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2024 Country Report – Slovenia

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Recommendation for a COUNCIL RECOMMENDATION

on the economic, social, employment, structural and budgetary policies of Slovenia

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Slovenia

2024 Country Report

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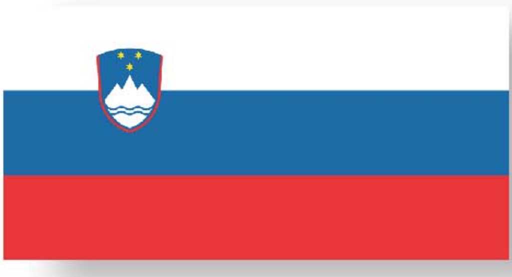


ECONOMIC AND EMPLOYMENT SNAPSHOT

Slower growth, decreasing inflation and a tight labour market

Growth in Slovenia decreased in 2023 but remained above the EU average ([1]). Slovenia has a dynamic, export-oriented economy with industry comprising a high share in total value added. Despite the devastating floods in the summer of 2023 that caused extensive damage to properties and infrastructure, real GDP grew by 1.6%. This is a decrease from the 2.5% in 2022 but is significantly above the 0.5% growth rate in the EU. GDP growth was mainly driven by domestic demand, especially in construction investment. Higher borrowing costs weighed on the investment in machinery and equipment, but construction was supported by significant inflows of EU funds, including those under the recovery and resilience plan (RRP), and the funds from the 2014-2020 cohesion policy programme. Employment growth and rising real wages further boosted growth in consumer spending. As the external environment continues to improve, price pressures abate and inventory levels normalise, economic growth is forecast to further increase this year and the next.

Inflation is set to continue declining. Harmonised Index of Consumer Prices (HICP) inflation decreased from 9.3% in 2022 to 7.2% in 2023, still significantly above the 5.4% in the euro area. The fall in inflation was driven by decreasing prices of energy, goods and food whereas the services inflation remained relatively high until the end of 2023, moderating thereafter. Inflation is forecast to decline further, dropping to 2.2% in 2025. Inflation excluding energy and unprocessed food remains somewhat higher than the headline inflation, as prices of services continued to increase rapidly.

After sustained increases, both exports and imports declined in 2023. Inflation (including that related to high energy, raw material, and rising producer prices), and global supply chain constraints have adversely affected the competitiveness of export-oriented and energy-intensive industries (e.g. chemicals, aluminium, steel and paper, as well as the automotive industry, see Annex 12). Competitiveness indicators have deteriorated, with production volumes decreasing and unit labour costs continuing to increase. The decline of imports was caused by a substantial downward adjustment of inventories, which contributed negatively (-4.4 percentage points) to GDP growth. Exports and imports of services increased. The current account balance has a surplus, as before the energy price crisis. Exports of goods and services are expected to grow in 2024-2025 as the situation in export markets improves. Imports are expected to pick up as the process of reducing the amount of inventory gradually abates.

The general government deficit is expected to remain below 3% of GDP in 2024 ([2]). Most of the measures implemented to mitigate the economic and social impact of high energy prices are being withdrawn in 2024. Expenditure related to flood reconstruction financing will reach 1.0% of GDP in 2024 and gradually decline in the coming years. This expenditure will be partially offset by a higher corporate income tax rate and a new tax on banking assets for the period 2024-2028. Nationally financed public investment is projected to remain high, at 5.3% of GDP in 2024. Public finances in the

([1]) The cut-off date for the data used to prepare the 27 Country Reports was 15 May 2024.

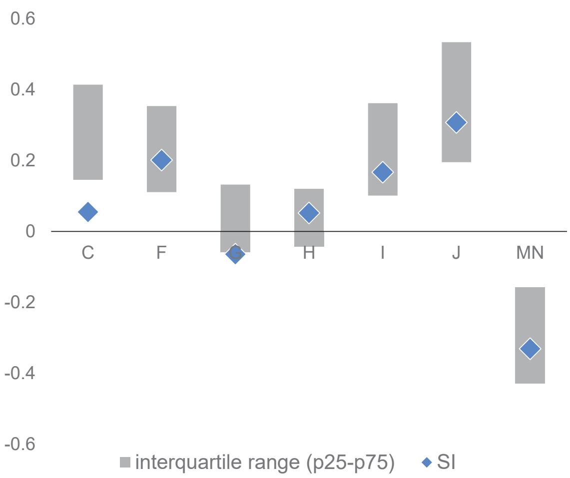
([2]) European Commission, 2024, Spring 2024 Economic Forecast.

coming years will also be impacted by the gradual phasing in of the long-term care, health and public sector wage system reforms. The government debt dropped below 70% of GDP in 2023 and is on a declining path. In recent years, Slovenia made significant progress in developing green budgeting techniques.

The labour market remains tight with labour shortages holding back economic growth. In 2023, the employment rate reached a record high (78%). The unemployment rate reached a new low of 3.7% in 2023 and gross nominal wages grew by some 9.7%, while real wages increased by 2.1%. Many sectors are facing labour shortages, with the vacancy rates being the highest in construction and hospitality sectors and the number of vacancies being highest in manufacturing. Amongst the businesses that recruited ICT specialists, Slovenia has the highest share of businesses reporting difficulties in finding sufficiently skilled employees in the EU (Annex 10). Furthermore, businesses appear to be hoarding labour, even in times of weaker growth, so they can resume production fully when demand recovers. Despite positive trends in employment and unemployment, the share of young people in temporary employment reached one of the highest levels in the EU in 2022 (Annex 14). The participation in adult education and training has decreased significantly since 2016 (also Annex 14) and Slovenia is falling well short of its target of having at least 60% of all adults participating in education and training every year by 2030.

The ageing workforce is placing an additional strain on the labour market. In 2030, there will be 40 000 fewer employees than in 2022 (3). Attracting unemployed or inactive people into the workforce is becoming increasingly difficult as this pool is drying out. Recruiting from abroad continues to be the most promising option for businesses. Further increases in labour supply and productivity will be needed to secure long-term growth and improve competitiveness. There are also indications that labour is not being allocated efficiently to the most productive sectors (see Graph 1.1).

Graph 1.1: **Indicator of allocative efficiency within industries**



(1) This indicator measures the extent to which productive resources (in this case labour) are channelled towards their most efficient use (i.e. comparatively more productive firms) within narrowly defined industries (NACE Rev. 2., 1 or 2 digit level). Allocative efficiency is measured as the percentage increase in industry-productivity connected with the actual allocation of employment across firms (the co-variance), relative to a baseline scenario in which employment is allocated uniformly. A positive (negative) number indicates that employment is concentrated among above-average (below-average) productivity firms. The interquartile range plots the distribution among the Member States (for which data are available). This measure is inspired by the breakdown of productivity developed in Olley and Pakes (1996). Sectors: C Manufacturing; F Construction; G Wholesale and retail trade; H Transport; I Accommodation and food services; J Information and communication; M_N Professional, administrative and support services.
Source: European Commission's elaboration calculations based on 2018 ORBIS data.

Low productivity growth

Slovenia's labour productivity remains below EU levels and shows no sign of catching up. Since 2008, labour productivity has fluctuated between 80 and 85% of the EU average, which is near the EU median. On the positive side, productivity in industry has increased faster than in the rest of the EU

(3) 2024 Ageing Report projections.

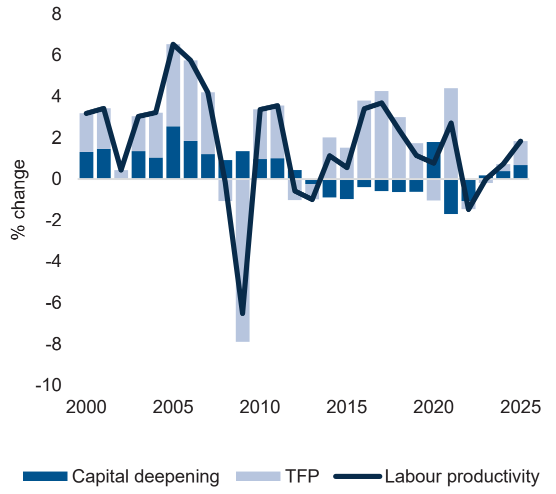
Box 1: **Slovenia's competitiveness in brief**

Slovenia remains competitive in its key export markets, facilitated by good performance in terms of some single market indicators, openness to trade and high levels of public investment. Slovenian industry, which has a high share in gross value added to GDP, has been able to improve its productivity faster than its competitors. In addition, Slovenia's RRP includes measures that aim to address long-standing challenges, such as reducing the administrative burden, improving the public procurement system, and increasing the efficiency of its public administration. However, competitiveness challenges remain.

- **Access to private capital could be improved.** A lack of such access restrains investment and growth of young and innovative firms and possibly hinders other investments.
- **Lack of availability of skilled labour resulting** from an ageing working force and workers' possible lack of ability to move to the more productive sectors could hold back growth and efficiency gains, including through a broad uptake of advanced technologies by businesses.
- **There is room for further improvements to the business environment** and the efficiency of state institutions needs to be improved by means of cutting red tape.

(Annex 12), and total factor productivity (4) growth has also consistently remained significantly above the EU average.

Graph 1.2: **Drivers of labour productivity growth**



(1) Growth accounting on GDP per hour worked
Source: European Commission (Autumn 2023 Forecast)

This can be attributed to Slovenia's high share of R&D personnel, its high level of post-secondary educational attainment and its high proportion of doctorate graduates in science, technology, engineering and mathematics. Despite this, patent applications remain relatively low (Annex 11), as is the R&D expenditure in the public sector. Slovenia is a 'moderate innovator' and the gap between the country's performance and that of the EU is becoming larger. The 2022 Programme for International Student Assessment (PISA 2022) showed that the share of top-performing 15-year-old Slovenians decreased in basic skills (mathematics and reading), which could affect the supply of skills and the capacity for innovation in future (see Annex 15).

Low levels of private investment and capital accumulation are holding back productivity growth. The ratio of business investment to GDP is below the EU average. While investments in equipment and machinery are relatively high, Slovenian businesses invest less than their foreign competitors in intellectual property products and buildings. The average R&D expenditure is lower than the EU average. Obstacles to investment in 2023 included lack of skilled labour, high energy costs, disrupted access to inputs and financial constraints (5).

The capital market is not providing good alternatives to bank financing. Slovenian

(4) A measure of productivity accounting for effects in total output not caused by traditionally measured inputs of labour and capital.

(5) 2023 EIBIS survey

Box 2: **UN Sustainable Development Goals (SDGs)**

Slovenia is making progress on all SDGs related to competitiveness and productivity (SDGs 4, 8, 9) although there remains some room for improvement. Slovenia is below the EU average in SDG 9 related to innovation, industry and resilient infrastructure in areas of sustainable industry, patent applications, R&D expenditure and use of passenger public transport. In SDG 8, related to decent work and economic growth, Slovenia has a higher material footprint than the EU average. Material footprint increased over 2015-2020, while it declined for the EU average (see Annex 1).

Out of the 17 indicators, 7 SDGs remain below the EU average. These relate to: (i) environmental stability (SDGs 2, 9, 12, 13); (ii) fairness, in the areas of good health and well-being (although negligeable); (iii) gender equality (SDGs 3 and 5); and (iv) macroeconomic stability, in the area of peace, justice and strong institutions (SDG 16).

companies rely more on bank funding and less on capital market funding than competitors in the other EU countries. The liquidity of the Ljubljana Stock Exchange is low. The value of annual private equity investment was just 0.1% of nominal GDP in 2022, only a sixth of the EU average and a tenth of the most advanced economies ([6]). The role of venture capital in the economy is limited (0.01% of nominal GDP compared to 0.09% in the EU-27). The Association of Financial Markets in Europe ranks Slovenia among the weakest in most indicators regarding the efficiency of capital markets ([7]). The role of institutional investors is also limited. Therefore, opportunities to develop risky but potentially very lucrative business ideas are hampered, which affects Slovenia's competitiveness.

Slovenia relies heavily on labour taxes including social contributions paid by employees. Tax revenue as a share of GDP is only slightly below the EU average (see Annex 19). The highest personal income tax bracket (50%) and the taxation of earnings from labour (the tax wedge) for various income levels remain among the highest in the EU. Social contributions as a share of GDP are the highest in the EU. A new long-term-care contribution will be introduced in July 2025. Revenue from consumption taxes and environmental taxes, particularly those on transport fuel, as a share of total taxation are above the EU average. On the other hand, capital taxes and recurrent property taxes remain very low, with a share about half the EU average. The government has announced a tax reform, the details of which are currently being discussed with various stakeholders.

Reforms to the public sector wage system since 2018 have fragmented it, making it less attractive for employment. Uneven wage growth between individual professions led to divergencies across wages of comparable professions. The share of staff under the age of 39 continues to fall (see Annex 13) and various public sector units reportedly have problems in filling vacant posts, especially with younger people and workers with digital skills. These challenges, and concerns over public finances, have prompted the government to put forward a reform as part of the RRP.

For 3 out of the 16 criteria of the European Pillar of Social Rights, Slovenia is among the best performers. However, old-age poverty remains a challenge, particularly for women, pointing to the inadequacy of the social protection system. The impact of social benefits (other than pensions) on poverty reduction decreased significantly between 2021 and 2022.

([6]) See Capital Market Union indicators 11 and 16

([7]) AFME: Capital Markets Union Key Performance Indicators – Sixth Edition 2023

IMPLEMENTATION OF KEY REFORMS AND INVESTMENTS USING EU INSTRUMENTS

Funding from the Recovery and Resilience Facility (RRF) and cohesion policy is mutually reinforcing Slovenia's efforts to boost its competitiveness and stimulate sustainable growth. In addition to the EUR 2.7 billion of RRF funding described in Annex 3, cohesion policy funding provides Slovenia with EUR 3.2 billion for the 2021-2027 period. Combined support from these two instruments represents 9.40% of Slovenia's GDP in 2023, compared to the EU average of 5.38% (see Annex 4).

Under its recovery and resilience plan (RRP), Slovenia has launched crucial policy measures that are expected to improve its competitiveness. The RRP envisages major reforms in areas like the digital transformation of the public administration, administrative barriers, alternative fuels infrastructure, and public procurement. Slovenia is carrying out major investments in railway infrastructure, energy renovation of buildings, construction of affordable public housing, education, and the digital and green transition of the economy.

The implementation of Slovenia's recovery and resilience plan is underway, however timely completion requires increased efforts. Slovenia has submitted 2 payment requests, corresponding to 65 milestones and targets in the plan and resulting in an overall disbursement of EUR 586 million on 28 December 2023 (see Annex 3). The size and complexity of the plan, and challenges linked to absorption capacity, call for accelerating investments and addressing emerging delays while strengthening administrative capacities to ensure that reforms and investments can be completed on time. Investments, in particular, are highly concentrated towards the end of the RRP implementation and merit special attention.

Cohesion policy funding helps tackle Slovenia's growth and competitiveness challenges and reduce the country's territorial and social disparities. Under the 2014-2020 cohesion policy programme, support was focused on research and innovation, SMEs, sustainable transport, energy efficiency, climate adaptation, and employment. For the 2021-2027 programming period, support is focused on boosting Slovenia's competitiveness, the green, digital and energy transitions including renewable energies and energy efficiency, climate adaptation, sustainable transport, lifelong learning and social cohesion, as well as improving living and working conditions.

Removing barriers to improve the business environment

The RRP's implementation includes important steps to reduce the regulatory burden and improve the business environment. The Debureaucratisation Act entered into force in January 2022 and was followed up by amendments to a further 24 pieces of legislation in 2022. The reform, a measure under the RRP, introduced simplifications and reduced burdens for individuals and businesses by cutting reporting requirements and frequency, easing licencing procedures, simplifying auditing, and introducing electronic identification and reporting. Moreover, over 200 laws and by-laws have been repealed.

Slovenia is speeding up the roll-out of renewable energy installations in the power sector. The Act on the Promotion of the Use of Energy from Renewable Energy Sources was adopted in July 2021 under the RRP. It lifts legal and administrative barriers to spatial planning and establishes a single point of contact to assist investors with procedures for installation and operation. The new Act on the Deployment of Installations for the Production of Electricity from Renewable Energy Sources, part of the REPowerEU chapter was also adopted in July 2023. It provides a legal basis for drawing up an action plan that identifies potential priority areas for solar and wind installations. A comprehensive reform of alternative fuel deployment in transport was adopted in 2023.

Slovenia has taken measures to reform its public procurement system, but challenges remain. The amended Public Procurement Act of 2021 aims to improve competition and digitalisation. In addition, since August 2021, Slovenia's national databases have been aligned with the Tenders Electronic Daily (TED) databases. Further reforms aiming to increase competition in the public procurement market were implemented with help from the European Commission's Technical Support Instrument. Further work, such as establishing a public procurement academy, is ongoing to address challenges. Despite these combined efforts, Slovenia still has a very high share of single bids and a low share of contracts awarded to foreign bidders.

Boosting investments in the green and digital transitions

Slovenia has adopted a business digital transformation strategy, which introduces a single register for all business operators. In line with the strategy, at least 200 businesses will acquire an e-identity. To facilitate the digital transition of the economy, the RRP is supporting the development of tailored digital strategies for 23 large companies to transform their business, technology, organisation and culture. The development of these digital strategies brings large companies and SMEs together. The large companies should benefit from access to specialised knowledge, while SMEs get access to new markets and vast amounts of data. About 23% of the EUR 43 million of RRP funding are allocated to SMEs. Under the cohesion policy programme, around EUR 24.5 million is being spent on helping SMEs to digitalise.

The RRF and cohesion policy will support investments and leverage private funds in research, development and innovation (R&I), a critical driver of productivity and economic growth. Cohesion policy funding for the 2014-2020 period helped promote research hubs such as the National Institute for Biotechnology. It attracted researchers from around Slovenia and abroad, successfully creating the link between research, business, and private investment. The benchmark research hub was supported with EUR 25.8 million from the European Regional Development Fund (see Annex 4).

The RRF provides EUR 51.64 million for RDI projects in the field of the green and digital transition. The investments are to support project consortia promoting collaboration between research organisations, large companies and SMEs. They aim to strengthen public-private cooperation and stimulate entrepreneurial investment in the green transition.

