services in Slovakia* (Černecký et al., 2021). The latter constitutes the first economic evaluation of ecosystem services at the national level.

To build on these efforts, Slovakia should advance work on natural capital accounting by establishing a pilot ecosystem comprising physical (extent, condition, capacity) and monetary accounts. Ecosystem service valuation should be integrated into decision making (e.g. through cost-benefit analysis) and be an input into policy design.

## **Legislative, strategic and institutional framework**

### *Slovakia has strengthened its biodiversity legislation*

The Nature and Landscape Protection Act (543/2002) (hereafter Nature Act) is the principal legislation governing nature, landscapes and the conservation, sustainable use and restoration of biodiversity. Slovakia has amended the Nature Act several times since 2010. Key amendments reform national park governance and management, and promote mainstreaming of biodiversity into sustainable forestry practices. Other positive developments include adoption of legislation on genetic resource access and benefit sharing and on IAS, as well as amendments to the Forest Act (discussed below).

### *Opportunities exist to reinforce and update the strategic framework for biodiversity*

Protecting and sustainably managing nature is a key pillar of Slovakia's Vision and Development Strategy 2030 (2021) and Envirostrategy 2030 (2019). Both strategies include high-level qualitative and quantitative objectives for biodiversity. The National Biodiversity Strategy and Action Plan (NBSAP) 2014-20 was the main strategy for biodiversity action, but it has expired. The NBSAP set a 2050 vision, nine goals for 2020 and actions to achieve them. The goals were mostly qualitative and lacked specificity.

Drafting of a new NBSAP began in 2019 and it is expected to be adopted in 2024. In line with good practice, the NBSAP should include a long-term vision, mission, specific and measurable targets, and accompanying measures aligned with the Convention on Biological Diversity's Kunming-Montreal Global Biodiversity Framework and the EU Biodiversity Strategy 2030.

Slovakia recognises the need for a more interactive and co-operative approach to the preparation of the post-2020 NBSAP (MoE, 2020b). The MoE intends to consult the national Biodiversity Working Group, which includes various ministries, NGOs and academic institutions. It will be necessary to engage these and other stakeholders, such as businesses, landowners and forest managers, early in the NBSAP's development to ensure its effective design and support for its successful implementation.

To complement the NBSAP and support achievement of a potential restoration target, Slovakia should consider developing a nature restoration strategy with dedicated funding. About 60% of Slovakia's ecosystems are degraded, resulting in a loss of approximately EUR 20 billion per year in ecosystem services such as climate regulation, flood control and timber provision (Černecký et al., 2021). Yet restoration has been ad hoc, with no significant progress made towards the 2014-20 NBSAP target of restoring at least 15% of degraded ecosystems by 2020 (MoE, 2020b). The strategy could identify priority sites (e.g. "priority habitat types" in Annex 1 of the EU Habitats Directive) and cost-effective restoration measures, especially those that contribute to disaster risk reduction, climate resilience and mitigation. It should address national priorities and requirements of the new EU Nature Restoration law.

### *... and enhance resources required for implementing the strategic framework*

A key challenge is the implementation of the strategic framework for biodiversity. Slovakia made good progress towards some of the nine goals of its 2014-20 NBSAP (e.g. IAS and access and benefit sharing). However, progress towards most goals was too slow or insignificant (e.g. restoration and protection of water-dependent habitats and species) (MoE, 2020b). Of the 167 tasks outlined in the action plan, 99 were fully implemented, 42 partially implemented and 26 not implemented (MoE, 2020c).

Limited biodiversity finance, institutional capacity and co-ordination on the ground are obstacles to proper implementation. Government expenditure on biodiversity protection fluctuated considerably from 2010-21. It dropped to EUR 31.7 million in 2017 (0.09% of government spending) and peaked at EUR 98.8 million in 2021 (0.22% of government spending) (OECD, 2023e). EU funds are a key source of biodiversity (and broader nature) funding but too often substitute for, rather than complement, state funding. Further,

Slovakia does not harness the full potential of EU and international funds owing to a lack of capacity within central and local governments to develop, fundraise for and implement biodiversity projects.

The challenges in securing and disbursing financial resources highlighted in Chapter 1 are acute for biodiversity. Slovakia would benefit from a focused finance strategy to promote a more strategic and systematic approach to mobilising and allocating resources for biodiversity, nature and landscape protection. Ideally, such a strategy would be based on an assessment of i) biodiversity finance needs; ii) barriers to effective spending and opportunities for increasing the cost effectiveness and efficiency of existing funding; and iii) priorities for mobilising additional resources, particularly domestic and private finance.

## **Protected areas**

### *Protected area network is extensive but has shortcomings*

Slovakia's protected area (PA) coverage is significantly higher than the OECD average. With more than 37% of its territory designated for protection, it has comfortably surpassed the 2020 target for PA coverage of 17% (Aichi Target 11) and the 2030 target of 30% under the Kunming-Montreal Global Biodiversity Framework (Target 3).

During 2011-21, Slovakia declared additional small PAs, including 76 nature reserves spanning 65 km<sup>2</sup> to protect the country's remaining old growth forests. After a slow start, the process to identify and designate Natura 2000 sites has accelerated since 2019. In 2022, Slovakia published "Conservation principles for habitats of European interest, and habitats of species of European interest, in sites of European importance" (ŠOP, 2022).

Slovakia's multiple, overlapping systems of protection (domestic, European, international) do not always align, creating confusion among stakeholders and management challenges. Moreover, the PA network is inconsistent with good practice standards set by the International Union for Conservation of Nature. For example, less than 20% of the area of national parks (and only 4% of Slovak Karst National Park) is strictly protected and strictly PAs are fragmented.

An additional limitation of the PA network is the lack of approved management plans. More than 90% of PAs do not have valid management plans. Many adopted management plans are yet to be implemented (MoE, 2020b) (ŠOP, 2023). Various factors may explain the lack of implementation, such as the limited staff and financial capacity: the number of employees and the budget per 100 km<sup>2</sup> of Slovakia's national parks are consistently below the regional average.<sup>8</sup> However, staff numbers have increased as part of the PA reform (MoE, 2022c).

### *Slovakia has launched a protected area reform and must shepherd it through to completion*

The Envirostrategy 2030 commits Slovakia to assessing and improving its PA network. It sets ambitious targets of expanding no-intervention zones in national parks to 50% by 2025 and to 75% by 2030. However, these targets may not be appropriate for national parks comprising large areas of significantly modified ecosystems, which require active management to achieve nature and biodiversity objectives. For these parks, the no-interference zone can be below the 50% threshold (MoE, 2019).