Slovenia will reduce the social and economic costs of the national coal exit strategy (end date 2033) and facilitate the green transition with the help of cohesion policy funding. The Just Transition Funds (JTF) will promote sustainable energy and energy restructuring, and the diversification of the local economy in the two coal regions, Savinjsko-šaleška and Zasavje, investing EUR 258 million. Moreover, by using the JTF, Slovenia will also step up the training and reskilling of workers.

To increase the productivity and competitiveness of companies while decarbonizing the economy, Slovenian authorities have approved 63 direct investment projects. These provide a total of EUR 88.5 million in RRP funding. Supported projects have to comply with a set of environmental performance criteria, specifically energy and material efficiency, and, like all projects under the RRP, they have to apply the 'do no significant harm' principle.

Slovenia is developing a green budgeting framework. A methodology was adopted in 2023 and is being implemented in 2024. This reform is expected to support the monitoring of green budget expenditure, the assessment of environmental and climate impacts of fiscal policy and the alignment of budgetary and fiscal policies with climate objectives.

Reforms to support the labour market

By reforming the educational system and investing in digital and green skills Slovenia is investing in its future. Slovenia launched an RRF-funded campaign to train 20 000 teachers (approximately 40% of the educational workforce) to boost their knowledge and skills in the areas of digital, sustainable and financial literacy. This should empower them to make learning more flexible and make the educational system more robust if pandemic-like crises arise. It is expected that the measure will help students in their transition to the labour market and help align the education system with labour market needs.

For those already in the labour market, the European Social Fund Plus (ESF+) help increase skills development through lifelong learning, with a budget of around EUR 207 million (Annex 4). A key area of ESF+ support is strengthening the competences, including digital and green skills, of the adult population, especially vulnerable groups.

Reforming healthcare, long-term care, pensions and public sector

A pension reform is expected to be adopted in 2024. According to the RRP, the first step is the consultation of the draft law with the social partners. The proposals are expected to address the adequacy and fiscal sustainability of the pension system. Based on the RRP, this is expected to include increasing the early retirement age and the regular retirement age, revising the indexation formula and taking more years of the career into account. The reform will be complemented by labour market reforms to limit the practice of retiring after receiving unemployment benefits for an extended period.

A comprehensive healthcare reform is expected to enter into force in 2024. Its aim is to address chronic problems in the system and ensure the quality, accessibility, and financial sustainability of healthcare. Some targeted measures have already been taken or are envisaged for 2024. They aim primarily to improve the efficiency of the healthcare system and attract more doctors into primary care. Among the measures taken is the replacement of the voluntary complementary healthcare insurance by the broadened coverage of the mandatory health insurance sticks out (see Annex 16).

A coherent regulatory framework for long-term care (LTC) is a long-standing country-specific recommendation for Slovenia. As part of the RRP, a new law on LTC entered into force in 2023. The right to family care has been applicable since January 2024, whereas other rights and a new LTC insurance will become applicable over the next 12 months. However, several implementing acts are still pending. These need to be adopted swiftly to ensure a coherent regulatory framework and provide sufficient time for stakeholders as the implementation is already facing headwinds, in particular pervasive labour shortages.

Important public sector reforms, which form part of the RRP, are expected to be adopted in 2024. The reform of the public sector wage system aims to modernise the remuneration system, establish differentiated remunerations for public sector segment and address shortages of specific professions in the public sector, while ensuring its fiscal sustainability. The reform is expected to be concluded in 2024 and is currently being discussed with stakeholders. The establishment of a Competence Centre is expected to help develop civil servants' digital skills and improve the human resource management of the public administration.

Box 3: **Combined action for more impactful EU funds**

To boost economic growth and maximise the impact of EU funding, Slovenia's RRP includes reforms that support investments under other EU instruments, creating significant synergies and complementarities between the various funds. For example, Slovenia's RRP supports a comprehensive reform of public passenger transport that will result in a new body to coordinate and align all modes and operators of public passenger transport. The corresponding RRF investments will enable railway sections and stations to be upgraded, most notably in Ljubljana, which is the largest passenger hub. The multi-fund cohesion policy programme for 2021-2027 will help prepare local sustainable transport strategies and investments in additional railway sections and stations that will complement rail transport with local buses, bikes and other green forms of transport. The RRP reform will ensure that these investments are fully integrated and coordinated at national level, which has never been achieved before.

Drafts of the two reforms have been shared with social partners.

Protecting homes and businesses from natural disasters

Supported by the RRP and cohesion policy, Slovenia will speed up flood protection and flood prevention measures at national, regional and local level through a new Slovenian Flood Risk Management Plan for 2023-2027. The reform makes flood risk management a permanent task with dedicated resources from the national budget. This will help prevent devastating floods like the one in August 2023, which is estimated to have caused EUR 1 billion of direct damage to the economy and total indirect costs of EUR 9.9 billion.

To help implement the flood protection plan, 2021-2027 cohesion policy funding and the RRP have in total earmarked EUR 349 million to ensure the direct safety of more than 38 000 people, their homes, businesses and jobs. The anti-flood measures prioritise nature-based solutions and green infrastructure as much as possible.

Making effective use of various EU funding sources, Slovenia has taken steps to respond swiftly to natural disasters. 2021-2027 cohesion policy funding supports investments in technical equipment for climate-related disasters such as floods, forest fires, sleet or storms. To complement this, the RRP is funding the rehabilitation of sites threatened by landslides and the creation of modular response units specialised and trained to respond to climate-related disasters at national, regional and local level.

FURTHER PRIORITIES AHEAD

Slovenia faces additional challenges related to fiscal sustainability, healthcare, long-term care, the labour market and the green transition. Tackling these will help increase Slovenia's long-term competitiveness and ensure the resilience of its economy. It will also help the country make further progress in achieving the SDGs.

It is important that the challenges identified are addressed both at national and regional level. This will help reduce regional disparities and improve the administrative and investment capacity in a balanced way across the country.

Addressing fiscal sustainability and the quality of public finances

The sustainability of Slovenia's public finances remains challenging in the medium and long term. Medium-term fiscal sustainability risks appear medium. The government debt ratio is expected to slightly decline until 2026 before rising to around 73% of GDP in 2034 (see Annex 21). Long-term fiscal sustainability risks appear overall high in view of the unfavourable initial budgetary position and above all of the projected rise in ageing costs. Ageing costs' developments are primarily driven by a projected increase in pension expenditure (3.1 pps.), as well as long-term and health care expenditure (0.9 pp. each) (Table A21.1, Table 2). While a number of investments and reforms in the RRP contribute to supporting the efficiency of the Slovenian health and long-term care systems, additional measures may be required to further improve the overall fiscal sustainability.

Sustainability goes hand in hand with quality of public finances. Slovenia is developing a new green budgeting framework, which is expected to improve the quality of public finances and contribute to the green transition ([8]). More efficient public procurement can help make considerable savings in certain areas and help redirect resources to areas of greater need. Furthermore, spending reviews help identify areas of lower priority or in which there is inefficient spending. Full implementation of their findings – including past findings – would allow the government to repurpose that expenditure to address fiscal challenges, help better target spending towards those in need, and offset costs projected to increase due to ageing and new reforms (e.g. in the healthcare sector, etc.).

While public investment is high, its effectiveness and efficiency could be improved. The planning for public investment appears to be carried out exclusively at the level of line ministries with limited coordination across sectors, including with the Ministry of Finance. The strategic relevance of the National Development Programme is hard to assess without a coherent set of long-term planning documents and an integrated medium-term plan for potential investments (see Annex 13). Better coordination and management would improve the efficiency of public investment, including the prioritisation of projects in line with national and European priorities, thereby strengthening growth potential and fiscal sustainability.

The Institute of Macroeconomic Analysis and Development and the Fiscal Council have established themselves as trusted independent institutions. The lifting of the ceiling for the number of technical staff

([8]) Ministry of Finance, 2023, https://www.gov.si/assets/ministrstva/MF/Proracun-direktorat/Drzavni-proracun/NRP/Metodologija-za-zeleno-proracunsko-nacrtovanje.pdf working at the Fiscal Council and an improved access to budgetary information would ease its constraints and boost its capacity.

Ensuring quality and sustainability of healthcare and long-term care

Timely access to publicly funded health services in Slovenia is a matter of growing concern. Labour shortages stretch the available resources in primary care to its limits ([9]). Workers in healthcare, including doctors, were on strike for several weeks earlier in 2024, demanding better pay and better working conditions. The aggravating situation requires attention.

The share of government spending on healthcare relative to GDP is expected to rise considerably in the mid to long term. While the share was relatively low compared to the EU average until 2023, it is expected to increase this year due to the integration of the voluntary complementary healthcare insurance into the mandatory public health insurance ([10]). In the mid to long term, government spending is also expected to continue rising significantly due to: (i) the rapid ageing of the Slovenian population in the coming years and decades as projected by the Ageing Report (Annex 16) ([11]); and (ii) the expected upward pressure on wages in the healthcare sector due to labour shortages. The focus of the health reform under the RRP is on access to high-quality services and improving social rights and inclusion. The additional strain on public finances requires further reflections on mechanisms to safeguard financial sustainability and burden-sharing as the new system matures and needs become apparent beyond what is expected under the RRP.

Slovenia encounters obstacles in securing an adequate number of staff in order to apply the new long-term care (LTC) law effectively. At entry points to LTC, which are critical for evaluating individuals' eligibility for care, there is a specific weakness with staff, in particular, understaffing and a lack of expertise. The efficient and effective functioning of the newly established LTC system will require further investments, beyond the RRP, in both infrastructure and human resources for all types of care offered (institutional, community, day care).

The financing of the LTC system should be sufficiently flexible. The three sources of funding - the new insurance scheme, the government budget and user contributions - are expected to cover the estimated costs of the system, in its current form. However, beyond the RRP, there is a risk that in the longer term they might not suffice if costs increased considerably, e.g., because of inflation or greater usage of the LTC than expected. This calls for further consideration of possible mitigating measures, which would provide flexibility on the revenue side. These could take the form of a regular review or some adjustment mechanism of the insurance or the government contribution.

([9]) At 3.3 practising doctors per 1 000 population in 2021, the number of physicians in Slovenia was below the EU average of 4.1 per 1 000. In addition, only 18.6% of the physicians in Slovenia are generalists, compared with an EU average of 20.4%. OECD/European Observatory on Health Systems and Policies (2023), Slovenia: Country Health Profile 2023, State of Health in the EU.

([10]) Contributions to the voluntary health insurance schemes comprised 13.4% of health expenditure in Slovenia in 2021. As the additional contribution to the mandatory health insurance equals that of the former voluntary contribution, the share of health expenditure accounted for by public sources, which stood at 73.7 % in 2021, can be expected to rise by around 13 percentage points. OECD/European Observatory on Health Systems and Policies (2023), Slovenia: Country Health Profile 2023, State of Health in the EU.

([11]) European Commission and Economic Policy Committee, 2024, 2024 Ageing Report – Economic and budgetary projections for the 27 EU Member States (2022-2070), Publications Office of the European Union, Luxembourg.

Deploying capital and investing in labour to improve productivity and growth

Despite the recent trend of positive growth, Slovenia's businesses still invest less than their competitors in other countries. While the 2017–2022 period saw one of the highest increases in investment in the EU, the overall investment-to-GDP ratio in Slovenia remained slightly lower than the EU average in 2022 (21.6%, EU: 22.4%). As employment continued to grow, capital per work remained stagnant. Housing investment remains relatively low, as does business investment in construction and intellectual property products (software, data, R&D). On the other hand, business investment into machinery and equipment is relatively high, reflecting the high share of industry in the economy. Surveys ([12]) suggest that the low level of business investment is related to the lack of skilled labour. Otherwise, the share of companies reporting obstacles to investment is lower than on average in the EU (Annex 12). Access to credit remains above the EU average but alternative financing possibilities are rather limited.

Beyond influencing investment decisions, labour shortages are also holding back short-term growth. At a time of lower economic growth, wages are increasing rapidly, and companies are hoarding workers. With a high employment rate, the potential to find more employees within Slovenia is becoming limited. As workforce participation rates among people in the 55+ age group are among the lowest in the EU, there is potential to extend their careers. To maintain or increase growth and productivity, workers should move from less productive to more productive sectors of the economy and new workers need to come in from abroad.

Low levels of investments in housing also impact negatively on productivity, labour mobility and the attractiveness for foreign labour. Lack of housing in those areas where employment is concentrated is becoming a problem, particularly for young people. Therefore, house prices in some regions have reached relatively high levels compared to incomes, which affects the ability of workers to relocate (also to work more productively) and makes it more difficult to attract foreign workers. Low availability of housing in urban areas increases commuting time, exacerbating transport emissions. Low levels of investment into housing also jeopardises the objectives of renovating the housing stock and therefore achieving the emission reduction targets.

The upskilling and reskilling of the workforce can help improve efficiency and productivity. Lifelong learning has become a constant requirement to help workers become employable in sectors that are key to the green economy and support the green transition, as well as learn about how to use digital tools to operate high-tech tools, including those supported by artificial intelligence. This not only concerns high-skilled workers. Older and low-skilled workers require digital skills, but currently possess them only to a limited extent (see 2023 country report). Along the same lines, it will be crucial to monitor and address the significant increase in the share of students with only a low level of basic skills in mathematics and reading in the OECD's Programme for International Student Assessment (PISA) tests between 2018 and 2022. In this regard, particular attention should be paid to basic skills in the ongoing curricula reform. The high share (51.2%) of foreign-born students who did not achieve the minimum level of proficiency in mathematics also requires additional attention (Annex 15).

More effective integration policies could address the labour shortages and precariousness. In 2023, Slovenian authorities adopted measures to help non-EU nationals gain employment in response to severe labour shortages in several sectors and recurrent complaints from employers about lengthy administrative procedures to get work permits. The amendments to the Employment, Self-employment and Work of Foreigners Act

([12]) See European Investment Bank Investment Survey 2023.

and to the Foreigners Act simplified the procedures for employing foreign workers to a certain extent. In addition, asylum seekers can now access the labour market 3 months after their work permit application is registered (previously 9 months). Further steps could be taken to facilitate and speed up the employment of foreign workers. There is still a significant backlog of foreign workers' applications – many have to wait 6 to 8 months due to excessively cumbersome legal requirements. These delays are related to understaffing, poor wages, overly complex legislation and excessively bureaucratic administrative procedures resulting in overworked staff and a very high turnover of employees. Further efforts are also needed to reduce the share of temporarily employed young people in Slovenia, which remains among the highest in the EU (40.7% vs EU average of 35.9%)

The relatively high labour tax wedge negatively affects labour supply and long-term growth. In 2023, Slovenia's labour tax wedge (the taxation of earnings from labour) for a single person at 50% of an average wage was 5.5 percentage points higher than the EU average and at average wage 3.1 percentage points higher. The gap with the EU has increased since 2010 (see Annex 19). The IMD World Competitiveness Centre ranks Slovenia ([13]) as 51st out of 64 countries in 2023 in relation to how tax policy supports competitiveness and identifies specifically the high tax burden on labour as a challenge. A lower labour tax wedge would reduce labour costs and boost labour demand. Higher net wages would also improve labour supply ([14]). Such tax restructuring, while respecting fiscal sustainability, could be achieved through a rebalancing of taxes towards growth-friendly tax sources that are currently used less, including recurrent property taxes.

There is room to improve the business environment. The number of obstacles to doing business for companies remain rather high and are related to, for instance, the inefficiency of state institutions, excessive red tape and lengthy procedures (Annex 12). The IMD World Competitiveness Centre ranks Slovenia ([15]) as 42nd out of 64 countries in 2023. It also identifies a downward trend in business and government efficiency since 2019. Furthermore, an outsized role of state-owned enterprises (ranging from tourism to insurance markets) in the Slovenian economy may negatively affect competitiveness and increase inefficiency ([16]).

Equity markets remain underdeveloped as financing is heavily skewed towards loans. Based on the European Investment Fund (EIF) access to finance index ([17]), Slovenia remains one of the weakest performers, having a very low ratio of venture capital investment to GDP (Annex 12). Furthermore, institutional investors only play a limited role in the market. There appears to be a lack of mechanisms to transfer private savings and foreign investments into the development of innovative, fast-growing firms that normally have difficulties in applying for bank funding. The stock market has seen very few, small initial public offerings and an alternative market is planned but has yet to be created. Lack of venture capital investment and low R&D expenditure in the public sector hinder Slovenia's competitiveness and have a negative impact on its performance on the Innovation Scoreboard (Annex 11). These deficits are negatively affecting the competitiveness of the economy, as well as medium- and long-term prospects for foreign direct investments and growth.

([13]) Institute for Management Development, 2023, IMD World Competitiveness Yearbook 2023 – Country Profile Slovenia, Lausanne.

([14]) Institute of Macroeconomic Analysis and Development (IMAD), 2019, Economic Issues 2019, Ljubljana.

([15]) Institute for Management Development 2023 https://worldcompetitiveness.imd.org/

([16]) OECD Economic Survey, Slovenia 2022.

([17]) EIF Working Paper 2023/92, The 2022 EIF SME Access to Finance Index August 2023 update.

Accelerating the green transition to bolster competitiveness

There is a surge in solar photovoltaics in Slovenia, but the uptake of wind remains sluggish. In 2023, the total renewable energy capacity in Slovenia increased by 23% year-on-year, continuing the positive trend recorded in previous years. In 2023 alone, 408 MW of new solar photovoltaics were deployed in Slovenia, bringing the total solar photovoltaics installed capacity to over 1 GW. At the same time, wind capacity has remained sluggish with a total installed capacity of only 3 MW (see Annex 7), while estimates show a potential deployment of up to 6-15 GW ([18]). Therefore, further efforts, e.g. removing the remaining bottlenecks in permitting processes for wind installations, are required to reap the full potential of renewable energy sources in Slovenia in line with the 2030 EU renewable energy targets. Strengthening the electricity grid beyond the measures listed in the RRP and deploying electricity storage continues to be crucially important for the continuous connection of new renewable energy installations and the balancing of the system.

High dependence on fossil fuels exposes Slovenia's economy and people to potential price shocks and supply constraints. Slovenia has taken steps to reduce dependence on Russian pipeline gas imports by concluding supply agreements with Algeria. Addressing the structural dependence on gas and other fossil fuels requires accelerating the green transition of the economy. Increased deployment of renewables and rolling out energy efficiency measures across all sectors of the economy beyond those already planned in the RRP are key to bringing down energy costs. Implementing energy efficiency measures in the building sector remains a priority in order to reduce energy demand and decrease the dependence on fossil fuels.

Climate change adaptation is of key importance. Slovenia is highly vulnerable to climate change-related weather events, with floods posing the greatest risk (see Annex 5). This was further confirmed by the catastrophic floods of August 2023, which affected a large part of Slovenia's territory and caused unprecedented economic damage. Green infrastructure and nature-based solutions are key to mitigating in particular the impact of floods while preserving the free flow of rivers and aquatic ecosystems (see Annexes 6 and 17). Furthermore, there are still climate change-related institutional weaknesses.

There are challenges to achieving sustainable water management and biodiversity protection. The estimated annual investment gap for sustainable water management, as well as for biodiversity and ecosystems remains wide (see Annex 6). With the increasing pressures on water and nature from climate change-related weather events and intensive agriculture, it will be crucial to ensure a more sustainable and efficient use of water and other natural resources.

The take-up of sustainable transport is still lagging in Slovenia. The high dependence on private cars and the still lagging take-up of sustainable modes of transport have a negative impact on Slovenia's ability to help achieve the EU target of reducing final energy consumption by 11.7% by 2030. Car trips accounted for 90% of distances travelled in Slovenia in 2021 (see Annexes 6 and 17). Despite many large railway investments being in progress, there is still further room to increase the take-up of public transport by improving the frequency, reliability, accessibility and availability of national and local public rail and bus transport, particularly with soft measures such as the coordination of timetables and single ticketing.

([18]) https://www.energetika-portal.si/podrocja/energetika/projekt-res-slovenia/

Box 4: The mid-term review of cohesion policy funding for Slovenia

The mid-term review of the cohesion policy funds is an opportunity to assess cohesion policy programmes and to tackle emerging needs and challenges in EU Member States and their regions. Member States are reviewing each programme taking into account, among other things, the challenges identified in the European Semester, including in the 2024 country-specific recommendations. This review forms the basis for a proposal by the Member State for the definitive allocation of 15% of EU funding included in each programme.

Slovenia has made progress in implementing cohesion policy programmes and the European Pillar of Social Rights, but challenges remain as outlined in this report, including in Annexes 14 and 17. In particular, Slovenia continues to register pronounced regional disparities between the capital region and the other parts of the country. Against this background, it is still important to continue implementing planned priorities, paying particular attention to: (i) flood protection and climate mitigation measures, prioritising nature-based solutions; (ii) sustainable transport to reduce the heavy reliance on passenger cars for commuting; (iii) territorial just transition plans, supporting the coal phase-out, and a strengthening of administrative capacity to manage cohesion funds; (iv) public-private R&D partnerships to increase labour productivity; (v) adult learning, including in digital and green skills, and active labour market policies, i.e. measures to help vulnerable groups find or stay in work; (vi) modernising and digitalising social and labour market services, (vii) stepping up the integration of migrant workers in the labour market and society; and (viii) accelerating deinstitutionalisation and development of quality, adequate and affordable community-based social services, in particular long-term care, to increase social inclusion.

Slovenia could also benefit from the opportunities provided by the Strategic Technologies for Europe Platform (STEP) initiative ([19]) to boost investments in the developing and manufacturing of clean and resource-efficient technologies, particularly in the renewable energies and heating sector. Addressing shortages of skills and labour are equally instrumental for the long-term competitiveness and sustainability of Slovenian businesses.

([19]) Regulation (EU) 2024/795)

KEY FINDINGS

With its wide policy scope, Slovenia's Recovery and Resilience Plan (RRP) includes measures to address a series of structural challenges, in synergy with other EU funds, including cohesion policy funds by:

- **Speeding up the roll-out of renewable energy installations** and boosting investments in the green and digital transitions, including in digital and green skills to align the education system with labour market needs;
- **Speeding up the planning and implementation of flood protection** and flood prevention and the response to other natural disasters;
- **Removing administrative and regulatory barriers** and increasing professionalisation, digitalisation, and competition in the public procurement system;
- **Strengthening its healthcare, long-term care and pensions system** with relevant reforms.

The implementation of Slovenia's recovery and resilience plan is facing increasing challenges. Renewed efforts are key for a successful implementation of all the measures of Slovenia's recovery and resilience plan by August 2026.

Beyond the reforms and investments in the RRP and cohesion policy programmes, Slovenia would benefit from:

- **Pursuing policies that support long-term fiscal sustainability** by shifting the tax burden from labour towards more growth-friendly sources and ensuring the sustainability of the social protection system beyond measures taken in the RRP;
- **Improving the efficiency of public investment**, including by carrying out spending reviews to prioritise expenditure and address new fiscal challenges, especially in areas where costs are expected to mount due to reforms or ageing;
- **Taking measures to further encourage private investment**, including in housing in large urban areas, research and innovation;
- **Improving the conditions for venture capital investment** and institutional investors, and participation in financial markets;
- **Taking further measures to ensure the availability of skilled labour** by addressing skills shortages that are prevalent in healthcare and long-term care, as well as in other productive sectors of the economy – this could be done by: (i) further encouraging more people to work or look for work; (ii) transferring workers from low to high productivity sectors; (iii) streamlining the processes for issuing work permits for non-EU workers; and (iv) strengthening basic and digital skills, particularly those of young people including by reinforcing basic skills in school curricula as part of the ongoing curricula reform;
- **Further strengthening the electricity grid** and deploying storage installations to enable continuous integration of renewable energy sources;
- **Strengthening Slovenia's resilience to climate change**-related weather events, while ensuring sustainable water management and biodiversity protection;

- **Significantly increasing the use of public transport**, building on measures such as single ticketing and coordination of timetables.

ANNEXES

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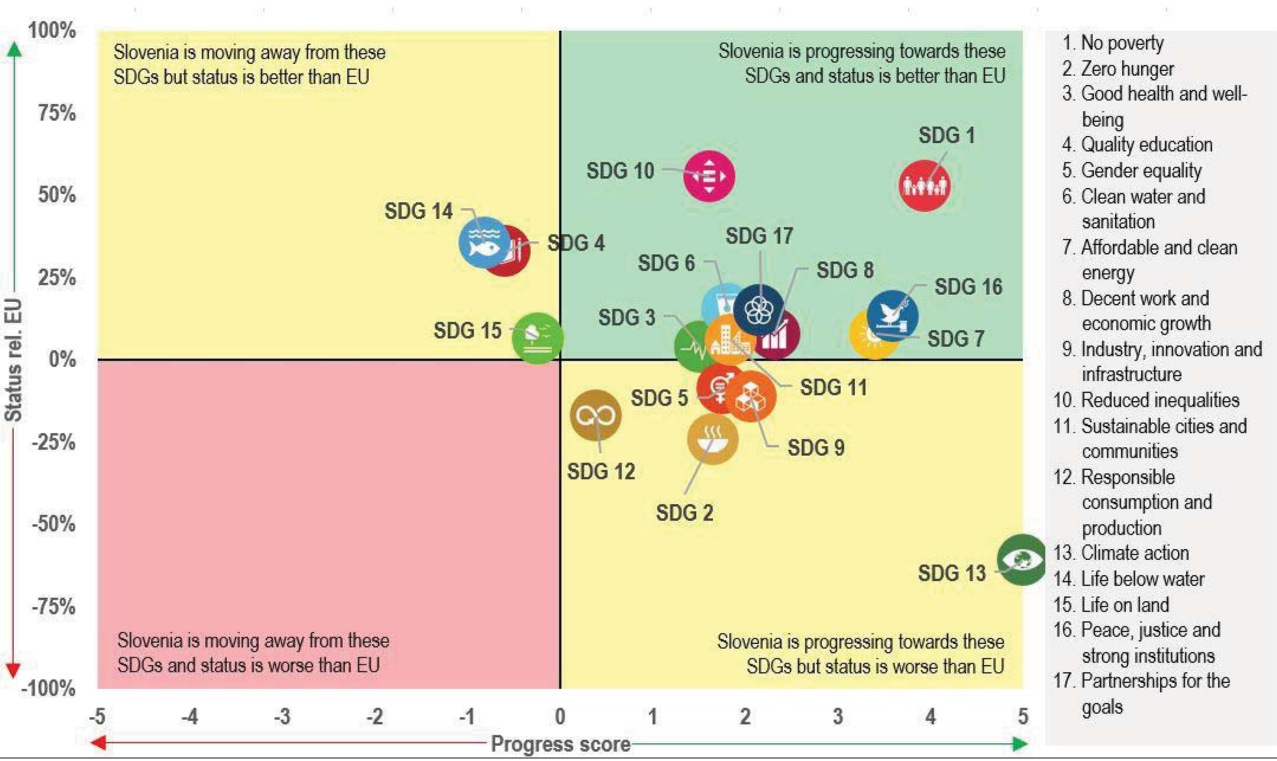
This Annex assesses Slovenia's progress on the Sustainable Development Goals (SDGs) along the four dimensions of competitive sustainability. The 17 SDGs and their related indicators provide a policy framework under the UN's 2030 Agenda for Sustainable Development. The aim is to end all forms of poverty, fight inequalities and tackle climate change and the environmental crisis, while ensuring that no one is left behind. The EU and its Member States are committed to this historic global framework agreement and to playing an active role in maximising progress on the SDGs. The graph below is based on the EU SDG indicator set developed to monitor progress on the SDGs in an EU context.

Slovenia is improving on most of the SDG indicators related to *environmental sustainability* (SDGs 2, 6, 7, 9, 11, 12, 13, 15), but it needs to catch up with the EU average on some (SDGs 2, 12). While Slovenia has made some progress in increasing its capacity for electricity generation from renewable energy sources and decarbonising its heating sector (see Annex 7), it continued in 2022 to use the mechanism of statistical transfer to reach 25% of renewable energy in gross final energy consumption (SDG 7). The recovery and resilience plan (RRP) is expected to boost Slovenia's renewable energy capacity by addressing regulatory challenges (see Annex 7). Slovenia has made some progress on SDG 13 (Climate action) over the last few years, but it still needs to catch up with the EU average. In particular, Slovenia reduced the net greenhouse gas emissions from 9.0 tonnes per capita in 2017 to 7.3 tonnes per capita in 2022, which now corresponds with the EU average value for 2022. Despite improvements on industry, innovation and infrastructure (SDG 9), Slovenia still needs to catch up with the EU average on certain indicators. In particular, the share of buses and trains in passenger transport is very low (10.0% in 2021, compared to EU average of 13.7%). The Slovenian RRP contains several measures aimed at increasing the currently low

Graph A1.1: **Progress towards the SDGs in Slovenia**



For detailed datasets on the various SDGs, see the annual Eurostat report '[Sustainable development in the European Union](#)'; for details on extensive country-specific data on the short-term progress of Member States: [Key findings – Sustainable development indicators - Eurostat (europa.eu)](#). A high status does not mean that a country is close to reaching a specific SDG, but signals that it is doing better than the EU on average. The progress score is an absolute measure based on the indicator trends over the past 5 years. The calculation does not take into account any target values as most EU policy targets are only valid for the aggregate EU level. Depending on data availability for each goal, not all 17 SDGs are shown for each country.
Source: Eurostat, latest update of 25 April 2024. Data refer mainly to the period 2017-2022 or 2018-2023. Data on SDGs may vary across the report and its annexes due to different cut-off dates.

use of public transport and significantly improving the country's railway infrastructure, which will help the country tackle this challenge. In terms of life below water (SDG 14), the share of marine protected areas in Slovenia (5% in 2021) is visibly lower than the EU average (12.1% in 2021).

Slovenia performs well or is improving on some SDG indicators related to *fairness* (SDGs 1, 4, 5, 7, 8, 10) but needs to catch up with EU average on access to healthcare (SDG 3). Slovenia performs well on poverty and basic needs (SDG 1) and compared to EU average (21.6% in 2022) has a low share of people at risk of poverty or social exclusion (13.3% in 2022). In addition, Slovenia has improved on the fairness-related gender equality indicator (SDG 5) but it still needs to catch up with EU average. The quality of education (SDG 4) is above the EU average but is getting worse. According to the PISA 2022 survey, about one quarter of students from Slovenia lacks the minimum level of proficiency in mathematics and reading, and the rate of underachieving students rose significantly (by 8.2%) in both mathematics and reading between 2018 and 2022. Despite good progress, Slovenia is only just above the EU average when it comes to affordable and clean energy (SDG 7). On access to healthcare (SDG 3), self-reported unmet needs for medical care are higher than in the EU (3.7% of population aged 16 or over, in 2022; EU average: 2.2%). The Slovenian RRP contains several measures aimed at addressing this challenge effectively, including key reforms in long-term care and healthcare.

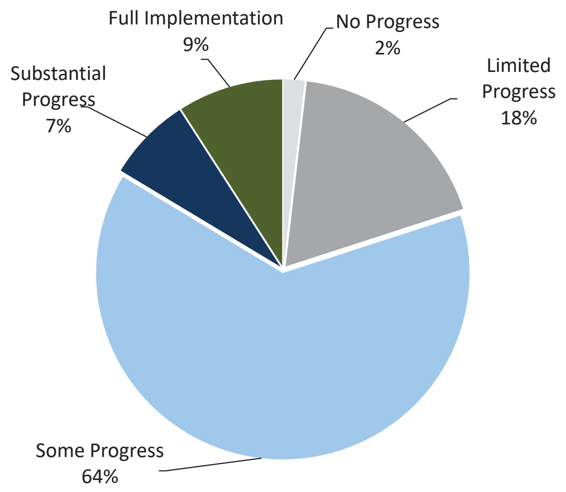
Slovenia performs well on most SDG indicators related to *productivity* (SDGs 4, 8, 9) but still needs to catch up with the EU average for SDG 9. Slovenia has made significant progress on sustainable infrastructure (SDG 9) regarding the share of households with a high-speed internet connection. The share increased from 50.4% in 2015 to 65.5% in 2020 and 75.5% in 2022. On digital skills (SDG 4), the share of adults with at least basic digital skills is still below the EU average (46.7% in 2023; EU average: 55.6%) and Slovenia needs to catch up. The share of adults aged 16 to 74 with at least basic digital skills has fallen over time from 49.7% (in 2021) to 46.7% (in 2023). This means that more than half of the Slovenian population aged 16 to 74 lacks basic digital skills. The Slovenian RRP will help digitalise the country's public and private sector and boost digital skills. The measures under the RRP will ensure that further progress is made on these SDGs.

Slovenia performs well on SDG indicators related to *macroeconomic stability* (SDGs 8, 16, 17). Slovenia performs well on indicators measuring employment (SDG 8). Notably, the percentage of young people not in employment, education or training is low compared to the EU average (7.8% in 2023; EU average: 11.2%) and the long-term unemployment rate is also below the EU average (1.4% in 2022; EU average: 2.1%). On SDG 16 (Peace, justice and strong institutions), Slovenia is catching up with the EU average. Based on recent data, the perceived independence of the justice system in Slovenia is now for the first time as high as the EU average (in 2023, 53% of Slovenians rated it as very or fairly good; EU average: 53%). Slovenia's real GDP per capita is still lagging behind the EU average (SDG 8) (EUR 22 090 in 2023; EU average: EUR 28 940). It also had a lower investment share of GDP (SDG 8) than the EU average (21.6% of GDP in 2022; EU average: 22.7%). A particular challenge for Slovenia is with the long-term sustainability of public finances, given its ageing population and pressures on public spending from pensions, healthcare and long-term care. The Slovenian RRP includes measures to address the impact of long-term care on fiscal sustainability. With regard to 'Partnership for goals' (SDG 17), Slovenia is progressing well and performing above the EU average.

As the SDGs form an overarching framework, any links to relevant SDGs are either explained or depicted with icons in the other Annexes.

The Commission has assessed the 2019-2023 country-specific recommendations (CSRs) ([20]) addressed to Slovenia as part of the European Semester. These recommendations concern a wide range of policy areas that are related to 14 of the 17 Sustainable Development Goals (see Annexes 1 and 3). The assessment considers the policy action taken by Slovenia to date and the commitments in its recovery and resilience plan (RRP) ([21]). At this stage of RRP implementation, 64% of the CSRs focusing on structural issues from 2019-2023 have recorded at least 'some progress', while 18% recorded 'limited progress' (see Graph A2.1). As the RRP is implemented further, considerable progress in addressing structural CSRs is expected in the years to come.

Graph A2.1: **Slovenia's progress on the 2019-2023 CSRs (2024 European Semester)**



Source: European Commission.

([20]) 2023 CSRs: EUR-Lex - 32023H0901(24) - EN - EUR-Lex (europa.eu)

2022 CSRs: EUR-Lex - 32022H0901(24) - EN - EUR-Lex (europa.eu)

2021 CSRs: EUR-Lex - 32021H0729(25) - EN - EUR-Lex (europa.eu)
2020 CSRs: EUR-Lex - 32020H0826(24) - EN - EUR-Lex (europa.eu)
2019 CSRs: EUR-Lex - 32019H0905(24) - EN - EUR-Lex (europa.eu)

([21]) Member States were asked to effectively address in their RRPs all or a significant subset of the relevant country-specific recommendations issued by the Council. The CSR assessment presented here considers the degree of implementation of the measures included in the RRP and of those carried out outside of the RRP at the time of assessment. Measures laid down in the Annex of the adopted Council Implementing Decision on approving the assessment of the RRP, which are not yet adopted or implemented but considered credibly announced, in line with the CSR assessment methodology, warrant 'limited progress'. Once implemented, these measures can lead to 'some/substantial progress or full implementation', depending on their relevance.