A 2021 Nature Act amendment strengthened the legal basis for PA zoning. It also established nine independent national park administrations under the MoE, which are responsible for park management, administration and strategic planning. State land in the highest protection zones of national parks was transferred from the MoA to the MoE. The transfer of the remaining state land is conditional upon the completion of national park zoning.

A priority now is to complete PA zoning, with an initial focus on national parks. Two-thirds of national parks are yet to be zoned. Zoning is complex due to long-standing tensions between landowners and the state, conflicts between economic interests (mainly forestry) and biodiversity interests, and the large share of land within national parks still privately owned. Fragmentation of land ownership, yet to be fully resolved by the land reform, makes consensus and agreement difficult to reach (MoE, 2022c).

Effective communication, participatory processes and economic incentives are required to facilitate national park zoning and governance. The national park reform and zoning restrict forestry and other economic activities, while creating new business and employment opportunities. Development plans akin to the Nitra region post-mining transition plan developed with local stakeholders could facilitate the national park reform. Additionally, it could ensure its long-term viability by helping to build sustainable local economies that benefit, and benefit from, national parks.

The conditionality clause requiring the completion of national park zoning before state land in lower levels of protection is transferred from the MoA to the MoE creates an additional challenge to zoning. It provides an instrument for opponents to the national park reform to undermine zoning to maintain the status quo. Slovakia should consider removing this condition, transferring the management of all state land in national parks to the MoE, regardless of its degree of protection and the status of zoning, and focus on protection of these sites.

National parks require an increase in financial resources to hire more staff (e.g. foresters/land managers, guards, tourism service providers) and invest in park infrastructure (e.g. visitor centres, trail development or maintenance). Sufficient, predictable and long-term core state funding is fundamental but currently lacking. State funding should be complemented by international and EU funding, and national parks' own revenues.

A new source of PA funding has emerged with the 2023 update to Act 414/2012, which allows earmarking of auctioning revenues from the ETS to support carbon sequestration measures in PAs. However, the specific modalities and criteria for disbursing these funds are yet to be defined. It will be important to spend the resources effectively to maximise benefits for both biodiversity and the climate, and to ensure consistency with new and incoming EU law-based instruments, such as an EU certification framework for carbon removals.

To generate their own revenues, national parks could use various mechanisms such as entrance fees, accommodation tax, issuance of concessions and payments for ecosystem services (MoE, 2022c), but these are yet to be leveraged. A notable exception is the PA entrance fees at Slovak Paradise National Park (Slovenský Raj). However, the entrance fee rate is lower than willingness-to-pay estimates (MoE, 2022c).

### ***Mainstreaming of biodiversity***

*Slovakia faces challenges aligning biodiversity and forestry interests, but is shifting towards more sustainable forestry models*

Forest area accounts for about 40% of Slovakia's territory and has increased slightly since 2010. Forestry contributed between 0.7-0.9% of annual GDP in 2010-22, which is more than in most OECD countries. It employs 73 000 people (FISE, 2022).

While some monoculture plantations exist (primarily conifers), forests are mainly diverse and have a natural species composition. The proportion of broadleaved trees is increasing, which is a positive trend for biodiversity and forest resilience (MoE/SEA, 2023). Introduced tree species cover less than 3% of forest area (MoE, 2022d). The share of naturally regenerating forest has increased slightly, accounting for 60% of total growing stock in 2020 (FAO, 2020).

While species composition is diverse, the age structure is not. Mature forest stands over 70 years old and very young stands (under 20 years) are disproportionately represented. The lack of variety in age structure increases forest vulnerability to biotic (e.g. bark beetle infestation) and abiotic (e.g. drought; wind damage) disturbances, both of which are increasing with climate change (MoE, 2022d).

Logging intensity is higher than in most OECD countries (OECD, 2023f). It has a long-term increasing trend, which is expected to persist (MoE, 2022d). This is due to an increase in planned logging as tree stands reach maturity and high volumes of incidental logging (e.g. salvage and sanitary logging), following disturbances.

All Slovakia's forests are covered by ten-year forest management plans to promote sustainable forestry. However, some plans are inconsistent with the management objectives of protected areas. Furthermore, salvage and sanitary logging have resulted in large-scale clearing of habitat of the threatened western capercaillie in Natura 2000 sites. To address this issue, Slovakia updated its legislation in 2020 to require environmental assessments of forest management plans and enable environmental authorities to restrict salvage and sanitary logging. Slovakia should ensure these changes are implemented effectively and efficiently, and that forest management plans and PA plans are aligned.

Additionally, Slovakia has taken measures to better mainstream biodiversity in forestry, through amendments to the Forest and Nature Acts. These amendments improve coherence between the two laws and promote close-to-nature forestry, which is now practised on over 112 000 ha (MoE/SEA, 2023). The draft 2024-30 National Forestry Programme of Slovak Republic sets a target of 25% of forests (i.e. 500 000 ha) under close-to-nature management by 2030. A plan for increasing close-to-nature forestry and technical guidance for foresters on such practices would be beneficial. Slovakia could also require and guide efforts to further integrate considerations of biodiversity, ecosystem services, and climate change mitigation and adaptation into forest management plans.

While protected and well-managed forests provide multiple benefits to society (e.g. watershed services and climate regulation), forest owners/managers have insufficient economic incentives to provide these services. In a positive step, the government introduced the Forestry Support for Non-Productive Forest Functions in 2017. However, the scheme has not yet driven action beyond regulatory requirements and has scope for improvement (e.g. stronger application of criteria; re-calculation of payment rates to enhance cost effectiveness) (Báliková and Šálka, 2022). Strengthening this mechanism and harnessing other instruments (e.g. payments for ecosystem services) for mobilising public (state and European Union) and private finance, could help Slovakia achieve its environmental objectives in forest management.

Slovakia could also renew its efforts to expand voluntary sustainable forest certification under the Forest Stewardship Council (FSC) or Programme for the Endorsement of Forest Certification (PEFC). While two-thirds of forest area is under FSC or PEFC certification, the overall area certified has been declining since 2010.

*The common agricultural policy has not fulfilled its potential for Slovak's biodiversity, but this looks to be changing*

Agricultural land covers nearly half of Slovakia but declined slightly over 2010-21 (MoE/SEA, 2023). It consists predominantly of arable land (59%) and permanent grassland (36%). Agriculture has contributed between 2-3% to annual GDP since 2010 (OECD, 2023e).