Table A2.1: **Summary table on 2019-2023 CSRs**

Slovenia	Assessment in May 2024	RRP coverage of CSRs until 2026	Relevant SDGs
2019 CSR 1	**Limited progress**		
Achieve the medium-term budgetary objective in 2020.	No longer relevant	Not applicable	SDG 8, 16
Adopt and implement reforms in healthcare	Limited Progress	Relevant RRP measures planned as of 2024	SDG 3
and long-term care that ensure quality, accessibility and long-term fiscal sustainability.	Some Progress	Relevant RRP measures being implemented since 2021.	SDG 3
Ensure the long-term sustainability and adequacy of the pension system, including by adjusting the statutory retirement age restricting early retirement and other forms of early exit from the labour market.	Limited Progress	Relevant RRP measures planned as of 2024.	SDG 8
Increase the employability of low-skilled and older workers by improving labour market relevance of education and training, lifelong learning and activation measures, including through better digital literacy.	Some Progress	Not applicable	SDG 4, 8
2019 CSR 2	**Some progress**		
Support the development of equity markets.	Some Progress	Relevant RRP measures being implemented as of 2021.	SDG 8, 9
Improve the business environment by reducing regulatory restrictions and administrative burden.	Some Progress	Relevant RRP being implemented as of 2021.	SDG 8, 9
Improve competition, professionalisation and independent oversight in public procurement.	Some Progress	Relevant RRP measures being implemented as of 2021.	SDG 9
Carry out privatisations in line with the existing plans.	Some Progress	Not applicable	SDG 9
2019 CSR 3	**Some progress**		
Focus investment-related economic policy on research and innovation,	Some Progress	Relevant RRP measures planned as of 2022.	SDG 9, 10, 11
low carbon and energy transition,	Some Progress	Relevant RRP measures planned as of 2022.	SDG 7, 9, 10, 11, 13
sustainable transport, in particular rail, and	Some Progress	Relevant RRP measures planned as of 2022.	SDG 10, 11
environmental infrastructure, taking into account regional disparities.	Some Progress	Relevant RRP measures planned as of 2022.	SDG 6, 10, 11, 12, 15
2020 CSR 1	**Some progress**		
Take all necessary measures, in line with the general escape clause of the Stability and Growth Pact, to effectively address the COVID-19 pandemic, sustain the economy and support the ensuing recovery. When economic conditions allow, pursue fiscal policies aimed at achieving prudent medium-term fiscal positions and ensuring debt sustainability, while enhancing investment.	No longer relevant	Not applicable	SDG 8, 16
Ensure the resilience of the health and long-term care system, including by providing the adequate supply of critical medical products and addressing the shortage of health workers.	Some Progress	Relevant RRP measures being implemented as of 2021.	SDG 3
2020 CSR 2	**Substantial progress**		
Mitigate the social and employment impact of the COVID-19 crisis, including by providing adequate income replacement and social protection,	Substantial Progress	Relevant RRP measures planned as of 2021.	SDG 1, 2, 8, 10
enhancing short-time work schemes and through flexible working arrangements.	Substantial Progress	Relevant RRP measures planned as of 2024.	SDG 8
Ensure that these measures provide adequate protection for non-standard workers.	Some Progress	Relevant RRP measures planned as of 2025.	SDG 1, 2, 8, 10
2020 CSR 3	**Some progress**		
Continue to swiftly implement measures to provide liquidity and financing to businesses and households and	Full Implementation	Relevant RRP measures planned as of 2022.	SDG 8, 9
reduce administrative burden.	Some Progress	Relevant RRP measures being implemented as of 2021.	SDG 8, 9
Front-load mature public investment projects and	Substantial Progress	Relevant RRP measures planned as of 2023.	SDG 8, 16
promote private investment to support the economic recovery.	Some Progress	Relevant RRP measures being implemented as of 2023	SDG 8, 9
Focus investment on the green and digital transition, in particular on clean and efficient production and use of energy,	Some Progress	Relevant RRP measures planned as of 2022.	SDG 7, 9, 13
environmental infrastructure,	Some Progress	Relevant RRP measures planned as of 2022.	SDG 6, 12, 15
sustainable transport,	Some Progress	Relevant RRP measures planned as of 2022.	SDG 11
research and innovation, and	Some Progress	Relevant RRP measures planned as of 2021.	SDG 9
the rollout of the 5G network.	Some Progress	Relevant RRP measures planned as of 2022.	SDG 9
Promote digital capacities of businesses, and	Some Progress	Relevant RRP measures being implemented as of 2021.	SDG 9

(Continued on the next page)

Table (continued)

strengthen digital skills,	Some Progress	Relevant RRP measures planned as of 2022.	SDG 4
e-commerce and	Limited Progress	Relevant RRP measures planned as of 2021.	SDG 9
e-health.	Limited Progress	Relevant RRP measures planned as of 2024.	SDG 3
2021 CSR 1	**No longer relevant**		
In 2022, maintain a supportive fiscal stance, including the impulse provided by the Recovery and Resilience Facility, and preserve nationally financed investment.	No longer relevant	Not applicable	SDG 8, 16
When economic conditions allow, pursue a fiscal policy aimed at achieving prudent medium-term fiscal positions and ensuring fiscal sustainability in the medium term.	No longer relevant	Not applicable	SDG 8, 16
At the same time, enhance investment to boost growth potential. Pay particular attention to the composition of public finances, on both the revenue and expenditure sides of the budget, and to the quality of budgetary measures in order to ensure a sustainable and inclusive recovery. Prioritise sustainable and growth-enhancing investment, in particular investment supporting the green and digital transition.	No longer relevant	Not applicable	SDG 8, 16
Give priority to fiscal structural reforms that will help provide financing for public policy priorities and contribute to the long-term sustainability of public finances, including, where relevant, by strengthening the coverage, adequacy, and sustainability of health and social protection systems for all.	No longer relevant	Not applicable	SDG 8, 16
2022 CSR 1	**Some Progress**		
In 2023, ensure that the growth of nationally-financed current expenditure is in line with an overall neutral policy stance, taking into account continued temporary and targeted support to households and firms most vulnerable to energy price hikes and to people fleeing Ukraine. Stand ready to adjust current spending to the evolving situation.	Full Implementation	Not applicable	SDG 8, 16
Expand public investment for the green and digital transition and for energy security, including by making use of the RRF, RePowerEU and other EU funds.	Some Progress	Not applicable	SDG 8, 16
For the period beyond 2023, pursue a fiscal policy aimed at achieving prudent medium-term fiscal positions.	Full Implementation	Not applicable	SDG 8, 16
Ensure the long-term fiscal sustainability of the healthcare and	Limited Progress	Relevant RRP measures planned as of 2024	SDG 3
long-term care systems.	Some Progress	Relevant RRP measures planned as of 2023	SDG 3
Introduce compensating measures to finalise the shift from labour taxes, including by rebalancing towards more green and growth-friendly taxes.	Limited Progress		SDG 8, 10, 12
2022 CSR 2			
Proceed with the implementation of its recovery and resilience plan, in line with the milestones and targets included in the Council Implementing Decision of 28 July 2021.	RRP implementation is monitored by assessing RRP payment requests and analysing reports published twice a year on the achievement of the milestones and targets. These are to be reflected in the country reports.		
Submit the 2021-2027 cohesion policy programming documents with a view to finalising their negotiations with the Commission and subsequently starting their implementation.	Progress on the cohesion policy programming documents is monitored under the EU cohesion policy.		
2022 CSR 3	**Some Progress**		
Diversify imports of fossil fuels and reduce overall reliance on fossil fuels	Some Progress	Relevant RRP measures planned as of 2022.	SDG 7, 9, 13
by accelerating the deployment of renewables, in particular by further streamlining permitting procedures,	Some Progress	Relevant RRP measures planned as of 2022.	SDG 7, 8, 9, 13
and strengthening of the electricity distribution network.	Limited Progress	Relevant RRP measures planned as of 2022.	SDG 7, 9, 13
Increase implementation of energy efficiency measures, notably in the building sector,	Some Progress	Relevant RRP measures planned as of 2022.	SDG 7
electrification of the transport sector,	Some Progress	Relevant RRP measures planned as of 2022.	SDG 11
and by ensuring that energy infrastructure and interconnections have sufficient capacity.	Some Progress		SDG 7, 9, 13
2023 CSR 1	**Some Progress**		
Wind down the energy support measures in force by the end of 2023 using the related savings to reduce the government deficit. Should renewed energy price increases necessitate support measures, ensure that these are targeted at protecting vulnerable households and firms, fiscally affordable, and preserve incentives for energy savings.	Substantial Progress	Not applicable	SDG 8, 16
Ensure prudent fiscal policy, in particular by limiting the nominal increase in nationally financed net primary expenditure in 2024 to not more than 5.5%.	Some Progress	Not applicable	SDG 8, 16
Preserve nationally financed public investment and ensure the effective absorption of RRF grants and other EU funds, in particular to foster the green and digital transitions.	Full Implementation	Not applicable	SDG 8, 16

(Continued on the next page)

Table (continued)

For the period beyond 2024, continue to pursue a medium-term fiscal strategy of gradual and sustainable consolidation, combined with investments and reforms conducive to higher sustainable growth, to achieve a prudent medium-term fiscal position.	Full Implementation	Not applicable	SDG 8, 16
Ensure the long-term fiscal sustainability of the healthcare and	Limited progress	Relevant RRP measures planned as of 2024	SDG 3
long-term care systems	Some progress	Relevant RRP measures planned as of 2023	SDG 3
Rebalance tax revenues towards more growth-friendly and sustainable sources.	no progress	Not applicable	SDG 8, 10, 12
2023 CSR 2			
Ensure an effective governance structure and strengthen the administrative capacity to allow for a swift and steady implementation of its recovery and resilience plan. Swiftly finalise the REPowerEU chapter with a view to rapidly starting its implementation. Proceed with the speedy implementation of cohesion policy programmes, in close complementarity and synergy with the recovery and resilience plan.	RRP implementation is monitored through the assessment of RRP payment requests and analysis of the bi-annual reporting on the achievement of the milestones and targets, to be reflected in the country reports. Progress with the cohesion policy is monitored in the context of the Cohesion Policy of the European Union.		
2023 CSR 3	**Some Progress**		
Continue efforts to diversify gas imports and reduce overall reliance on fossil fuel	Some Progress	Relevant RRP measures planned as of 2022.	SDG 7, 9, 13
by accelerating the deployment of renewables, in particular by further simplifying and shortening the permitting procedures, and	Some Progress	Relevant RRP measures planned as of 2022.	SDG 7, 8, 9, 13
strengthening the electricity grid, as well as improving its management, including through digitalisation.	Limited progress	Relevant RRP measures planned as of 2022.	SDG 7, 9, 13
Increase the implementation of energy efficiency measures, in particular in the building sector,	Some Progress	Relevant RRP measures planned as of 2022.	SDG 7
promote the electrification of the transport sector, and	Some Progress	Relevant RRP measures planned as of 2022.	SDG 11
step up policy efforts aimed at the provision and acquisition of skills and competences needed for the green transition	Limited progress	Relevant RRP measures planned as of 2022.	SDG 4

Note:
* See footnote (21)
** RRP measures included in this table contribute to the implementation of CSRs. Nevertheless, additional measures outside the RRP may be necessary to fully implement CSRs and address their underlying challenges. Measures indicated as 'being implemented' are only those included in the RRF payment requestes submitted and positively assessed by the European Commission.
Source: European Commission

This Annex provides a snapshot of Slovenia's implementation of its recovery and resilience plan (RRP), past the mid-way point of the Recovery and Resilience Facility's (RRF) lifetime. The RRF has proven central to the EU's recovery from the COVID-19 pandemic, helping speed up the twin green and digital transition, while adapting to geopolitical and economic developments, and strengthening resilience against future shocks. The RRF is also helping implement the UN Sustainable Development Goals and address the country-specific recommendations (see Annex 2).

The RRP paves the way for disbursing up to EUR 1.6 billion in grants and EUR 1.1 billion in loans under the RRF over the 2021-2026 period, representing 4.3% of Slovenia's GDP ([22]). As of mid-May 2024, EUR 841 million has been disbursed to Slovenia under the RRF, comprising EUR 530 million in grants and EUR 310 million in loans.

Slovenia still has EUR 1.8 billion available in grants and loans from the RRF. This will be disbursed after the positive assessment of the future fulfilment of the remaining 149 milestones and targets ([23]) included in the Council Implementing Decision (CID) ([24]), ahead of the 2026 deadline established for the RRF.

Slovenia's progress in implementing its plan is recorded in the Recovery and Resilience Scoreboard ([25]). The scoreboard gives an overview of the progress made in implementing the RRF as a whole. Graphs A3.1 and A3.2 show the current state of play as reflected in the scoreboard.

Slovenia's RRP includes a REPowerEU chapter to phase out its dependency on Russian fossil fuels, diversify its energy supplies, and produce more clean energy in the coming years. To kick-start the REPowerEU chapter's implementation, EUR 24,4 million was disbursed as pre-financing on 13 December 2023. This helped launch relevant reforms like removing regulatory barriers to the deployment of renewable energy installations.

The plan has a strong focus on the green transition, dedicating 48.9% of the available funds to measures that support climate objectives and 20.0% of its total allocation to support the digital transition. It also retains a strong social dimension with social protection measures, especially related to healthcare, pensions, and long-term care.

Table A3.1: **Key facts of the Slovenian RRP**

Initial plan CID adoption date	28 July 2021
Scope	Revised plan with REPowerEU chapter
Last major revision	17 October 2023
Total allocation	EUR 1,613 million in grants and EUR 1,072 million in loans (4.3% of 2023 GDP)
Investments and reforms	50 investments and 36 reforms
Total number of milestones and targets	205
Fulfilled milestones and targets	56 (27.3% of total)

Source: RRF Scoreboard

With 2 payment requests completed, Slovenia's implementation of its RRP is underway. However, timely completion requires increased efforts. The Commission gave a positive assessment of Slovenia's first payment request, taking into account the opinion of the Economic and Financial Committee. This led to EUR 50 million being disbursed in financial support on 20 April 2023 ([26]). The related 12 milestones covered reforms and investments in low-power processors and semiconductor chips as well as in European common data infrastructure

([22]) GDP information is based on 2023 data. Source: https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard/index.html?lang=en

([23]) A milestone or target is satisfactorily fulfilled once a Member State has provided evidence to the Commission that it has reached the milestone or target and the Commission has assessed it positively in an implementing decision.

([24]) https://data.consilium.europa.eu/doc/document/ST-8390-2022-INIT/en/pdf

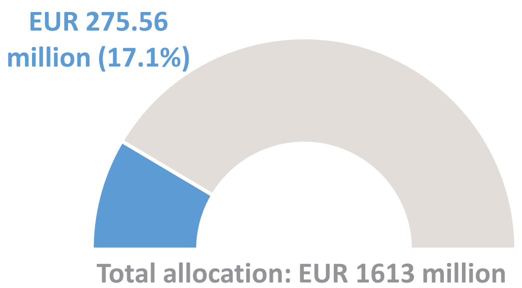
([25]) https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard/country_overview.html

([26]) When requested payments are disbursed, the pre-financing is cleared proportionally. The net amounts are quoted here.

and services, and others in the areas of digital transformation, business environment, long-term care and audit and control.

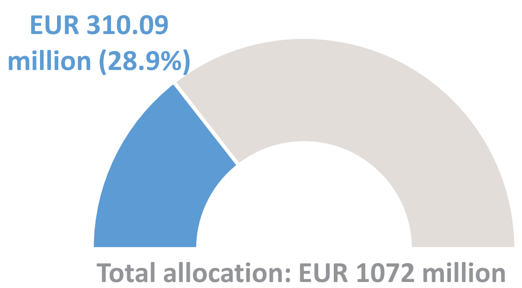
The most recent payment request, which the Commission assessed positively on 27 November 2023, led to the disbursement of EUR 536 million on 28 December 2023. The disbursement reflected the positive assessment of 43 milestones and targets covering among others flood risk measures, the use of renewable energy sources and the digital transformation of businesses, tourism and culture.

Graph A3.1: **Total grants disbursed under the RRF**



Note: This graph displays the amount of grants, including pre-financing, disbursed so far under the RRF. Grants are non-repayable financial contributions. The total amount of grants given to each Member State is determined by an allocation key and the total estimated cost of the respective RRP.
Source: RRF Scoreboard

Graph A3.2: **Total loans disbursed under the RRF**



Source: RRF Scoreboard

As of 15 May 2024, Slovenia is working towards its third payment request. Table A3.2 highlights some relevant measures achieved so far, and some that will be implemented before 2026 to keep making Slovenia’s economy greener, more digital, inclusive, and resilient.

Table A3.2: **Measures in Slovenia's RRP**

Reforms and investments implemented
• Strategy for the digital transformation of enterprises • Decree on Development Incentives for Tourism • Strengthening of the capital market
Upcoming reforms and investments
• Upgrade of railway lines • Investments in flood safety infrastructures • Provision of public rental housing

Source: FENIX

EU funding instruments provide considerable resources for recovery and growth to the EU Member States. In addition to the EUR 2.7 billion of Recovery and Resilience Facility (RRF) funding described in Annex 3, EU cohesion policy funds ([27]) provide EUR 3.2 billion to Slovenia for the 2021-2027 period ([28]). Support from these two instruments combined represents around 9.40% of the country's 2023 GDP, compared to the EU average of 5.38% of GDP ([29]). Cohesion policy supports regional development, economic, social and territorial convergence and competitiveness through long-term investment in line with EU priorities and with national and regional strategies.

During the 2014-2020 programming period, cohesion policy funds boosted Slovenia's competitiveness, with tangible achievements notably in research and innovation, sustainable transport and employment. By the end of the eligibility period in December 2023, 2014-2020 cohesion policy funds ([30]) had made EUR 3.3 billion available to Slovenia ([31]), of which EUR 2.2 billion has been disbursed since March 2020, when the COVID-19 pandemic began ([32]). The REACT-EU programme has helped mitigate the impact of the pandemic, including through preferential loans to SMEs and the purchase of medical equipment. The achievements of cohesion policy funds over the programming period include support provided to R&I and the promotion of research hubs such as the National Institute for Biotechnology (NIB). This institute attracts researchers from Slovenia and abroad, successfully creating the link between research, business, and private investment (also see Annex 11). This benchmark research hub was supported by EUR 25.8 million from the European Regional Development Fund (ERDF). In the area of sustainable transport and decarbonisation of travel, EUR 128.6 million from the Cohesion Fund (CF) has supported the upgrade of the Maribor-Šentilj railway line which is part the of trans-European transport network. New tracks, modernised stations, less noise, and new park & ride facilities make it a more attractive means of transport, therefore promoting the modal shift from road to rail, helping reduce greenhouse gas (GHG) emissions. This structural green transport investment eases the daily commuting for the regional and cross-border workforce when travelling to Slovenia's second largest city. During the same period, almost 10 000 unemployed people, of which more than half were long-term unemployed, received support from measures under the European Social Fund (ESF) for active inclusion to boost their employability.

In the current programming period (2021-2027), cohesion policy will provide a further boost to Slovenia's competitiveness, to the green transition and to social cohesion, improving the living and working conditions of Slovenia's people. In 2021-2027, the ERDF and CF are investing EUR 2.1 billion in the green transition, the largest single support heading. Crucially, a portion of this funding will be spent on climate mitigation measures, in particular to provide flood-protection installations following the devastating floods of August 2023. EUR 109 million of ERDF support has been earmarked for new installations in the Savinja, Drava, and Vipava river basins alongside complementary support from the recovery and resilience plan (RRP) and national funds. These new installations are being provided based on a fully revised national flood-protection plan for these three river basins, to protect 9 000 people and 4 700 hectares of land. In the area of sustainable urban transport, cohesion policy supports alternative infrastructure for a door-to-door modal shift away from passenger cars to reduce GHG emissions. This is achieved, for example, through implementing digital public transport optimisation systems, providing quality separate bike lanes and curtailing road traffic in inner cities. A total of 698 000 passengers per year will benefit from modernised public transport and 1.1 million users per year will be able to use new cycling infrastructure. The Just Transition Fund will help ease the implementation

([27]) In 2021-2027, cohesion policy funds include the Cohesion Fund, the European Regional Development Fund, the European Social Fund Plus and the Just Transition Fund.

([28]) European territorial cooperation (ETC) programmes are excluded from the figure. In 2021-2027, the total investment, including national financing, amounts to EUR 4.5 billion.

([29]) RRF funding includes both grants and loans, where applicable. The EU average is calculated for cohesion policy funds excluding ETC programmes. GDP figures are based on Eurostat data for 2022.

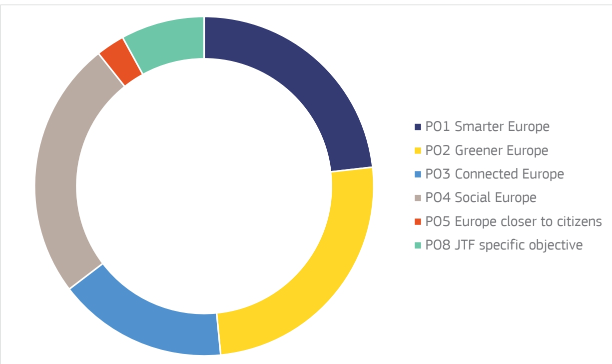
([30]) In 2014-2020, cohesion policy funds included the Cohesion Fund, the European Regional Development Fund, the European Social Fund and the Youth Employment Initiative. REACT-EU allocations are included but ETC programmes are excluded.

([31]) In 2014-2020, the total investment, including national financing, amounted to EUR 4.1 billion.

([32]) Cut-off date: 14 May 2024.

of the Territorial Just Transition Plans, including coal phase-out by 2033, by promoting sustainable energy and energy restructuring, diversifying the local economy in the two coal regions, and training and reskilling workers. These measures will help people better overcome the challenges of the green and digital transition. The ESF+ will help boost skills development in the labour market, including lifelong learning, with a budget of around EUR 207 million. The key areas of ESF+ support will include the strengthening of a wide range of competences of the adult population especially the most vulnerable groups, including digital and green skills. With this work, cohesion policy substantially contributes to achieving the UN Sustainable Development Goals (SDGs) in Slovenia, in particular SDG 9 (Industry, innovation, infrastructure), SDG 8 (Decent work and economic growth) and SDG 7 (Affordable and clean energy).

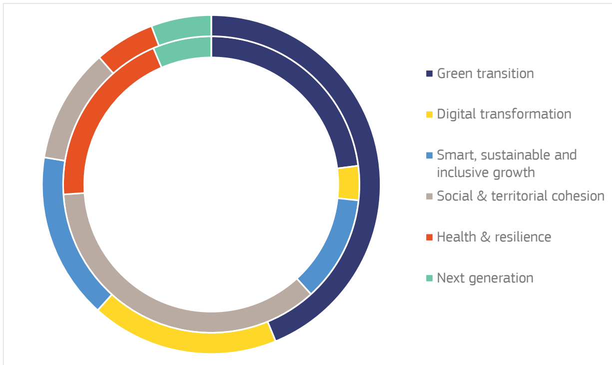
Graph A4.1: **Distribution of cohesion policy funding across policy objectives in Slovenia**



Source: European Commission

Through combined action, cohesion policy and the RRP has a mutually reinforcing impact in Slovenia. To adapt to climate change, cohesion policy supports investments in flood-protection installations, and in technical equipment to deal with climate-related disasters such as floods, forest fires, sleet or storms. To complement this, the RRP is funding flood-protection measures, the rehabilitation of sites threatened by landslides and the creation of modular response units specialised and trained to respond to climate-related disasters at national, regional and local level. On sustainable transport, the RRP supports the creation of a public passenger transport body coordinating all public transport modes. Corresponding RRP investments upgrade railway sections and stations, most notably Ljubljana railway station which is the largest passenger hub. Cohesion policy supports local sustainable transport strategies and enables infrastructure upgrades such as the suburban railway line to and from Maribor, Slovenia's second largest city. The contribution of cohesion policy and the RRP funding by different policy objectives is illustrated by Graphs A4.1 and A4.2.

Graph A4.2: **Distribution of RRF funding by pillar in Slovenia**



(1) Each RRP measure helps achieve the aims of two of the six policy pillars of the RRF. The primary contribution is shown in the outer circle while the secondary contribution is shown in the inner circle. Each contribution represents 100% of the RRF funds. Therefore, the total contribution to all pillars displayed on this chart amounts to 200% of the RRF funds allocated to Slovenia.
Source: European Commission

The Technical Support Instrument (TSI) helps Slovenia invest in its public administration and create a better enabling environment for EU and national investment. The TSI has funded projects in Slovenia to design and implement growth-enhancing reforms since 2016. The support provided in 2023 included the review the Slovenian Industrial Strategy 2021-2030; the implementation of the economic, social and governance risk management framework for the financial sector; and the improvement of the capacities to prevent and manage wildfires. The TSI is also helping Slovenia to increase its overall capacity to implement the RRP by integrating the 'do no significant harm' principle into public funding programmes, as well as by improving mechanisms for the monitoring, reporting and implementing of the RRP.

Slovenia also receives funding from several other EU instruments, including the ones presented in Table A4.1.

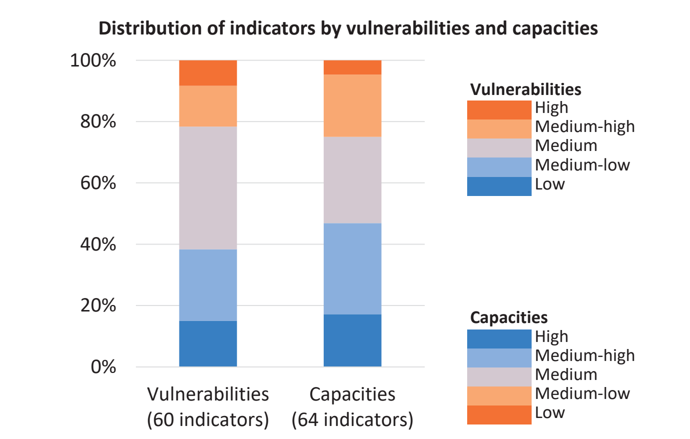
Table A4.1: **Support from EU instruments in Slovenia**

EU grants			
	Amount 2014-2020 (EUR million)		Amount 2021-2027 (EUR million)
Cohesion policy	3 336.9		3 242.1
RRF grants (1)	-		1 612.9
Public sector loan facility (grant component) (2)	-		19.6
Common agricultural policy (3)	2 300.0		1 232.0
EMFF/EMFAF (4)	21.8		23.9
Connecting Europe Facility (5)	420.6		236.2
Horizon 2020 / Horizon Europe (6)	378.7		262.5
LIFE programme (7)	63.9		30.2
EU guarantees			
	EU Guarantee (EUR million)		Volume of operations (EUR million)
European Fund for Strategic Investment 2015-2020 (8)	82.0		195.5
InvestEU 2021-2027 (9)	16.8		67.0
EU loans			
	Period	Total amount available (EUR million)	Disbursed amount (EUR million)
SURE (10)	2020-2022	1 113.7	1 113.7
RRF	2021-2026	1 072	310.1

(1) RRF implementation period is 2021-2026.
(2) The public sector loan facility's programming period is 2021-2025 and the amount reflects the national share in its grant component reserved until the end of the period.
(3) Common agricultural policy programming periods are 2014-2022 and 2023-2027.
(4) EMFF – European Maritime and Fisheries Fund, EMFAF – European Maritime, Fisheries and Aquaculture Fund.
(5) Data on the Connecting Europe Facility covers transport and energy and has a cut-off date of 15 May 2024.
(6) Data on Horizon Europe (2021-2027) has a cut-off date of 13 May 2024.
(7) 2021-2027 data on the LIFE programme has a cut-off date of 15 May 2024.
(8) The amount of the EU guarantee signed under the EFSI Infrastructure and Innovation Window was derived based on the signed amount of the operations and the average internal multiplier, as reported by the EIB (cut-off date is 31 December 2023).
(9) The amount of the EU guarantee and of the volume of operations signed under InvestEU includes the EU compartment as well as the Member State compartments (cut-off date is 31 December 2023).
(10) SURE - European instrument for temporary support to mitigate unemployment risks in an emergency.
Source: European Commission

Table A5.1: **Resilience indices across dimensions for Slovenia and the EU-27**

Dimension		SI 2023 RDB	SI 2024 RDB	EU-27 2024 RDB
Overall resilience	Vulnerabilities			
	Capacities			
Social and economic	Vulnerabilities			
	Capacities			
Green	Vulnerabilities			
	Capacities			
Digital	Vulnerabilities			
	Capacities			
Geopolitical	Vulnerabilities			
	Capacities			



(1) The synthetic indices aggregate the relative resilience situation of countries across all considered indicators. For an indicator, each country's relative situation in the latest available year is compared with the collection of values of that indicator for all Member States and all years in the reference period.
Source: Resilience Dashboards - version spring 2024, data up to 2022

This Annex uses the Commission's resilience dashboards (RDB) ([33]) to show Slovenia's relative resilience capacities and vulnerabilities ([34]) that may be of relevance for societal, economic, digital and green transformations, and for dealing with future shocks and geopolitical challenges. ([35])

According to the RDB's set of resilience indicators, Slovenia's overall vulnerabilities have increased to medium, while its capacities remained unchanged at medium-high. Its vulnerabilities and capacities are comparable to the EU's. This is reflected in the distribution of its vulnerability and capacity indicators. Around 40% of its vulnerability indicators are medium-low and low, while close to 50% of its capacity indicators are medium-high or high.

Slovenia could further strengthen its strong position in the social and economic dimension, where its vulnerabilities are now at medium-low and its capacities medium-high. It has further reduced its long-term unemployment rate with respect to the 2023 RDB, and is one of the EU countries with the second lowest proportion of its population at risk of poverty or social exclusion (AROPE) and one of the lowest income quintile share ratios, pointing to overall relatively low inequalities. However, its proportion of young people neither in employment nor in education and training has slightly increased and, while still relatively low in the EU, is now in the medium-low vulnerability category. In terms of capacities, it has managed to increase further the proportion of children under 3 in formal childcare and its government investment to GDP ratio.

In the green dimension, Slovenia has maintained its medium vulnerabilities and medium-high capacities. Its reduced environmental patents per capita has weakened its position in this dimension, and urban wastewater treatment as well as one of the highest risks of soil erosion by water remain a major concern. At the same time, there has been a small

([33]) Https://ec.europa.eu/info/strategy/strategic-planning/strategic-foresight/2020-strategic-foresight-report/resilience-dashboards_en. Resilience is defined as the ability not only to withstand and cope with challenges but also to undergo transitions, in a sustainable, fair, and democratic manner. 2020 Strategic Foresight Report: *Charting the course towards a more resilient Europe* (COM(2020) 493).

([34]) Vulnerabilities describe features that can exacerbate the negative impact of crises and transitions, or obstacles that may hinder the achievement of long-term strategic goals, while capacities refer to enablers or abilities to cope with crises and structural changes and to manage transitions.

([35]) This Annex is linked to Annex 1 on SDGs, Annex 6 on the green deal, Annex 8 on the fair transition to climate neutrality, Annex 9 on resource productivity, efficiency and circularity, Annex 10 on the digital transition and Annex 14 on the European pillar of social rights.

improvement in the harmonised risk indicator 1 for pesticides ([36]).

In the digital dimension, vulnerabilities have improved, to medium-low, and are above the EU average and capacities have remained unchanged below the EU average. With respect to digital skills, Slovenia's performance is close to, but not quite on a par with, the EU average. The number of information and communication technology (ICT) Master's graduates in the 20-29 age group also remains below the EU average, giving Slovenia a lower degree of preparedness for the digital transition.

With respect to the 2023 RDB, Slovenia's geopolitical vulnerabilities have deteriorated, but its capacities have, at medium-high, remained stable. The main reasons for the change in vulnerability are the Extra-EU import and export partners that remain highly concentrated and Slovenia's exceptionally high borrowing from the rest of the world in 2022, when its ratio of net lending over GDP increased to 1.4% of GDP.

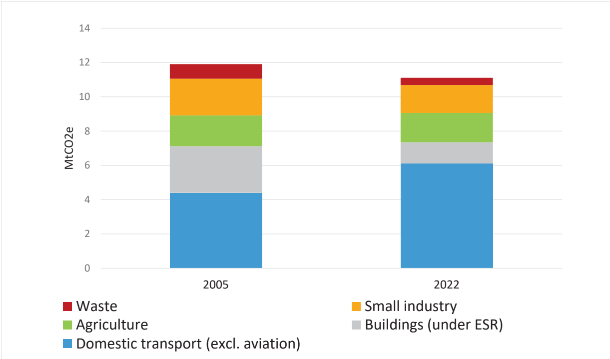
([36]) For more information on this indicator: https://food.ec.europa.eu/plants/pesticides/sustainable-use-pesticides/harmonised-risk-indicators_en.

Slovenia has made progress in the green transition, with more action needed on specifying the funding framework for the climate and energy transition, on sustainable water management, on strengthening the institutional framework on climate adaptation, and other areas. This Annex provides a snapshot of climate, energy, and environmental aspects of the transition in Slovenia ([37]).

Slovenia's draft updated national energy and climate plan (NECP) does not yet map all its investment needs against sources of funding to achieve its 2030 climate and energy targets. The plan does not provide information on public (EU and national) and private funding. It only outlines the budget allocated to energy projects under Slovenia's recovery and resilience plan and under the 2021-2027 cohesion policy programme ([38]).

With the planned additional measures, Slovenia is projected to reach its 2030 effort sharing target ([39]). In 2022, Slovenia's greenhouse gas emissions from its effort sharing sectors are expected to be 6.1% below 2005 levels. Additional policies considered in Slovenia's draft updated NECP are projected to reduce these emissions by 28.8% from 2005 levels by 2030. This is 1.8 percentage points below Slovenia's effort sharing target to reach a 27% reduction. With current policies alone, Slovenia is projected to reduce its effort sharing emissions by 9.1% from 2005 levels by 2030, which is 17.9 percentage points short of the target ([40]). This highlights the importance of implementing the full range of policies and measures in the draft updated NECP. The plan confirms Slovenia's commitment to achieve climate neutrality by 2050. Slovenia's climate law, which is currently under preparation, is set to establish a more efficient framework for obtaining data on greenhouse gas emissions and monitoring the implementation of climate policy measures.

Graph A6.1: **Greenhouse gas emissions from the effort sharing sectors in Mt CO2eq, 2005-2022**



Source: European Environment Agency

There is scope for increasing Slovenia's targets for renewable energy and energy efficiency in its final updated NECP ([41]). Currently set at 30-35% by 2030 in the draft updated NECP, Slovenia's renewable energy contribution target is significantly below the required contribution of 46%. Its energy efficiency contributions of 6.03 Mtoe in primary energy consumption and 4.43 Mtoe in final energy consumption for 2030 are also less ambitious

([37]) This Annex is complemented by Annex 7 on energy transition and competitiveness, Annex 8 on the fair transition to climate neutrality, Annex 9 on resource efficiency, circularity, and productivity, and relevant topics in other annexes to this country report.

([38]) See the Commission's (2023) [assessment of the draft national energy and climate plan of Slovenia]().

([39]) The national greenhouse gas emission reduction target is laid down in Regulation (EU) 2023/857 (the Effort Sharing Regulation). The aim is to align action in the sectors concerned with the objective to reach the EU-level economy wide target of greenhouse gas reductions of at least 55% compared to 1990 levels. The target also applies to the sectors outside the current EU Emissions Trading System, notably buildings (heating and cooling), road transport, agriculture, waste, and small industry (known as the effort sharing sectors).

([40]) The effort sharing emissions for 2022 are based on approximated inventory data. The final data will be established in 2027 after a comprehensive review. Projections on the impact of current policies ('with existing measures', WEM) and additional policies ('with additional measures', WAM) as per Slovenia's draft updated NECP.

([41]) The EU target set out in the revised Renewable Energy Directive is to have 42.5% of gross final energy consumption coming from renewable energy sources by 2030, with the aspiration to reach 45%. The formula in Annex I to Directive (EU) 2023/1791 sets the indicative national contribution for Slovenia at 5.79 Mtoe for primary energy consumption. The Commission communicated a corrected national contribution of 4.32 Mtoe in final energy consumption for 2030 in accordance with Article 4(5) of the Energy Efficiency Directive to increase the contribution towards the Union's binding energy efficiency target. See the [Commission Recommendation of 18.12.2023 to Slovenia.]()

than those required by the Energy Efficiency Directive.

Continued momentum is crucial for the take-off of zero-emission mobility in Slovenia ([42]). By the end of 2023, electric vehicles (in the segment of light vehicles weighing up to 3.5 tonnes) represented roughly 1% of Slovenia's total passenger vehicle fleet. It's 2 000 publicly accessible charging points provided a charging point for every six electric vehicles (above the EU average of 1:10). State subsidies are planned in 2024 to boost the rollout of public and private charging infrastructure. Car trips account for more than 90% of distances travelled in Slovenia. Rail plays a significant role in the transport of freight, accounting for 34% of freight transported (the remainder being transported by road). However, only 50% of the rail network is electrified (EU average: 56%).