Biodiversity in agricultural landscapes continues to decline. In the past decade, the Common Farmland Bird index declined faster than the EU average (EC, 2023d). Agricultural activities threaten more than 60% of habitats and 70% of species of European interest (Černecký et al., 2020). A key issue is the loss of landscape diversity, resulting from the removal of landscape elements (e.g. hedgerows, solitary trees) and the cultivation of monocultures. This is exacerbated by the large average field size in Slovakia (the largest



in the European Union) (OneSoil, 2020), which stems from collectivisation and land consolidation following the Second World War.

Agricultural practices such as excess use of industrial fertilisers and pesticides also pose a threat to biodiversity. Consumption of nitrogen-based inorganic fertilisers (kg/ha) has increased by 20% since 2011 and is above the EU average. Pesticide application (kg/ha) is lower than in most EU countries but has been increasing faster. During 2011-21, pesticide application increased by 30%. Grassland habitats and species face the additional threats of woody succession and invasive alien plant species, owing to the abandonment of land and reductions in low-intensity grazing (Černecký et al., 2020).

The EU Common Agricultural Policy (CAP) provides important incentives for conserving and sustainably using biodiversity in Slovakia's agricultural land, but its full potential has not yet been realised (EC, 2020) (MoE, 2020c). Large monoculture fields have persisted under CAP and little progress has been made to restore landscape features (Gális, 2020). Furthermore, the effectiveness of agri-environmental-climate measures (AECMs) has been patchy. For example, during the 2014-20 period, measures to promote multi-functional field edges and protect threatened species were undersubscribed (EC, 2020) (MoE, 2020c). In contrast, measures supporting protection of grassland habitats and organic agriculture performed well (MoE, 2020c). The share of agricultural land farmed organically reached 13.6% in 2021, above the EU average and the Envirostrategy's target for 2030 (MoE/SEA, 2023). The National Action Plan for Organic Farming sets a new target of 14% for 2027 (MoA, 2023a).

While it is too soon to evaluate its impact, Slovakia's CAP 2023-27 Strategic Plan is better geared towards protecting biodiversity and achieving other environmental objectives, such as climate change mitigation and adaptation. This reflects not only revised and more stringent CAP requirements following EU negotiations, but also how Slovakia has translated the CAP nationally – a process that benefited from improved and effective stakeholder engagement.

Slovakia has changed the criteria for direct payments (pillar one) to allow for more landscape features (unproductive land) within the eligible hectares and strengthened the environmental requirements for obtaining these payments (i.e. conditionality). Additionally, the Strategic Plan allocates EUR 560 million (28% of pillar one) to a Whole-Farm Eco-Scheme that divides large parcels of land by biobelts and sets aside non-productive landscape elements.

Other measures targeting biodiversity include AECMs (under pillar 2) for protecting great bustard, ground squirrel and grasslands, and for managing Natura 2000 habitats. Support is also allocated to adopting or maintaining organic farming practices on 14% of agricultural land. Payment levels for the Eco-Scheme and AECMs were calculated carefully and certified by an independent body (MoA, 2023b).

Slovakia should ensure the farm advisory service has sufficient capacity to support the uptake and effective implementation of the Eco-Scheme and AECMs, with involvement of relevant agricultural and environmental experts. It will also be important to closely monitor the implementation and outcomes of environmental measures, and ensure the conditionality requirements are respected, particularly in ecologically sensitive and important areas.

To further promote positive biodiversity outcomes from CAP, Slovakia could consider using the flexibility mechanism to increase the share of pillar 1 going to the Whole-Farm Eco-Scheme and to transfer funding from pillar 1 to pillar 2 AECMs. A focus on results-based AECMs could also be beneficial (OECD, forthcoming). Additionally, Slovakia should continue to build and disseminate knowledge about biodiversity-friendly and climate-smart farming practices, including through the European Innovation Partnership for Agricultural Productivity and Sustainability.

Beyond CAP payments and conditionality, Slovakia could consider other policy measures to promote nature and biodiversity in the agriculture sector. For example, the Slovak Land Fund could introduce terms into agricultural leases requiring specific biodiversity measures in key areas such as PAs. Favourable lease rates could be considered where additional demands are placed on farmers. Additionally, to manage the

increase in pesticide use, Slovakia could develop economic thresholds to inform decisions on pesticide application. To manage the adverse effects of fertilisers, strengthened nitrate testing and compliance control in areas threatened by nitrates (as indicated in the Envirostrategy), would be beneficial.

*Slovak's energy transition must be consistent with climate and biodiversity commitments*

Slovakia has taken important steps to address the pressures of the energy sector on biodiversity. Notably, the State Nature Conservancy, NGOs and electricity transmission companies have been working together to address powerline impacts on biodiversity. Additionally, in 2018, Slovakia removed bioenergy subsidies that were contributing to unsustainable biomass harvesting and introduced sustainability criteria for biomass.

Challenges remain. Slovakia received a letter of formal notice from the European Commission for failing to conduct a strategic environmental assessment (SEA) of the national plan on the usage of hydropower (EC, 2022c). The SEA considered only 4 of 37 small hydropower plants listed in the plan. Furthermore, at the project level, authorities did not conduct the necessary EIA for several already constructed hydropower plans required by the EIA and Water Framework Directives.

As a late mover on solar and wind energy, Slovakia has an opportunity to learn from other countries' experiences in harnessing synergies and minimising trade-offs between these technologies and biodiversity protection (OECD, 2024b). Direct, indirect and cumulative biodiversity impacts should be assessed as part of environmental assessments and mitigated effectively. Identifying renewable energy zones where risk to biodiversity is low (e.g. abandoned agricultural land, brownfield sites) could help reduce biodiversity impacts and project delays, while allowing for accelerated permitting. Slovakia should also fully harness opportunities to integrate solar panels into the built environment.

Slovakia has set an objective of developing sustainability criteria for all sources of renewable energy as part of its Envirostrategy 2030. Criteria are yet to be developed for solar PV and geothermal energy. Industry views the wind criteria, which were adopted more than a decade ago, as a barrier to investment (WindEurope, 2022). It would be beneficial to review these criteria to ensure they reflect the current state of knowledge and are fit-for-purpose. The country could also assess the need for decision-support tools (e.g. ecological sensitivity maps and guidance) to help renewable energy companies, energy planners and regulators implement renewable energy criteria.

*Biodiversity mainstreaming has progressed slowly for other sectors*

Integration of biodiversity into infrastructure decisions is improving but is not systematic. Positive developments include the monitoring of transport impacts on land-use change, strengthened governance of IAS, improved knowledge on migratory routes of large mammals affected by transport infrastructure, and integration of biodiversity and broader nature considerations into the Transport Strategy 2030 (MoE, 2020c).