Slovenia's land use sector is performing strongly in removing carbon from the atmosphere through land use, land use change and forestry (LULUCF). The country's forests are responsible for a major share of the removals. However, to reach the 2030 LULUCF target, additional carbon removals of 212 kt CO_2eq ([43]) are needed. According to the latest projections, Slovenia's efforts are paying off and it is on track to meet the target ([44]).

On climate adaptation, institutional weaknesses are a key challenge in Slovenia. The country is vulnerable to climate change-related events such as heavy flooding, windstorms, heatwaves, and wildfires. Agriculture and forestry have embraced adaptation strategies, but implementation has been slow and uneven. Furthermore, Slovenia has not yet identified further vulnerabilities beyond these sectors. In 1980-2020, only 6% of reported losses caused by climate-related events were insured. Flood is the highest risk, as evidenced by the floods of summer 2023, but its potential economic impacts can be mitigated by good insurance coverage. Nature-based solutions are key to mitigating the impact of floods. Integrating adaptation, such as nature-based solutions, into sectoral policies, including for flood protection, is necessary, as is setting up a monitoring, reporting and evaluation system, and better coordination between sectors of government ([45]).

Slovenia would benefit from improving its sustainable water management and the status of its freshwater bodies. The water exploitation index plus (WEI+) stood at 0.4% in 2019. On average, 4.3% of Slovenia's area was impacted by droughts in 2000-2020, compared to 52.4% in 2022. The country would benefit from using its water resources more efficiently. In 2021, Slovenia's economy generated EUR 61 per cubic metre of water abstracted, below the EU average of EUR 398. Forests and woodlands are generally the most impacted ecosystems. According to the second river basin management plan, 59% of surface water bodies are in at least a good ecological status, and only 1% are in a good chemical status. According to the latest data, not all marine waters are in a good environmental status, as tracked by the descriptors used in the Marine Strategy Framework Directive.

Slovenia continues to face challenges in the areas of biodiversity and nature protection and restoration. At the end of 2021, 40.5% of Slovenia's land areas and only 5% of its marine area were under protection. According to the report on the conservation status of protected habitats and species covered by Article 17 of the Habitats Directive, in 2013-2018, 38% of habitats and 29% of species were in a good conservation status. Agricultural land is still affected by biodiversity loss and the common farmland bird index stood at 81.6 in 2020, above the EU average of 78.2. The EU has launched an infringement procedure against Slovenia for the deterioration of several bird and butterfly species in Natura 2000 sites, mainly due to unsustainable agricultural practices.

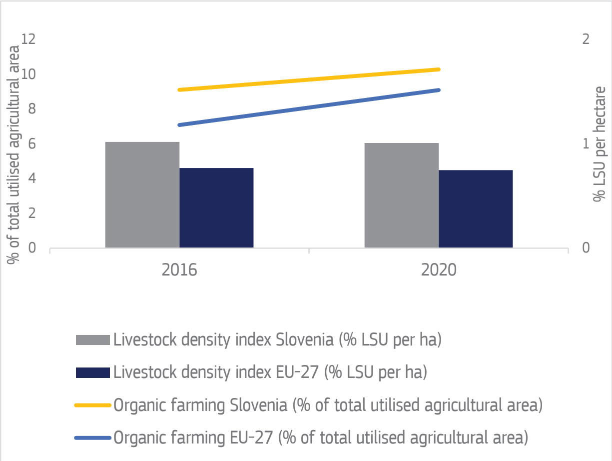
([42]) Unless otherwise indicated, data in this section refer to 2021. See European Commission, 2023, EU transport in figures, transport.ec.europa.eu.

([43]) National LULUCF targets of the Member States in line with Regulation (EU) 2023/839.

([44]) Projections submitted in Slovenia's draft updated national energy and climate plan, 2023.

([45]) See the Commission's 2023 assessment and recommendation on Slovenia's progress on climate adaptation.

Graph A6.2: **Changes in livestock density and organic farming**

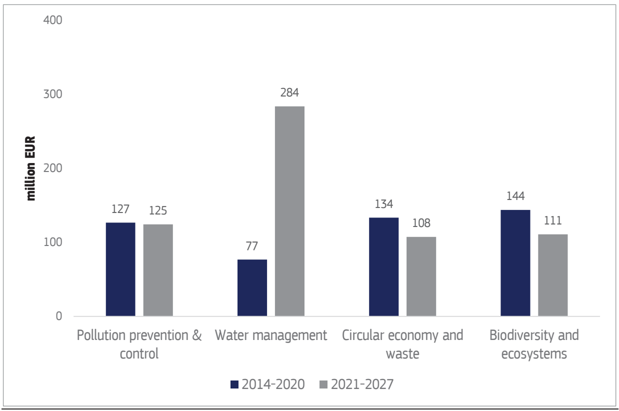


Livestock unit (LSU)/ha of UAA: it measures the stock of animals (cattle, sheep, goats, equidae, pigs, poultry and rabbits) converted in LSUs per hectare of UAA.
Source: Eurostat

Intensive agriculture has a major impact on ecosystems, biodiversity, and air quality. The value of the agricultural sector's annual output totalled EUR 1.2 billion (46) in 2023. Slovenia is in the process of converting to organic agriculture, with the share of its utilised agricultural land (UAA) under organic farming reaching 10.8% in 2021 versus the EU average of 9.1% (47) and the EU-wide goal of at least 25% by 2030. Furthermore, conservation tillage practices, which increase soil organic carbon, covered 12% of Slovenia's tillable area in 2016. Slovenia's livestock density index decreased from 1.04% to 1.01% in 2010 to 2020 but remained well above the EU average of 0.75%. In parallel, the share of extensive animal farming (48) in Slovenia's UAA decreased from 69.7% in 2013 to 24.9% In 2016, above the EU average of 23.8%. The intensive rearing is among the most polluting industrial activities for ammonia emissions into air. The agricultural sector was responsible for 92.6% of Slovenia's total ammonia emissions in 2021 (EU average: 90.7%). According to the latest figures, Slovenia has a nitrogen surplus, with an average nitrogen balance of 43.2 kg of nitrogen per hectare in 2019. The content of nitrate in groundwater stands below the EU average (14.1 mg nitrate/l vs 20.5) and 9% of groundwater monitoring stations showed levels above the maximum of 50 mg nitrate/l.

Slovenia would benefit from investing more in sustainable water management and in measures to protect biodiversity. Between 2014 and 2020, environmental investment gap was estimated at EUR 493 million per year, equivalent to 1.1% of GDP, above the EU average of 0.8%. The gap is estimated to be increasing over the 2021-2027 period at EUR 627 million a year (1.1% of GDP). There remains an opportunity to increase funding, in particular for sustainable water management (EUR 284 million) and pollution prevention and control (EUR 125 million). Slovenia would also benefit from investing in circular economy and biodiversity and ecosystems.

Graph A6.3: **Environmental investment gap, annual average**



The numbers are computed by the European Commission based on the latest internal reports, Eurostat, EIB and national data sources.
Source: European Commission

(46) Production value at basic price (2015=100).

(47) In 2020. 2021 data is not available.

(48) Share of utilised agricultural area with livestock density below one livestock unit per hectare.

Table A6.1: **Indicators tracking progress on the European Green Deal from a macroeconomic perspective**

							Target	Distance	
		2005	2019	2020	2021	2022	2030	WEM	WAM
Progress to climate and energy policy targets									
Greenhouse gas emission reductions in effort sharing sectors [(1)]	Mt CO_{2eq}, %, pp	11,826.3	-9%	-18%	-12%	-6%	-27%	-17	1.8
Net greenhouse gas removals from LULUCF [(2)]	Kt CO2eq	-7 230	-641.000	-397.000	-321.000	-169.000	-146	n/a	n/a
Share of energy from renewable sources (1) [(3)]	%	20%	22%	25%	25%	23%	0.46	-	-
Energy efficiency: primary energy consumption [(3)]	Mtoe	7.2	6.5	6.1	6.3	6.2	5.8		
Energy efficiency: final energy consumption [(3)]	Mtoe	5.1	4.9	4.4	4.7	4.7	4.3		
							EU-27		Projected
		2018	2019	2020	2021	2022	2021	2022	2030
Green transition: mobility									
Greenhouse gas emissions: road transport	Mt CO2e	-	-	-	5.2	6.1	769.0	786.6	5.0
Share of zero-emission vehicles in new registrations [(4)]	%	0.6	0.8	3.1	3.1	5	9	12.1	n/a
Number of publicly accessible AC/DC charging points		-	-	401	1228	1596	299178	446956	n/a
Share of electrified railways	%	50.5%	50.5%	50.5%	50.5%	-	56.1%	-	n/a
Green transition: buildings									
Greenhouse gas emissions: buildings	Mt CO2e	-	-	-	1.3	1.2	537.0	486.7	0.7
Final energy consumption in buildings	2015=100	96.2%	93.1%	93.1%	97.6%	90.2%	104.0%	97.2%	
Climate adaptation									
Climate protection gap [(5)]	score 1-4	-	-	1.5	1.8	1.6	1.5	1.5	n/a
		2018	2019	2020	2021	2022	2020	2021	2022
State of the environment									
Water | Water exploitation index (WEI+) (1) [(6)]	% of renewable freshwater	0.6	0.4	-	-	-	3.6	-	-
Circular economy | Material footprint [(7)]	tonnes per person	14.2	13.4	12.7	14.9	16.6	14.2	14.8	14.9
Pollution | Years of life lost due to air pollution by PM2.5 [(8)]	per 100.000 inhabitants	826	623	567	543	-	545	584	-
Biodiversity | Habitats in good conservation status [(9)]	%	38.2					14.7		
Common farmland bird index [(10)]	2000=100	79	77	82	-	-	78	-	-
Green transition: agri-food sector									
Organic farming	% of total utilised agricultural area	10.01	10.35	10.29	10.81	-	9.1	-	-
Nitrates in groundwater	mg NO_3/litre	-	-	-	-	-	20.42	-	-
Food waste per capita	Kg per capita			68	68	-	130	131	-
Share of soil in poor health [(11)]	%					30			41
Soil organic matter in agricultural land [(12)]	Mt per ha	19	-	-	-	-	7,904	-	-

Sources: (1) Member States' emission data for 2019 and 2020 are in global warming potential (GWP) values from the 4th Assessment Report (AR4) of the Intergovernmental Panel on Climate Change (IPCC). Member States' 2005 base year emissions under Regulation (EU) 2018/842, emissions data for 2021 and 2022, and 2030 projections are in GWP values from the 5th Assessment Report (AR5) of the IPCC. 2021 data are based on the final inventory reports, 2022 data are based on approximated inventory reports and European Environmental Agency's calculation of effort sharing emissions. The final data for 2021 and 2022 will be established after a comprehensive review in 2027. The 2030 target is in percentage change of the 2005 base year emissions. Distance to target is the gap between the 2030 target and projected effort sharing emissions with existing measures (WEM) and with additional measures (WAM), in percentage change from the 2005 base year emissions. The measures included for the 2030 emission projections reflect the state of play as reported in Member States' draft updated national energy and climate plans or, if unavailable, as reported by 15 March 2023 as per Regulation 2018/1999. (2) Net removals are expressed in negative figures, net emissions in positive figures. Reported data are from the 2024 greenhouse gas inventory submission. 2030 value of net greenhouse gas removals as in Regulation (EU) 2023/839 – Annex IIa. (3) The 2030 national objectives for renewable energy and energy efficiency are indicative national contributions, in line with Regulation (EU) 2018/1999 (the Governance Regulation), the EU-level 2030 renewable energy target set out in Directive EU/2018/2001 amended by Directive EU/2023/2413 (the revised Renewable Energy Directive) – 42.5% of gross final energy consumption with the aspiration to reach 45% –, and the formula in Annex I to Directive (EU) 2023/1791 (the Energy Efficiency Directive). (4) Passenger battery electric vehicles (BEV) and fuel cell electric vehicles (FCEV). (5) The climate protection gap refers to the share of non-insured economic losses caused by climate-related disasters, based on modelling of the risk from floods, wildfires, windstorms, and the insurance penetration rate. Scale: 0 (no protection gap) –4 (very high gap) (European Insurance and Occupational Pensions Authority, 2022). (6) Total water consumption in renewable freshwater resources available for a territory and period. (7) Material extractions for consumption and investment. (8) Years of potential life lost through premature death due to exposure to particulate matter with a diameter of less than 2.5 micrometres. (9) Share of habitats in good conservation status according to the records submitted under Art. 17 of the Habitats Directive (Directive 92/43/EEC) for 2013-2018. (10) Multi-species index measuring changes in population abundances of farmland bird species. (11) Source: annex 12 of the Commission's proposal for a soil monitoring law, SWD (2023) 417 final. (12) Estimates of organic carbon content in arable land.

This Annex ([49]) sets out Slovenia's progress and challenges in accelerating the net-zero energy transition while bolstering the EU's competitiveness in the clean energy sector ([50]). It considers measures and targets put forward in the draft updated National Energy and Climate Plans (NECPs) for 2030 ([51]).

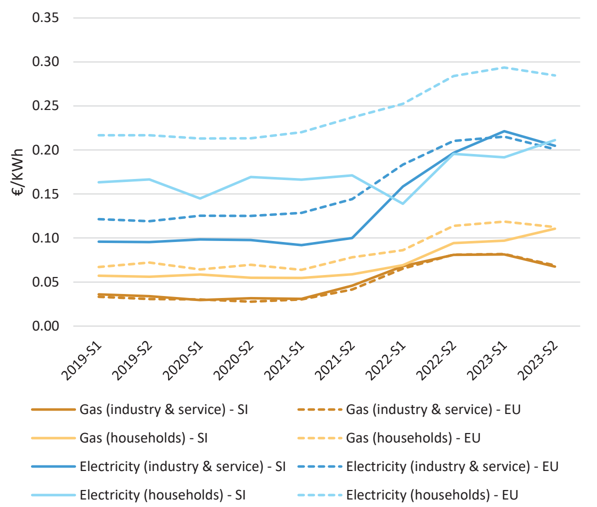
Slovenia has made efforts to decrease its dependence on Russian natural gas, including by strengthening gas interconnection with Italy and contracting alternative supplies. It saw a record increase in deployment of solar photovoltaics in 2023. However, new wind capacities have not been deployed in years and remain at an insignificant level. Further uptake in deployment of renewable energy, particularly wind, as well as additional energy efficiency improvements would supporting Slovenia to reach its 2030 targets and support the competitiveness of its energy system. Already supporting its competitiveness is a vibrant domestic manufacturing industry involved primarily in batteries and solar modules.

Slovenian households experienced lower average electricity prices than the EU average in the second of 2023 and have largely been shielded from the price increases of the last year thanks to regulatory and fiscal interventions. Following a peak in first halve of 2023, industrial consumers saw a gradual decline in average gas and electricity prices, dipping by 17% and 7.5%, in line with the EU average, in the second half of 2023.

Some of the support measures have been well targeted towards helping vulnerable households and companies alleviate the impacts of energy-price inflation, but

Slovenia has also implemented several across-the-board compensation mechanisms. The government reduced the cost of energy for households and certain protected consumer groups by lowering taxes, excise duties and contributions. The measures setting the maximum retail electricity and gas prices, including those for households and small business consumers, have been extended to the end of 2024, and to April 2024 in the case of natural gas. Through a Decree, below-cost prices for the supply of electricity for micro, small and medium-sized enterprises were also brought in for a period in 2023.

Graph A7.1: **Slovenia´s energy retail prices for households and industry & service**



(1) For industry, consumption bands are I3 for gas and IC for electricity, which refer to medium-sized consumers and provide an insight into affordability
(2) For households, the consumption bands are D2 for gas and DC for electricity
(3) Industry prices are shown without VAT and other recoverable taxes/levies/fees as non-household consumers are usually able to recover VAT and some other taxes
Source: Eurostat

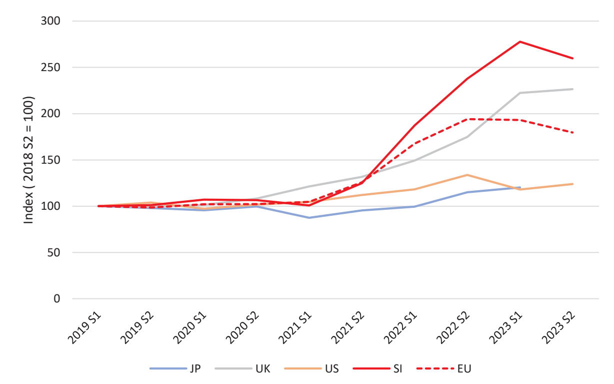
In relative terms, electricity prices for non-household consumers have increased significantly compared to the US, Japan, and to a lesser extent, the UK, thus potentially affecting the international competitiveness of energy-intensive industries in Slovenia.

([49]) It is complemented by Annex 6 as the European Green Deal focuses on the clean energy transition and by Annex 8 on the action taken to protect the most vulnerable groups, complementing ongoing efforts under the European Green Deal, REPowerEU and European Green Deal Industrial Plan.

([50]) In line with the Green Deal Industrial Plan and the Net-Zero Industry Act.

([51]) Slovenia submitted its draft updated NECP in June 2023, and the Commission issued an assessment and country-specific recommendations on 18 December 2023. [Commission Recommendation, Assessment (SWD) and Factsheet of the draft updated National Energy and Climate Plan of Slovenia - European Commission (europa.eu).]

Graph A7.2: **Trends in electricity prices for non-household consumers (EU and foreign partners)**



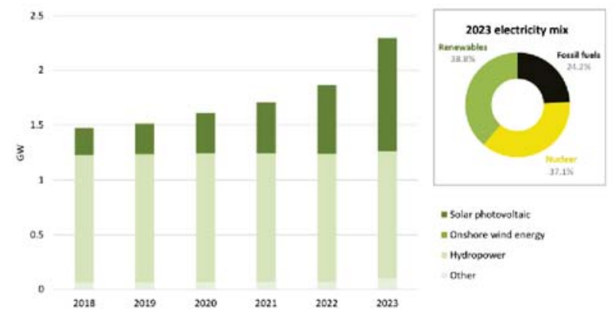
(1) For Eurostat data (EU and SI), the band consumption is ID referring to large-sized consumers with an annual consumption of between 2 000 MWh and 20 000 MWh, such as in electricity intensive manufacturing sectors, and gives an insight into international competitiveness
(2) JP = Japan
Source: Eurostat, IEA

Consumer empowerment in the electricity and gas markets is significant. Deployment of smart meters is up to 92%, and there are increasing investments in energy communities and individual/collective self-consumption. High switching rates in electricity and gas were also observed in Slovenia.