To help address infrastructure impacts on biodiversity, Slovakia could consider adopting an explicit biodiversity "no net loss" or ideally "net positive gain" objective for infrastructure developments. It could support achievement of this objective through adoption of a national biodiversity offsetting scheme. It will be critical that such a scheme is well governed and follows best practices (OECD, 2016). This includes full adherence to the mitigation hierarchy: avoid then minimise and restore/rehabilitate residual impacts onsite before offsetting.

Poorly regulated tourism has put pressure on Slovakia's ecosystems and their services, particularly in PAs. At the same time, the potential benefits of sustainable ecotourism for biodiversity, local economies and people have not been fully realised. At a strategic level, Slovakia is starting to address this through its Envirostrategy 2030 and the development of its Strategic Plan for the Development of Green Tourism. It

has also promoted tourism and biodiversity links under the Interreg Centralparks initiative and the Slovak Republic-Hungary Cross-Border Cooperation Programme (MoE, 2020c).

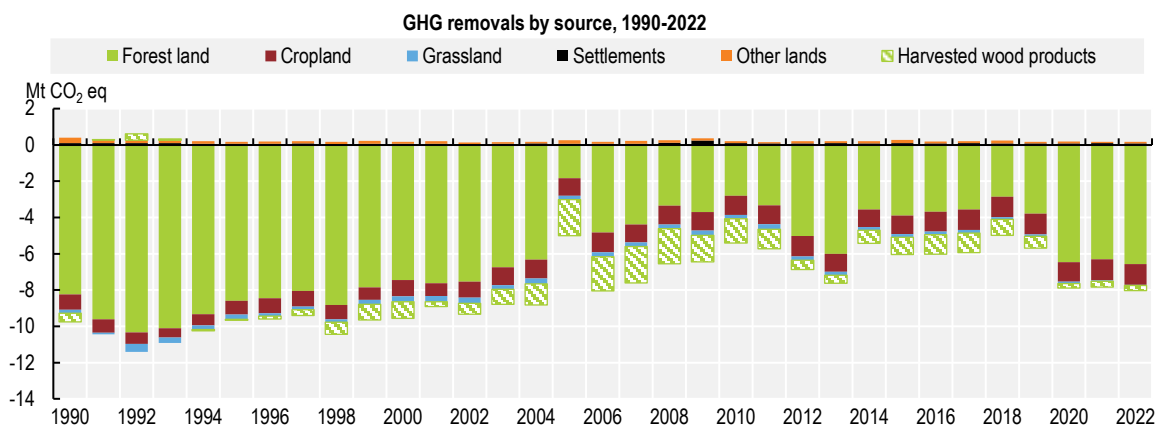
Across all sectors, businesses could play a more active role in Slovakia's biodiversity agenda. No formal mechanism exists for governments to engage with business on biodiversity issues and collaboration has been limited. In addition to providing clear policy signals for business, Slovakia could consider establishing a multi-stakeholder business and biodiversity platform to communicate with business and facilitate the exchange of good practices. It could also engage in the European Biodiversity and Business Platform, which has no Slovakian members.

### **Climate change mitigation, adaptation and biodiversity**

*Despite new policies, projections show Slovakia will fall short of its 2030 LULUCF target*

Slovakia's land use, land-use change and forestry (LULUCF) sector is a net sink. However, net carbon removals have a long-term declining trend (Figure 5). This is mainly due to declining removals from forests, resulting from the skewed age structure of forests and the increase in planned and actual harvest (discussed above) (MoE, 2022b; MoE, 2022d). Removals from grasslands and harvested wood products also show a declining trend.

**Figure 5. GHG removals from land use, land-use change and forestry have declined**



Note: Removals dropped by half in 2005 due to wind damage to forests in the High Tatras. Increased removals in 2020/21 likely reflects reduced forestry activity owing to COVID-19. Settlements and other lands are net sources of GHG emissions, mostly due to the construction of transport infrastructure, industrial sites and municipal development; 2022 data are estimates.

Source: MoE (2023), National Inventory Report 2022; EEA (2023), Member States' greenhouse gas (GHG) emission projections, 24 October.

StatLink  <https://stat.link/5tmz3q>

The revised LULUCF Regulation (EU 2023/839) requires Slovakia to increase net GHG removals in the LULUCF sector by 504 kilotonnes of carbon dioxide equivalent (kt CO<sub>2</sub>e) by 2030 compared to the 2016-18 average. According to Slovakia's projections, GHG net removals in the LULUCF sector will decline by 2030, even in a scenario with additional planned measures. Examples of these additional measures include changing the species composition of forests, afforestation of unused agricultural land, increasing the share of long-life wood products (HWP), increasing carbon sequestration in agricultural soils, and maintaining and restoring grasslands (MoE, 2022b).

Slovakia will need to swiftly and comprehensively implement the measures identified for enhancing removals and reducing emissions from LULUCF. It will also need to identify and implement additional

measures across all land-use sectors to meet its target. For forest land, which has the most influence on GHG removals, adjusting harvest volume (e.g. by decreasing harvesting rates or modifying rotation periods) may be the most effective measure for increasing removals in the short term (Barka, Priwitzer and Pavlenda, 2020). However, this could undermine long-term mitigation by delaying the transition to more resilient and stable forest stands (see below). Work is under way to enhance modelling and methodologies to estimate the impact of measures across the different land-use categories and inform their prioritisation.

*Slovakia has adopted a comprehensive strategic framework for adaptation*

Slovakia adopted a National Adaptation Strategy (NAS) in 2014 and an updated strategy in 2018 (MoE, 2018). The NAS establishes an institutional framework and co-ordination mechanism to promote adaptation. A National Adaptation Plan (NAP) adopted in 2021 outlines seven priority areas with specific objectives and measures for the short term (2021-23) and medium term (2024-27)<sup>9</sup> (MoE, 2021b). The NAS and NAP emphasise an integrated approach to adaptation and cover all adaptation-relevant areas.

Adaptation measures for biodiversity and nature-based solutions are integrated into both the NAS and NAP. The NAP outlines seven measures to support biodiversity and ecosystem services under the priority domain “natural environment and biodiversity”, including strengthening PA networks; monitoring climate impacts on biodiversity and ecosystem services; and controlling spread of IAS. Measures involving the sustainable management and restoration of ecosystems are also integrated into other priority areas such as water protection (e.g. restoration of floodplains and wetlands), adapted forestry (e.g. conversion of monocultures to close-to-nature forest stands, forest protection against biotic and abiotic agents, tending to young forest stands, research and monitoring of primeval forests), and sustainable agriculture (e.g. promoting mosaic agricultural land and suitable pollinator habitats).

*Slovakia must harness synergies across biodiversity, climate adaptation and climate mitigation while managing potential trade-offs*

Various measures could simultaneously deliver nature and biodiversity protection, climate adaptation and climate mitigation benefits. For example, diversifying the species and age structure of forests through targeted planting and close-to-nature forestry will increase the resilience of forests in the long run. This, in turn, would reduce the risk of GHG emissions associated with tree loss. Restoration and protection of wetlands, including peatlands, could secure their carbon stocks, reduce the impacts of droughts and floods, and provide habitat for wetland species.

Trade-offs may also exist. For example, in some contexts, afforestation projects could increase removals in the short term but compromise biodiversity. This in turn could undermine ecosystem resilience and long-term mitigation objectives. Harvesting of even-aged forest stands – particularly monocultures – may be required to transition to more resilient close-to-nature forestry that provides adaptation, biodiversity and longer-term mitigation benefits. However, it may reduce the carbon sink in the short term. Such trade-offs need to be assessed and carefully addressed through national strategies, policies and locally tailored management plans.

While Slovakia’s strategies increasingly recognise synergies across biodiversity and climate change, these need to be harnessed in practice. This requires effective policy mixes coupled with integrated approaches to financing and project implementation. The RPP for Slovakia provides a platform for this, allocating EUR 159 million to adaptation, with emphasis on nature and biodiversity protection. Key areas of focus include the reforms of landscape planning, water management and national park management.

Landscape planning offers an integrated approach to delivering on climate and biodiversity objectives. To that end, it protects and restores landscape features necessary for retaining water; provides habitat and ecological corridors; and supports carbon sequestration and storage. While the methodological underpinning for landscape planning is well established through the Landscape Ecological Planning and

Territorial System of Ecological Stability, its implementation is lacking. A landscape planning law has been drafted but not adopted.

Slovakia's MoA is leading a new initiative – the Carbon and Water Bank – to improve the status and quality of water and soil with a positive impact on the climate, the water cycle and biodiversity. The concept involves a climate fund for soil with new sources of finance, a soil information and monitoring system, and a carbon and water bank certification scheme. As the scheme develops, Slovakia should ensure the necessary practices and safeguards are in place to promote both cost effectiveness and environmental integrity.

Finally, it will be important for Slovakia to monitor and evaluate how synergies across mitigation, adaptation and biodiversity are being harnessed in practice; better understand how species and ecosystem services are responding to climate change; and inform adaptive management.

## Recommendations on biodiversity and forests in the context of climate change

### Strategic and institutional framework for biodiversity

- Adopt a National Biodiversity Strategy and Action Plan (NBSAP) with a long-term vision, mission and specific and measurable targets aligned with the Kunming-Montreal Global Biodiversity Framework and the EU Biodiversity Strategy for 2030. Develop a national plan for restoring ecosystems that identifies priority sites and cost-effective restoration measures.
- Develop a national biodiversity finance plan to mobilise and promote efficient, cost-effective use of public and private resources. Enhance the capacity of local, regional and central governments to develop, fundraise for and implement nature and biodiversity projects.
- Strengthen data and information and their use in decision making: address remaining data and knowledge gaps for habitats and species of conservation importance; advance natural capital accounting; develop tools and capacity to integrate ecosystem service values into policy development and appraisal.

### Protected area reform

- Strengthen and simplify the protected area system in line with international good practice. Prioritise zoning of national parks, including the expansion and consolidation of areas under strict protection. Adopt and implement management plans for protected areas (in line with EU 2030 target for effective management of protected areas).
- Enhance the capacity of national park administrations and the State Nature Conservancy to manage protected areas effectively, support participatory approaches and communicate with local stakeholders. Consider contracting professional mediators to facilitate zoning.
- Establish development plans for national parks and adapt regional development plans to promote sustainable local economies that benefit from and are consistent with the biodiversity objectives of national parks.
- Resolve land ownership in protected areas: revise the condition in the Nature Act requiring zoning to be approved before certain state lands are transferred to the MoE; accelerate efforts to purchase, lease or exchange private land in protected areas.
- Increase the volume and predictability of state funding for national parks and increase national parks' own revenues through appropriately priced entrance fees, payments for ecosystem services, tourism taxes and other tailored measures.

### Mainstreaming biodiversity into sectoral policies and practices

- Adapt forestry practices to better support nature and adapt to climate change: require and guide integration of biodiversity, ecosystem services and climate change considerations into forest management plans and their appraisal; scale up close-to-nature forestry and measures to protect young trees from ungulates; strengthen economic incentives for land and forest owners/managers and promote forest certification.
- Increase agricultural landscape diversity, including by reducing field sizes, and adopt biodiversity-friendly farming practices: promote and support the uptake of the Eco-Scheme and AECMs; leverage the CAP flexibility mechanism to increase funding of biodiversity measures; ensure conditionality is respected; leverage other policy options beyond CAP payments.

- Align the energy transition with biodiversity, water and climate objectives: assess and address cumulative biodiversity impacts in renewable energy planning; identify areas of low ecological risk for accelerated deployment of solar and wind energy; develop/adapt renewable energy sustainability criteria.
- Adopt an objective of no net loss or net gain for infrastructure projects. Examine the potential for a national biodiversity offsetting scheme to support this objective, ensuring strict adherence to the mitigation hierarchy.

### Biodiversity and climate linkages

- Scale up efforts to increase net removals from LULUCF across all land-use categories in line with Slovakia's 2030 EU commitment. Harness synergies and manage potential trade-offs across biodiversity, climate mitigation and adaptation, and between short- and long-term mitigation action.
- Promote integrated landscape planning to improve water retention, carbon stocks and species' habitat through biological corridors, vegetation belts and other green/blue infrastructure. Review, update and implement the Landscape Ecological Planning and Territorial System of Ecological Stability (so-called ÚSES) methodologies, including in the application of the CAP Strategic Plan.
- Monitor and enhance knowledge of climate change impacts on biodiversity and ecosystem services to better incorporate climate considerations and facilitate adaptive management, especially in protected areas, agriculture and forestry.

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## Notes

<sup>1</sup> Considering the 2022 downward revision of the Recovery and Resilience Facility, REPowerEU grants and Brexit Adjustment Reserve.