Slovenia has taken measures to strengthen alternative supplies of natural gas. Slovenia's largest gas trading company contracted alternative gas supplies from Algeria, imported through Italy, in 2022 and then increasing the volumes in 2024. Slovenia's domestic annual needs (0.8 bcm), are unlikely to lessen in the coming years, due to the expected entry into operation of a gas-fired Combined Heat and Power Plant in Ljubljana in 2024. Slovenia reduced its gas demand between August 2022 and December 2023 by only 11% compared to the average of the previous 5 years. Following the enhancement of the Gorizia/Šempeter interconnection point with Italy completed in 2022, a second stage of the project is planned on the Slovenian territory with the aim of further increasing bidirectional capacity from 1.22 bcm/y to 1.53 bcm/y. The reinforcements of the gas infrastructure carried out in Croatia, included in Croatian RRP, will enable Slovenia to access the expanded Krk LNG terminal by increasing the cross-border capacity between the two countries up to 1.5 bcm/y. However, the additional quantities of gas from Krk will not be available for booking until 2025 to 2026.

Renewable installed capacity surged in 2023, thanks to the uptake of solar photovoltaics, while the deployment of wind capacities remained stagnant. Slovenia's total renewable energy capacity in 2023 was 2296 MW ([52]) (increase of 23% from 2022). This was driven by the acceleration of solar photovoltaic deployment to the amount of 408 MW, resulting in total installed capacity of 1034 MW in 2023. On the other hand, the wind capacity currently deployed in Slovenia remains insignificant (3 MW) ([53]), with limited plans for its deployment between by 2030.

Graph A7.3: **Slovenia's installed renewable capacity (left) and electricity generation mix (right)**



(1) "Other" includes solid biofuels, liquid biofuels and biogas
Source: IRENA, Ember

Slovenia has taken steps to implement reforms to accelerate the deployment of renewables. Following the 2021 Act on the Promotion of the Use of Renewable Energy Sources, another important RRP reform in spatial planning and permitting was enacted in July 2023 through the Act on the Deployment of Installations for the Production of Electricity from Renewable Energy Sources. The Act sets out a legal basis for drawing up an action plan identifying potential priority areas for solar and wind installations. It also sets out certain priority areas for solar photovoltaic installations such as the rooftops of larger buildings, car parks, abandoned landfills, and others. It sets out the conditions under which the installation of solar photovoltaic panels on certain new constructions, reconstructed buildings, and some existing buildings, is compulsory. It simplifies the permitting procedures for the installation of solar photovoltaic panels on co-owned properties. Most recently, in April 2024, the

([52]) IRENA Report 2023.

([53]) International Renewable Energy Agency, Renewable energy statistics 2023.

Slovenian Parliament passed the Energy Act, comprehensively adapting the country's legal framework in the energy sector to support the green transition. Despite the legal improvements made, installations of wind power plants are still being delayed due to local opposition and lengthy municipal permitting procedures (see also Annex 12). So far, Slovenia has not set up auctions to support uptake of renewable energy. Furthermore, the project pipeline of renewable energy projects is not clear either, as Slovenia has not published its long-term schedule for auctions for the next 3 or 5 years. Nor are the details clear on timing, the frequency of auction procedures, expected capacity and budget, and eligible technologies.

Slovenia's considerable proportion of renewables in heating and cooling (34% in 2022) is mainly the result of biomass use. Heat pumps cover about a tenth of this. The draft updated NECP's targets appear rather unambitious, linked to a decrease in the use of biomass. The uptake in share of renewables is expected mainly to come from heat pumps and other sources of renewable heat. Through the support from the RRP in the amount of EUR 31 million, at least 45 MW of new renewable district heating capacity will come online by 2026. Support for district heating decarbonisation, amounting to more than EUR 32 million, will also be provided through the European Regional Development Fund. The new Energy Act laid out several measures to reinforce the decarbonisation efforts by obliging municipalities to prepare plans and set objectives for increasing their share of renewable energy consumption, energy savings as well as targets for the energy renovation of public buildings. Plans will cover actions to phase out heating on fossil fuels. Also importantly from the decarbonisation perspective, the installation of boilers using natural gas or liquefied petroleum gas for heating in new residential buildings starting 2025.

Electricity grid upgrades remain a precondition for greater uptake of renewable energy. Slovenia has a robust transmission network and strong interconnection links with neighbouring EU countries, which have been reinforced with the implementation of recent Projects of Common Interest with Croatia and Hungary. Still, the transmission network will need to be reinforced to enable the connection of new generation facilities, mainly from renewable sources, an expected increase in electricity demand, and peak loads. Ensuring network flexibility, including through currently limited electricity storage units, will also be necessary to support the green transition. Besides digitalisation, investments are particularly needed on the distribution grid, given one quarter of all applications for small-scale electricity generation installations were rejected in 2022 due to grid constraints (54). The electrification of transport and heating will put additional strain on the grid. The implementation of the priorities set out in the recently endorsed Central and South Eastern Europe Energy Connectivity (CESEC) electricity and renewable energy action plan (55) and the CESEC action plan on gases (56) will be crucial for accelerated infrastructure development and market integration.

Energy efficiency gains have slowed down in Slovenia, leaving significant room for improvement. In 2022, Slovenia's primary energy consumption was 6.2 Mtoe, a 2.2% decrease compared to 2021, and a 9.3% decrease compared to 2012. Its final energy consumption was 4.7 Mtoe, a 0.1% decrease compared to 2021, and a 4.1% decrease compared to 2012. In the last year, the best results came from the residential sector, which decreased its final energy consumption by 10.5%, and the worst from the transport sector, which increased its final energy consumption by 10.1%.

Slovenia has implemented a series of energy efficiency measures, primarily in the building sector, with the support of several EU funds. Its RRP includes investments in the energy renovation of public buildings and publicly owned residential buildings, as well as the refurbishment, extension, and construction of tourist facilities (EUR 196.9 million). It also includes investments in energy efficiency and decarbonisation of industry (EUR 42.4 million). Under cohesion policy, almost 13% of overall funding (around EUR 320 million) is in energy efficiency, with most of it going into

(54) Energy Agency, Report on the energy situation in Slovenia, 2022.

(55) CESEC electricity and renewable energy action plan (2024), https://circabc.europa.eu/ui/group/e334255a-6951-4933-923d-0afd1b105268/library/3f18bd9c-f32f-4054-8c61-ba9d49c0e09f/details.

(56) CESEC action plan on gases (2024), https://circabc.europa.eu/ui/group/e334255a-6951-4933-923d-0afd1b105268/library/f2fced37-5172-4905-be11-dd384ec46be9/details.

building renovations. The key enabling measure to increase energy efficiency in industry is the energy savings obligation scheme for energy suppliers.

Most of the financial support schemes for energy efficiency are grant-based and the use of financial instruments is limited. In energy efficiency, Slovenia mainly uses grants-based funding schemes implemented through the Ecofund, which also deploys soft loans.

Slovenia needs to continue working towards reaching its long-term renovation strategy target to reduce buildings' energy consumption by 17% by 2030 compared to 2020. The residential sector's final energy consumption declined by 2.3% ([57]) between 2020 and 2022. Heating and cooling represent almost 80% of Slovenia's residential final energy consumption, 34% of which comes from renewables. Heating with a heat pump is only cheaper than heating with a fossil fuel boiler if electricity costs the end-user less than three times the price of gas. In Slovenia, residential electricity costs the end-user 1.97 times more than the price of gas. Slovenia does a low number of checks on products covered by eco-design and energy labelling. A low number of market surveillance activities gives cause for concern about compliance levels.

Slovenia has put forward some plans that are indicative of the increased role hydrogen will have in its economy. Slovenia has plans to construct two electrolysers for storing surplus electricity in the form of hydrogen as part of its draft updated NECP, with the electrolysers' exact capacity yet to be defined. It also intends to establish two hydrogen corridors with Hungary, Italy, Croatia and Austria, consisting partly of the existing gas infrastructure and partly of new hydrogen infrastructure, with indicative completion dates after 2030.

Slovenia is a Moderate Innovator with performance at 95.1% of the EU average. Its strengths are public-private co-publications, lifelong learning, international scientific co-publications, businesses providing information and communication (ICT) training, and product innovators. Its weaknesses are non-research and development-related innovation expenditures, venture capital expenditures, innovation expenditures per employee, knowledge-intensive services exports, and environmental technologies.

Slovenia has significant battery manufacturing capacity and capacity for photovoltaic module manufacturing, whose deployment has been increasing in the last few years. Behind the manufacturing operations of both technologies are mainly Slovenian pure market players (see also Annex 12). Annual capacity for the production of solar modules by Slovenia's lead manufacturer is approximately 750 MW. There are also several battery manufacturers in Slovenia, some of which have been operating for over half a century. Its leading battery manufacturer owns three production facilities in Slovenia and one abroad. Its portfolio includes different types of lead and lithium-ion batteries. Recently, the company unveiled ambitious plans to start its first gigafactory for lithium-ion energy storage systems in Prevalje, set to come online in 2024. The different activities of the consortium brought together by the leading battery manufacturer, including support for production and research and development, have been supported through the Slovenia's RRP.

([57]) Final energy consumption in households from Eurostat (data tables of December 2023), climate corrected by the Joint Research Centre with reference period 2005-2022 (FEC climate corrected = FEC/ (HDD/HDD reference period).

Table A7.1: **Key Energy Indicators**

		Slovenia				EU			
		2019	2020	2021	2022	2019	2020	2021	2022
ENERGY DEPENDNCE	**Import Dependency [%]**	**52.1%**	**45.7%**	**48.6%**	**54.0%**	**60.5%**	**57.5%**	**55.5%**	**62.5%**
	of Solid fossil fuels	20.1%	17.7%	11.0%	28.1%	43.3%	35.8%	37.3%	45.8%
	of Oil and petroleum products	101.4%	99.5%	99.6%	98.4%	96.7%	96.8%	91.7%	97.7%
	of Natural Gas	99.2%	99.4%	99.4%	99.5%	89.7%	83.6%	83.6%	97.6%
	Dependency from Russian Fossil Fuels [%]								
	of Natural Gas	11.8%	8.7%	13.6%	8.6%	39.7%	41.3%	41.1%	21.0%
	of Crude Oil	0.0%	0.0%	0.0%	0.0%	28.8%	26.7%	26.4%	19.5%
	of Hard Coal	3.7%	21.9%	0.2%	0.0%	43.5%	49.1%	47.4%	21.5%

		2016	2017	2018	2019	2020	2021	2022
DIVERSIFICATION OF GAS SUPPLIES	**Gas Consumption (in bcm)**	**0.9**	**0.9**	**0.9**	**0.9**	**0.9**	**1.0**	**0.8**
	Gas Consumption year-on-year change [%]	6.1%	4.8%	-1.9%	1.5%	0.0%	5.4%	-11.1%
	Gas Imports - by type (in bcm)	**0.9**	**0.9**	**0.9**	**0.9**	**0.9**	**0.9**	**0.8**
	Gas imports - pipeline	0.9	0.9	0.9	0.9	0.9	0.9	0.8
	Gas imports - LNG	0.0	0.0	0.0	0.0	0.0	0.0	-
	Gas Imports - by main source supplier (in bcm) (1)							
	Austria	0.5	0.7	0.6	0.8	0.8	0.8	0.7
	Russia	0.3	0.2	0.3	0.1	0.1	0.1	0.1

		2019	2020	2021	2022	2023
DIVERSIFICATION OF GAS SUPPLIES	**LNG Terminals - storage capacity m3 LNG**					
	Number of LNG Terminals	0	0	0	0	0
	LNG Storage capacity (m3 LNG)	0	0	0	0	0
	Underground Storage					
	Number of storage facilities	0	0	0	0	0
	Technical Capacity (bcm)	0.0	0.0	0.0	0.0	0.0

		2016	2017	2018	2019	2020	2021	2022	2023
ELECTRICITY/ENERGY	**Gross Electricity Production (GWh) (2)**	**16,500**	**16,326**	**16,327**	**16,100**	**17,191**	**15,877**	**13,616**	-
	Combustible Fuels	5,730	5,610	5,397	5,287	5,239	4,715	3,958	-
	Nuclear	5,715	6,285	5,776	5,821	6,353	5,706	5,606	-
	Hydro	4,782	4,141	4,893	4,683	5,225	4,997	3,401	-
	Wind	6	6	6	6	6	6	6	-
	Solar	267	284	255	303	368	453	646	
	Geothermal	-	-	-	-	-	-	-	-
	Other Sources	-	-	-	-	-	-	-	-
	Gross Electricity Production [%]								
	Combustible Fuels	34.7%	34.4%	33.1%	32.8%	30.5%	29.7%	29.1%	-
	Nuclear	34.6%	38.5%	35.4%	36.2%	37.0%	35.9%	41.2%	-
	Hydro	29.0%	25.4%	30.0%	29.1%	30.4%	31.5%	25.0%	-
	Wind	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-
	Solar	1.6%	1.7%	1.6%	1.9%	2.1%	2.9%	4.7%	-
	Geothermal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-
	Other Sources	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-
	Net Imports of Electricity (GWh)	**- 1,176**	**- 516**	**- 502**	**- 319**	**- 2,003**	**- 270**	**1,446**	-
	As a % of electricity available for final consumption	-9.0%	-3.8%	-3.6%	-2.3%	-15.4%	-2.0%	11.0%	-
	Electricity Interconnection [%]		**83.6%**	**73.6%**	**76.2%**	**78.9%**	**65.8%**	**75.6%**	**82.1%**
	Share of renewable energy consumption - by sector [%]								-
	Electricity	32.1%	32.4%	32.3%	32.6%	35.1%	35.0%	37.0%	-
	Heating/cooling	35.6%	34.6%	32.3%	32.1%	32.1%	35.2%	34.0%	-
	Transport	1.6%	2.6%	5.5%	8.0%	10.9%	10.6%	7.8%	-
	Overall	22.0%	21.7%	21.4%	22.0%	25.0%	25.0%	25.0%	-

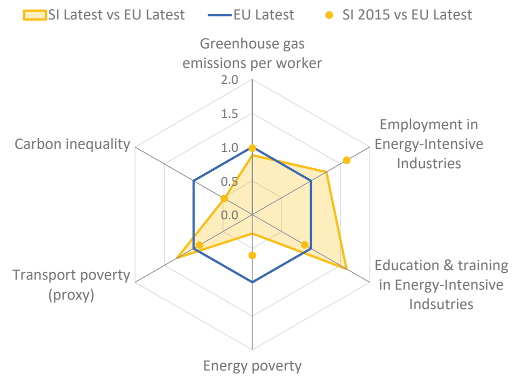
		2019	2020	2021	2022	2023
CLEAN ENERGY	**VC investments in climate tech start-ups and scale-ups (EUR Mln)**	**-**	**3.55**	**-**	**-**	**1.70**
	as a % of total VC investment (3) in Slovenia start-ups and scale-ups	-	32.4%	-	-	3.7%
	Research & Innovation spending in Energy Union R&i priorites					
	Public R&I (EUR mln)				-	-
	Public R&I (% GDP)	-	-	-	-	-
	Private R&I (EUR mln)	15.6	-	-	-	-
	Private R&I (% GDP)	0.032%	-	-	-	-

(1) The ranking of the main suppliers is based on the latest available figures (for 2022)
(2) Venture Capital investment includes Venture Capital deals (all stages), Small M&A deals and Private Equity (PE) growth deals (for companies that have previously been part of the portfolio of a VC investment firm or have received Angel or Seed funding).
Source: Eurostat, Gas Infrastructure Europe, JRC elaboration based on PitchBook data (03/2024), JRC SETIS (2024)

This Annex monitors Slovenia's progress in ensuring a fair transition towards climate neutrality and environmental sustainability, particularly for workers and households in vulnerable situations. Slovenia's green economy is expanding. Between 2015 and 2021, total jobs in the environmental goods and services sector grew by 19.7% (to around 30 200) (EU: 18.2%), reaching 3.1% of total employment (EU: 2.7%). Also between 2015 and 2022, the greenhouse gas (GHG) emission intensity of Slovenia's workforce (see Graph A8.1 and Table A8.1) declined from 14.1 to 12.6 tonnes per worker, below the EU average (14.3 tonnes per worker in 2022) ([58]), indicating a positive trend in the green transition. Slovenia has implemented some measures for a fair transition to achieving climate neutrality in line with the Council Recommendation on ensuring a fair transition towards climate neutrality ([59]), but more strategic orientation is needed. Green skills are integrated in some active labour market measures. Slovenia's recovery and resilience plan (RRP) addresses bottlenecks that prevent lasting and sustainable growth, while investments are targeted towards accelerating the transition towards a greener economy, maximising the benefits of digitalisation and ensuring social-economic cohesion and resilience. The Strategy for Greening Education and Research Infrastructure contributes to the green transition. The European Social Fund Plus (ESF+) contributes to job creation, upskilling and reskilling programmes for the green transition and circular economy.

Employment in Slovenia's sectors that are most affected by the green transition is slowly decreasing. In 2023, employment in Slovenia's energy-intensive industries comprised 4.4% of total employment (EU: 3.5%). Employment in mining and quarrying in 2023 was the same as in 2015, with some fluctuation in between, standing at 3 100 workers 2023). The job vacancy rate in construction (see Graph A8.2), a key sector for the green transition, is higher than the EU average (6.2% vs 3.6% in EU in 2023), in line with the perception of small and medium-sized enterprises (SMEs) in the sector, where 81% agreed that skills shortages are holding them back in general business activities ([60]). According to the European Labour Authority (ELA) ([61]), labour shortages were reported in 2023 for a number of occupations that required specific skills or knowledge for the green transition ([62]), including electrical engineers, insulation workers, and building and related electricians. At least 2.3% of ESF+ labour market support, such as activation programmes, will be focused on increasing the number of people with green skills.

Graph A8.1: **Fair transition challenges in Slovenia**



Source: Eurostat, EU Labour Force Survey, EMPL-JRC GD-AMEDI/AMEDI+ and DISCO(H) projects (see Table A8.1).