<sup>2</sup> According to Act No. 250/2012 Coll. on Regulation in Network Industries, a household is energy poor when its average monthly expenditure on the consumption of electricity, gas, heating and hot water accounts for a significant share of its average monthly income.

<sup>3</sup> Under the amended EU ETS Directive (2023/959), member states will have to use all auction revenues that are not attributed to the Union budget for climate-related purposes, with the exception of revenues used for the compensation of indirect carbon costs.

<sup>4</sup> Revenue from energy taxes includes a surcharge on electricity to finance feed-in tariffs for renewables and co-generation and subsidies for electricity generation from domestic coal. The decrease in 2022 reflects the fall in revenue from the surcharge, as high market prices have led to a reduction in support for electricity and CHP producers.

<sup>5</sup> As Slovakia has no carbon tax, effective carbon rates (ECR) consist of permit prices from the EU ETS, and fuel excise taxes.

<sup>6</sup> Households are exempted if they are the final consumers and are directly supplied with the commodity they use for their own consumption (i.e. no exemption if they live in multi-flat buildings).

<sup>7</sup> Secondary succession refers to growth or change in an ecological community following a disturbance that does not remove all existing vegetation from a site. This can have a negative impact on biodiversity, for example, where woody vegetation replaces important grassland habitat following abandonment of farmland. Affected ecosystems in Slovakia are grasslands, peatlands and moors.

<sup>8</sup> Based on data collected from some national parks in Austria, Germany, Poland, Czechia and Romania.

<sup>9</sup> Water protection, management and use; Sustainable agriculture; Adapted forestry; Natural environment and biodiversity; Health and healthy population; Residential environment; Technical, economic and social measures.

# Annex 1. Actions taken to implement selected recommendations from the 2011 OECD Environmental Performance Review of the Slovak Republic

Recommendations	Actions taken
<b>Chapter 1. Towards sustainable development</b>	
<p>Consolidate the inter-institutional co-operation platform and extend its activities to the strategic design and assessment of climate change, energy and transport policies; strengthen the system to monitor implementation of GHG emission reduction policy measures, extending it to their related financial and economic costs, with a view to assessing and improving overall cost-effectiveness.</p>	<p>Several inter-ministerial councils have been established to ensure strategic co-ordination. These include the councils for the 2030 Agenda; for the European Green Deal (in charge of climate policy); for the Recovery and Resilience Plan (RRP); and for the Cohesion Policy 2021-27. By mid-2023, the government was considering merging some of these councils to improve co-ordination on sustainable development.</p> <p>A dedicated analytical group prepared a broad study on the impacts of the EU “Fit for 55 package” legislation on Slovakia’s economy and environment. Another collaborated on the preparation of the public sector energy savings plan in the context of the energy crisis. However, these initiatives are ad hoc.</p> <p>The 2023 draft Climate Law envisaged creating a Council for Climate Accountability.</p>
<p>Review the efficiency and effectiveness of environmentally related taxes in achieving their environmental objectives, and their coherence with other economic instruments.</p>	<p>Envirostrategy 2030 (2019) has pledged for a fiscally neutral green tax reform. A 2020 joint OECD-Ministry of Environment (MoE) paper reviews the use of economic instruments for the environment in Slovakia and proposes reform options by environmental domain. Slovakia has reformed the landfill tax (2018 and 2022 for industrial and construction waste), introduced a charge for the use of light plastic bags (2018) and a deposit-refund system for single-use PET bottles and cans (2022). It has also increased air pollution tax for certain pollutants. However, the environmental impacts of these changes remain to be assessed. The tax burden has not shifted from labour to environmentally harmful activities.</p>
<p>Consider restructuring taxes on energy products used in sectors not covered by the EU ETS by including a CO<sub>2</sub> tax component; consider raising the tax rate on diesel with a view to making the tax treatment of automotive fuels consistent with climate change objectives.</p>	<p>Energy taxes do not reflect climate damage of fuel use. They are low compared to EU countries. Fuel taxes decreased in real terms. The tax on diesel remains well below that on petrol.</p>
<p>Continue to gradually phase out coal subsidies and tax concessions for energy use by households and in energy-intensive industries, with a view to encouraging changes in energy-consumption patterns and contributing to fiscal consolidation.</p>	<p>Slovakia has mapped fossil fuel subsidies and identified those for reform. It is committed to end subsidies for electricity produced from domestic coal in 2023. Energy tax exemptions for households and energy-intensive businesses remain. Between 2022 and 2023, to mitigate the effects of the energy crisis, the government adopted measures amounting to 3.3% of GDP. They mainly consist of untargeted energy price support measures.</p>
<p>Consider extending the annual road vehicle tax to private cars and link the tax rate to environmental performance, particularly regarding carbon and other emissions that may pose risks to human health in urban areas.</p>	<p>The annual motor vehicle tax rate does not vary with emissions (although electric vehicles are exempted) and only businesses pay it.</p>
<p>Extend to cars the existing distance-based and emission-differentiated road tolls applied to heavy goods vehicles.</p>	<p>Only heavy goods vehicles pay a toll based on the distance travelled and their emissions on specific sections of motorways. Cars pay a flat rate.</p>
<p>Speed up modernisation of rail infrastructure, improve public transport services and develop alternative modes to road transport.</p>	<p>Investment in rail infrastructure has been significantly lower than investment in roads. The Ministry of Transport has published an investment plan for railway infrastructures in 2022. Sustainable transport is a priority of Slovakia’s RRP, which subsidises the modernisation of railway, tram and trolleybus lines, the construction of cycle lanes and the roll-out of electric vehicle charging stations.</p>



Periodically assess the value-added of the Environmental Fund and Recycling Fund in terms of both their economic efficiency and environmental effectiveness in meeting their objectives; consider options for adjusting the objectives and operation of the funds, including eventually phasing them out.

Improve the effectiveness of Slovakia's participation in the EU ETS and use of the Kyoto Protocol flexible mechanisms by ensuring transparency of transfers of emission allowances and revenue use, and fully implementing the Green Investment Scheme.

Strengthen capacity to attract, absorb and efficiently allocate EU funds for environmental purposes.

Build capacity for economic analysis to support environment-related policy development and implementation; strengthen co-operation between the Slovak Statistical Office, the Ministry of Environment and other relevant ministries and agencies to develop environmental accounting.

Develop a new environmental strategy as an integral part of Slovakia's strategy for economic and social development; ensure that the environmental administration is stable, professional, efficient and open, dedicated to pursuing ambitious environmental goals.

Further streamline and simplify environmental permitting and integrate inspection procedures; develop an explicit environmental enforcement policy that includes enforcement priorities and policies for applying sanctions; strengthen compliance promotion efforts targeting small and medium-sized enterprises.

Ensure that environmental impact assessment and strategic environmental assessment procedures are fully in line with EU requirements, particularly regarding public participation and access to justice.

Establish a forum in which the Ministry of Environment and NGOs meet regularly with a view to strengthening dialogue and co-operation.

Develop cost-effective measures to reduce air emissions from growing sectors (e.g. transport, residential heating), and to reduce potential health impacts in urban areas.

The Recycling Fund was abolished in 2016 with the introduction of the Extended Producer Responsibility system.

The Environmental Fund has recently improved its strategy, management and project evaluation. However, budget planning has been hampered by limits set by the Ministry of Finance on the use of proceeds from the auctioning of EU ETS allowances for environmental purposes. Only 22% of these revenues were spent on environmental action over 2015-22. A 2023 legislative update is expected to increase the share of auctioning revenue earmarked for the environment.

Since 2021, like other low-income EU member states, Slovakia has benefited from the Modernisation Fund (financed by revenues from the auctioning of EU ETS allowances), to modernise its energy system and improve energy efficiency.

In 2013, the Slovak Republic sold 7 million unused assigned amount units under article 17 of the Kyoto Protocol. The proceeds were used for the SlovSEFF III programme, which supported projects to improve energy efficiency and use renewable energy sources until 2022.

Over 2014-20, Slovakia had a low absorption rate of structural funds for environmental purposes. The country has streamlined the governance and management of EU funds for 2021-27 with a single operational programme "Programme Slovakia" implemented by a single managing authority. Slovakia has amended its legislation to simplify and accelerate public procurement procedures. The ongoing reform of public investment management aims to better plan projects and prioritise those with the highest social return. Spending efficiency and overall capacity of municipalities are limited by their small size.

The Slovak Republic has established analytical units, such as the Value for Money Department of the Ministry of Finance and the Institute for Environmental Policy, an independent unit of the MoE. However, they are not systematically involved in decision making.

Important progress has been made with the publication of the *Catalogue of Ecosystem Services of Slovakia* (2019) and *The Value of Ecosystems and their Services in Slovakia* (2021).

The Envirostrategy 2030, approved in 2019, sets out various environmental commitments for all sectors. In 2022, the MoE elaborated an implementation plan but did not make it public. Indicators were developed to monitor progress in some areas of the Envirostrategy.

Slovakia is reforming environmental impact assessment (EIA) and environmental permitting. The MoE planned to separate the permit under the Industrial Emissions Directive (IED) from the building permit, and to combine the EIA process with the IED permit. For simple constructions, the EIA and building permit would be integrated into a single process. These reforms were disrupted by the reform of the construction law, which also changed the EIA and IED permit processes. A 2023 legislative amendment has been criticised for giving insufficient consideration to the environment, for limiting public participation and for lack of inter-ministerial consultation. The entry into force of the construction law and its amendments (due by April 2024) may be postponed due to the serious reservations expressed by stakeholders.

A national strategy to combat environmental illegal activities has not yet been adopted. Since 2022, Slovakia has been reinforcing the police unit specialised in fighting environmental crime.

Examples of successful collaboration include the development of the Envirostrategy, the circular economy roadmap, the Water Policy Concept and the Common Agricultural Policy (CAP) Strategic Plan 2023-27. A "Green Tripartite" channels suggestions and comments from NGOs in environmental policy making.

Slovakia met its 2020-29 emission reduction commitments under the NEC Directive. It is on track to meet its 2030 targets, only with additional measures for ammonia emissions.

Measures planned by the 2020 National Air Pollution Control Programme (under revision) include subsidies for alternative-fuelled vehicles; vehicle inspections; support for improving the energy efficiency of buildings; and replacement of fossil fuel heating systems and old boilers with low-emission solutions. Costs are reported for a limited number of measures. The 2023 Air Pollution Law, which strengthens competences of local authorities, including to introduce low-emission zones, is expected to improve air quality management. The Integrated National Energy and

Review and adjust the ten sub-basin water management plans so as to increase synergies between policies (including those for agriculture, water supply and sanitation, landscape and land-use planning, flood prevention, nature conservation and climate change adaptation); complete institutional arrangements for river basin management with a view to assuring adequate consultation between stakeholders and effective implementation at the sub-basin level.

Conduct a comprehensive evaluation of the current gap in water supply and sanitation infrastructure, the measures required to meet objectives and their cost; on this basis, devise a realistic strategy for achieving EU objectives for the water sector, particularly for wastewater treatment, including clear priorities, strategic financial planning for achieving objectives and proposals for further institutional reform of the water management sector; identify measures to increase connections to the water and wastewater networks.

Strengthen measures to reduce flood risks and their impacts, emphasising preventive landscape and land-use planning and low cost (ecosystem) options and technologies.

Review economic instruments applied to waste management with a view to increasing the incentive for waste minimisation, recovery and diversion from landfill.

Implement the state programme on contaminated sites, applying the polluter pays principle to site clean-up when appropriate; prioritise sites with the greatest risk to human health and the environment, and assure long-term funding for orphan site remediation.

Climate Plan for 2021 to 2030 (under revision), the long-term building renovation strategy and the RRP have important co-benefits on air quality.

River Basin Management Plans (RBMPs) have been developed in line with the EU Water Framework Directive. The third RBMPs (2022-27) include programmes of measures to address key pressures: organic pollution, pollution by nutrients and priority substances, and hydromorphological alterations. Drought and water scarcity as a consequence of climate change are also addressed. The MoE prepared RBMPs in co-operation with all stakeholders and draft RBMPs were subject to a strategic impact assessment.

In 2022, Slovakia adopted the Water Policy Concept until 2030 with a view to 2050 to integrate water planning instruments and ensure synergies with sectoral policies. The Concept was drawn up in a participatory and inclusive manner.

Slovakia has drawn up development plans for public water supply and sewerage for 2021-27. Investment needs for implementing the EU Urban Waste Water Treatment Directive and improving public water supply have been estimated at EUR 1.6 billion and EUR 660 million, respectively, by 2027. The plans rely heavily on EU funds and identify investment gaps of EUR 750 million for wastewater treatment and EUR 370 million for water supply. Tariffs for water services are too low to recover the full costs of service provision and contribute to infrastructure financing needs, especially for small municipalities and regulated entities. The Water Policy Concept plans a comprehensive reform of water pricing instruments by 2030.

Flood risk management plans in the sub-basins of the Slovak Republic were developed in 2015 based on the 2011 preliminary flood risk assessment and subsequent flood hazard and risk maps. Updated flood risk management plans were under public consultation in November 2023.

Although separate collection has improved, municipal waste generation has grown faster than GDP in the last decade and 41% of this waste still ends up in landfills. Slovakia has reformed the landfill tax (2018 and 2022 for industrial and construction waste), introduced a charge for the use of light plastic bags (2018) and a deposit-refund system for single-use PET bottles and cans (2022). The 2018 reform required all municipalities to pay the landfill tax even if a landfill is operated on their territory (previously an exemption). However, municipalities in this case receive compensation from landfill tax revenue. This weakens the incentive to divert waste from landfill and reduces potential support for sorting and recycling municipal waste. In addition, the reform does not provide for the tax rates to be adjusted for municipal waste after 2021 (2024 for industrial and construction waste).

The joint OECD-EC circular economy roadmap for the Slovak Republic (2022), recommended the country strengthen the use of economic instruments, including by further raising the landfill tax for municipal waste and reforming the distribution of its proceeds; improve extended producer responsibility schemes and expand pay-as-you-throw systems.

Progress of the state programme on contaminated sites has been slow.

## Chapter 2. Biodiversity and forests in the context of climate change

Develop a comprehensive strategy for protected areas in line with the Natura 2000 objective, involving all relevant stakeholders and taking account of the benefits and costs of different options; further develop the monitoring and information system for nature and biodiversity protection.

A specific/separate strategy for protected areas in line with the Natura 2000 areas objective does not exist. However, most of the information is included in the Priority Action Framework for Natura 2000; National Biodiversity Strategy and Action Plan, which is based on the Convention on Biological Diversity and Envirostrategy 2030. The MoE prepared and submitted the National Programme on Wetland Protection (updated in six-year period) and its action plans (developed for three-year period) to the government.

Legal changes over 2015-21 broadened stakeholders' involvement in protected area governance, including through the national parks councils.

Since 2016, the State Nature Conservancy has been developing a common monitoring and information system for nature and biodiversity protection, focusing on habitats/species of EU importance. Gradually, a broader set of data is being added. The database will have to be extended further to cover other species and habitats, in co-ordination with other sectors related to biodiversity protection.

Expand the use of existing economic instruments for biodiversity protection, and develop new instruments, particularly payments for ecosystem services.

Use of economic instruments in nature protection remains underdeveloped. Entry fees are now charged in the Slovak Paradise National Park in the most popular locations. The idea to extend this practice to other national parks has been discussed but not implemented.

A study of the Institute for Environmental Policy recommended extending entry fees to other national parks, levying a tax on accommodation and expanding payments for ecosystem services.

Payments for ecosystem services are yet to be scaled up. However, in 2017, Slovakia introduced a new subsidy scheme – “forestry support for non-productive forest functions” – to support sustainable silviculture measures and close-to-nature forest management. Agri-environmental payments for biodiversity are also integrated into the CAP.

The Ministry of Agriculture (MoA) introduced a “Soil – carbon and water bank of the country” concept in 2022. The aim is to value and finance soil and landscape ecosystem services, taking Fit for 55 carbon neutrality and climate change adaptation targets into account.

Better integrate landscape protection into land-use planning; explore ways in which the tourism sector could provide payments for the services provided by landscape management; develop a valuation methodology to provide a basis for estimating payments to landowners and farmers for the ecological services they provide.

Slovakia has continued efforts to promote landscape planning and better integrate it with spatial planning. This includes developing 50 regional and local systems of ecological stability (USES) projects under the Operational Programme Quality of Environment. The RRP includes reform and investment plans for landscape planning. A draft law on landscape planning has been prepared but not adopted.

Slovakia has assessed ecosystems and ecosystem service values at the national level and at three national parks. Additionally, Slovakian experts led the development of the Carpathian Ecosystem Services Toolkit as part of the Interreg Central Europe programme.

Promote voluntary farm management plans in which environmental objectives going beyond national requirements would be eligible for additional support; promote fertiliser and manure management plans at the farm level in nitrate-vulnerable zones.

Voluntary farm management plans with extra support are not in place.

Since 2018, manure management plans have been mandatory in nitrate-vulnerable areas.

Consider how environmental outcomes could be better targeted in payments under the harmonised rural development programme, including Natura 2000 payments, other agri-environmental payments and payments to maintain farming in less favoured areas.

About 40% of the Rural Development Programme 2014-22 budget was allocated to green initiatives. Of the total EUR 1.2 billion, EUR 152 million went towards agri-environmental payments, EUR 163 million towards organic farming, EUR 8 million for Natura 2000 payments and EUR 8 million for forestry, environmental and climate services. The largest share of this package, EUR 628 million in total, supported areas with significant constraints. Uptake of agri-environmental schemes was mixed: payments targeting species protection were undersubscribed due in part to low payment rates, while payments targeting grassland habitats performed well. The CAP Strategic Plan 2023-27 includes a Whole-Farm Eco-Scheme that aims to reduce field size and increase landscape elements, as well as agri-environmental payments targeting key species and habitats.

Strengthen incentives for more environmentally sound agricultural practices by accelerating the identification of landowners and the development of the land market.

The government approved a 30-year plan of the MoA to finish the land consolidation process in 2019. This process has faced delays.

Further strengthen inspection and enforcement of trade-related environmental conventions, remove legal obstacles to imposing penalties for infringement of CITES on Slovak territory, and continue programmes for training judges and prosecutors in environmental matters.

Customs authorities are responsible for enforcing the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) at the border (infringements detected by customs authorities doubled between 2012 and 2016). Inside the country, the Slovak Environmental Inspectorate (SEI) and district offices are in charge. All have the power to impose fines, to safeguard illegally kept specimens and subsequently seize them or forfeit for the benefit of the state. Crime offences in the CITES area are covered in § 305 of the Slovak Penal code and are dealt with by the Department of Hazardous Materials Detection and Environmental Crime of the police.

The National Action Plan for 2014-19 aimed to make the fight against illegal trade with endangered species more effective. An inter-ministerial body was established, combining the police, the MoE, customs authorities, the SEI, prosecution, and veterinary and tax authorities. It sets the half-year priorities to which the checks are targeted based on trends in illegal trade.

Regular training of control and law enforcement authorities also contribute to the more effective control of CITES legislation.

Source: OECD secretariat based on country submission and findings of the 2024 EPR.





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