Upskilling and reskilling in declining and transforming sectors slightly increased, but skill shortages remain, causing bottlenecks. Skills are key for smooth labour market transitions and help keep workers in the labour market without their numbers being reduced. In energy-intensive industries, workers' participation in education and training increased from 9.6% in 2015 to 17.5% in 2023, above the EU average (10.9%). In Slovenia, 40% of the SMEs think that the skills required for greening business activities are becoming more important (EU: 42%) ([60]). If Slovenia matches its projected contribution to the EU's 2030 renewable energy target, between 200

([58]) Workforce-related calculations are based on the EU Labour Force Survey. Note, in the 2023 country report for Slovenia, such indicators were calculated based on employment statistics in the national accounts. This may result in limited comparability across the two reports.

([59]) The Council Recommendation of 16 June 2022 on ensuring a fair transition towards climate neutrality (2022/C 243/04) covers employment, skills, tax-benefit and social protection systems, essential services and housing.

([60]) Eurobarometer on skills shortages, recruitment, and retention strategies in small and medium-sized enterprises.

([61]) Based on the European Labour Authority 2024 EURES Report on labour shortages and surpluses 2023, i.e., data submitted by the EURES National Coordination Offices.

([62]) Skills and knowledge requirements are based on the European Skills Competences and Occupations (ESCO) taxonomy on skills for the green transition.

Table A8.1: **Key indicators for a fair transition in Slovenia**

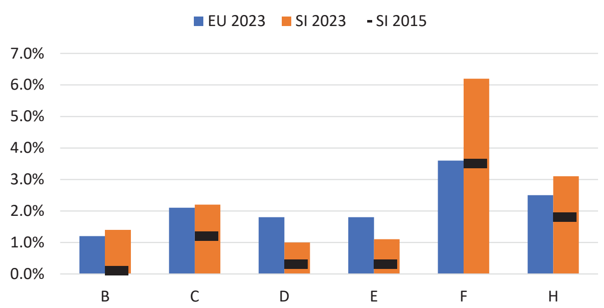
Indicator	Description	SI 2015	SI	EU
GHG per worker	Greenhouse gas emissions per worker - CO2 equivalent tonnes	14.1	12.6 (2022)	14.3 (2022)
Employment EII	Employment share in energy-intensive industries, including mining and quarrying (NACE B), chemicals (C20), minerals (C23), metals (C24), automotive (C29)	5.6%	4.4% (2023)	3.5% (2023)
Education & training EII	Adult participation in education and training (last 4 weeks) in energy-intensive industries	9.7%	17.5% (2023)	10.9% (2023)
Energy poverty	Share of the total population living in a household unable to keep its home adequately warm	5.6%	2.6% (2022)	9.3% (2022)
Transport poverty (proxy)	Estimated share of the AROP population that spends over 6% of expenditure on fuels for personal transport	33.5%	47.5% (2023)	37.1% (2023)
Carbon inequality	Ratio between the consumption footprint of the top 20% vs bottom 20% of the income distribution	1.3	1.3 (2021)	2.7 (2021)

Source: Eurostat (env_ac_ainah_r2, lfsa_egan2d, ilc_mdes01), EU Labour Force Survey (break in time series in 2021), EMPL-JRC GD-AMEDI/AMEDI+ and DISCO(H) projects.

and 1 000 additional skilled workers will be needed for the deployment of wind and solar energy, which may require an investment in skills of EUR 1.4-1.7 million (63). To address this challenge, specific investments under the Recovery and Resilience Facility and the Just Transition Fund provide training for reskilling workers in regions affected by the transition, together with a broader training offer at national level and flexibility mechanisms to encourage in-company training. In Slovenia, ESF+ funds will be invested into vocational education and training programmes, which also include measures on the green transition and the promotion of lifelong learning to help in the adaption to the digitalisation and automation of jobs.

Energy poverty indicators have worsened slightly following the spike in energy prices but remain well below the EU average. The share of the population unable to keep their homes adequately warm fell from 5.6% in 2015 to 2.6% in 2022, well below the EU average (9.3%) (64). However, the indicator increased by 0.9 percentage points between 2021 and 2022 on the back of energy price spike due to supply constraints caused by the COVID-19 pandemic and Russia's war of aggression against Ukraine, despite the emergency measures implemented in Slovenia, while increasing slightly to 2.6% in 2022. In 2022, only 7.3% of the population at risk of poverty (AROP) and 2.5% of lower middle-income households were affected. However, in January 2023, 47.5% of the AROP population spent more than 6% of their budget on private transport fuels (EU: 37.1%) (65). The Action Plan to Alleviate Energy Poverty was adopted in November 2023 for a three-year period. The budget of EUR 33.8 million (of which EUR 15 million from Cohesion policy - ERDF) earmarked for its implementation will support 8 000 households mainly through investments in renewables and energy-saving measures.

Graph A8.2: **Job vacancy rate in transforming sectors and mining and quarrying**



B - Mining and quarrying
C - Manufacturing
D - Electricity, gas, steam and air conditioning supply
E - Water supply; sewerage, waste management and remediation activities
F - Construction
H - Transportation and storage
Source: Eurostat jvs_a_rate_r2.

Air pollution remains a critical issue leading to environmental inequalities in Slovenia. The average levels of air pollution in 2021 stood above the EU average (12.2 vs 11.4 µg/m³ PM2.5), with 87% of the population living in regions exposed to critical levels of air pollution (66). This has led to a significant impact on health, affecting vulnerable groups in particular, and an estimated 1 191 premature deaths annually due specifically to air pollution (67). In 2021, the consumption footprint of

(63) EMPL-JRC AMEDI+ project.

(64) Energy poverty is a multi-dimensional concept. The indicator used focuses on an outcome of energy poverty. Further indicators are available at the Energy Poverty Advisory Hub. Methodology explained in Economic and distributional effects of higher energy prices on households in the EU.

(65) Affordability of private transport fuel is one key dimension of transport poverty. The indicator has been developed in the context of the EMPL-JRC GD-AMEDI/AMEDI+ projects.

(66) Two times higher than the recommendations in the WHO Air Quality Guidelines (annual exposure of 5µg/m³).

(67) EEA- Air Quality Health Risk Assessment

the 20% of the population with the highest income was 1.3 times the footprint of the poorest 20% (EU: 1.8) ([68]). For both groups, the footprint is highest for food and housing.

A stronger and more strategic orientation of a fair transition towards climate neutrality is needed. While green skills are integrated in some active labour market measures, no operational definition of 'green' currently exists at national level. Slovenia would benefit from a strategic cross-cutting policy orientation, addressing research gaps related to labour and social aspects of the green transition and analyse its impact on the labour market. Slovenia has a very well-developed system of enabling access to finance and markets for SMEs. Slovenia would benefit from a growth-friendly and green tax reform which could enable a shift away from labour taxation and further stimulate labour supply and sustainable growth through a higher proportion of recurrent property taxes. Furthermore, it should be ensured that social partners, especially workers' organisations, and civil society actively and meaningfully participate in the decision-making process, to achieve a just and fair transition ([69]).

([68]) Developed in the context of the EMPL-JRC DISCO(H) project. Methodology explained in [Joint Research Centre, 2024. Carbon and environmental footprint inequality of household consumption in the EU. JRC137520](). The EU average refers to EU27 without Italy (household income data not available for IT in the HBS)

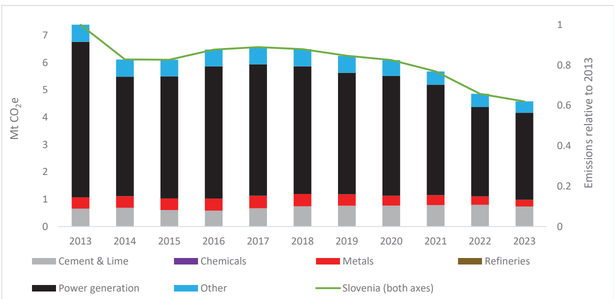
([69]) Based on the monitoring review of the Council Recommendation on ensuring a fair transition towards climate neutrality, which took place in October 2023.

ANNEX 9: RESOURCE PRODUCTIVITY, EFFICIENCY AND CIRCULARITY

The green transition of industry and the built environment, in particular decarbonisation, resource efficiency and circularity, is essential to boost Slovenia's competitiveness ([70]). In this regard, priorities for Slovenia are the use of circular materials and the uptake of circular business models in industry and construction.

Slovenia is on track to achieve the EU Circular Economy Action Plan's goals. However, the material footprint is still higher than the EU average. After a drop in 2019 and 2020, it increased to 16.6 tonnes per capita in 2022 – versus an EU average of 14.9 tonnes per capita. Between 2010 and 2020, the amount of total waste produced increased from 2.3 to 3.6 tonnes per capita, below the EU average. The draft updated national energy and climate plan recognises circular economy as a key tool for decarbonisation and competitiveness. Slovenia identifies the transition to low-carbon circular economy as a key priority for the overall sustainable development of the country. To increase material efficiency, it identifies a set of measures in research and innovation, public procurement, waste prevention, product design, reuse, reparability of products and public awareness as well as legislative amendments.

Graph A9.1: **ETS emissions by sector since 2013**



Source: European Commission

In 2023, the sectors covered by the EU emissions trading system (ETS) in Slovenia ([71]) emitted 27% less greenhouse gases than in 2019, with the largest decrease between 2021 and 2022. In 2023, 70% of greenhouse gases emitted by Slovenia's ETS installations came from power generation, significantly more than the EU average (57%). Of the total emissions from all industry sectors, cement, and lime production emitted 53%, 30% came from other industries ([72]), and 18% from the metals industry. Between 2019 and 2023, the power sector registered a higher emissions reduction (28%) than the industry sectors (23%). Between 2013 and 2023, greenhouse gas emissions declined by 44% in power generation and by 18% in industrial manufacturing, leading to a total greenhouse gas reduction of 38% in this period. There is still room for improving Slovenia's industrial efficiency. In 2022, the secondary material use rate dropped to 9.4% versus an EU average of 11.5%. Resource productivity increased at a slower pace and reached 2.04 purchasing power standards per kilogram (PPS/kg) in 2022 versus an EU average of 2.45 PPS/kg. Resource productivity expresses how efficiently the economy uses material resources to produce wealth. Improving resource productivity can help minimise negative impacts on the environment and reduce dependence on volatile raw material markets. Slovenia was dependent on imports for 46.3% of materials used in 2022, compared with an EU average of 22.4%, making the country comparatively more vulnerable to supply chain disruptions. To tackle water scarcity, Slovenia reused 26.25 million m3 of water in 2019 for industrial and agricultural activities.

Slovenia's industry is progressing in taking up circular economy approaches. The 2022 Eco-Innovation Scoreboard placed the country in the 'eco-innovation average performers group', with a score of 115.9. As of September 2023, Slovenia totalled 60 awarded EU Ecolabel licences and 158 products with the EU Ecolabel, showing a rather low but steadily increasing take-up of products and licences.

([70]) See also Annexes 6, 7 and 12.

([71]) This analysis excludes air travel. For more details and the data sources, see Weitzel, M; van der Vorst, C. (2024), Uneven progress in reducing emissions in the EU ETS, JRC Science for policy brief, JRC138215, Joint Research Centre.

([72]) Of the greenhouse gas emissions classified as coming from the 'other' group, it appears that 50% in fact relate to the manufacture of paper and paperboard, and 20% (in 2023) to the manufacture of certain non-metallic mineral products (NACE code 23.99).

Table A9.1: **Circularity indicators**

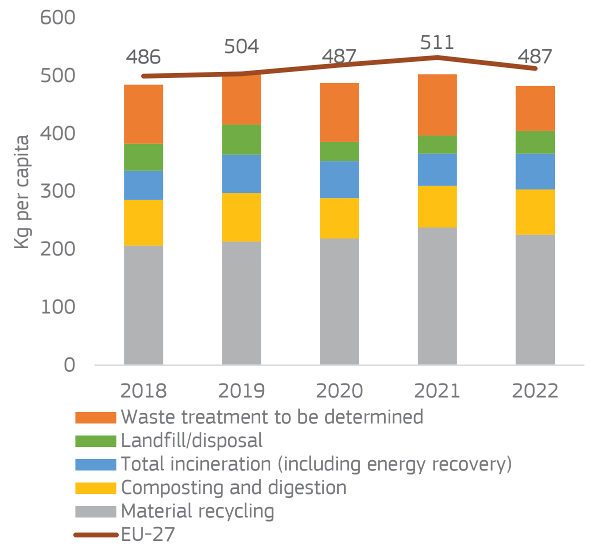
	2018	2019	2020	2021	2022	2023	EU-27	Latest year
Industry								
Resource productivity (purchasing power standard (PPS) per kilogram)	1.8	2.1	2.0	2.1	2.0	-	2.5	2022
Circular material use rate (%)	10.0	10.2	9.9	10.1	9.4	-	11.5	2022
Eco-innovation index (2013=100)	97.0	100.4	106.8	111.0	115.9	-	121.5	2022
Recycling of plastic packaging (%)	48.8	50.3	44.6	50.0	-	-	40.7	2021
Cost of air emissions from industry (EUR bn)	2.0	1.6	1.5	1.6	-	-	352.7	2021
Built environment								
Recovery rate from construction and demolition waste (%)	98.0	-	97.0	90.4	-	-	89.0	2020
Soil sealing index (base year = 2006)	103.1	-	-	-	-	-	103.4	2018
Non-residential floor area (m^2 per capita)	15.5	15.6	15.6	-	-	-	18.0	2020
Waste backfilled (%)	-	-	-	-	70.6	-	9.9	2020

Source: Eurostat, European Environment Agency

Slovenia has made significant progress with its waste management system over the last decade, but there is still room for improvement. The municipal waste recycling rate stood at 62.6% in 2022, meeting the 2025 recycling target of 55% well in advance. With a recycling rate of plastic packaging at 50% in 2021, the country has also reached the packaging waste recycling targets for 2025. Still, problems exist with the purity of separately collected waste and the management of disposed packaging. Furthermore, Slovenia is among the top performers in e-waste recycling, with a rate of 87.1% in 2021. Moreover, the country is not at risk of missing the 2035 landfilling target. Innovation in waste treatment technologies is still low, as illustrated by the fact that no new patents were registered in 2021.

Slovenia could use its existing building stock more efficiently. In 2023, Slovenia's building permits index, based on useful floor area, stood at 169.6 ([73]) on average. Construction activity has been increasing since 2015. In 2020, the residential floor area per capita was 35.70 m2 per capita, versus an EU average of 52.33 m2 per capita. The non-residential floor area per capita also stood below the EU average in 2020, at 15.64 m2 per capita versus an EU average of 19.40 m2 per capita; it has remained relatively stable over time ([74]). Slovenia submitted a long-term renovation strategy in 2020. It recognises building construction and renovation as a priority area for the transition to a low-carbon circular economy.

Graph A9.2: **Treatment of municipal waste**



Source: Eurostat

The built environment could decrease its waste generation and improve its treatment of wastewater. Construction and demolition waste per capita increased between 2012 and 2020 but remained below the EU average. Slovenia's recovery rate stood at 90.4% in 2021. Despite improvements, Slovenia does not perform well in wastewater treatment yet. The population connected to at least secondary wastewater treatment was only 67.6% in 2021, below the EU average of 80.9%. It is necessary to prioritise alignment with the higher EU standards to reduce environmental pressures and pollution of water ecosystems and to restore biodiversity of rivers, lakes, and sea waters.

([73]) 2015=100. Statistics | Eurostat (europa.eu)

([74]) EU Building Stock Observatory - Factsheets (europa.eu).

Digital transformation is key to ensuring a resilient and competitive economy. In line with the Digital Decade Policy Programme, and in particular with the targets in that Programme for digital transformation by 2030, this Annex describes Slovenia's performance on digital skills, digital infrastructure/connectivity and the digitalisation of businesses and public services. Where relevant, it makes reference to progress on implementing the Recovery and Resilience Plan (RRP). Slovenia allocates 20% of its total RRP budget to digital (EUR 0.5 billion) ([75]). Under Cohesion Policy, an additional EUR 0.3 billion (9% of the country's total Cohesion Policy funding) is allocated to the country's digital transformation ([76]).

The Digital Decade Policy Programme sets out a pathway for EU's successful digital transformation by 2030. Slovenia's national roadmap outlines the actions it intends to take to reach the objectives and targets at national level. The first Report on the State of the Digital Decade highlighted the need to accelerate and deepen the collective efforts to reach the EU-wide targets and objectives ([77]). Among others, a digitally skilled population increases the development and adoption of digital technologies and leads to productivity gains and new business models. It also leads to higher inclusion and participation in an environment increasingly shaped by the digital transformation ([78]). Digital technologies, infrastructure and tools all play a role in addressing the current structural challenges, including strategic dependencies, cybersecurity and climate change.

([75]) The share of financial allocations that contribute to digital objectives has been calculated using Annex VII to the Recovery and Resilience Facility Regulation.

([76]) This amount includes all investment specifically aimed at or substantially contributing to digital transformation in the 2021-2027 Cohesion Policy programming period. The source funds are the European Regional Development Fund, the Cohesion Fund, the European Social Fund Plus, and the Just Transition Fund.

([77]) European Commission (2023): Report on the State of the Digital Decade 2023, [2023 Report on the state of the Digital Decade | Shaping Europe's digital future (europa.eu)].

([78]) See for example OECD (2019): OECD Economic Outlook, Digitalisation and productivity: A story of complementarities, [OECD Economic Outlook, Volume 2019 Issue 1 | OECD iLibrary (oecd-ilibrary.org)] and OECD (2019): Going Digital: Shaping Policies, Improving Lives – Summary, https://www.oecd.org/digital/going-digital-synthesis-summary.pdf.

In digital skills, Slovenia's performance is below the EU average, and the need for a digitally skilled workforce remains a key challenge. Slovenia's performance on basic digital skills, ICT specialists and female ICT specialists has decreased and remains below the EU average. Moreover, the country remains far behind innovation leaders in the EU. 78% of Slovenian enterprises that recruited ICT specialists reported difficulties in finding sufficiently skilled employees, which is the highest percentage in the EU ([79]).

In digital infrastructure/connectivity, Slovenia shows a mixed performance. The country's gigabit connectivity, measured by very high capacity network (VHCN) coverage, is around the EU average, but the country still faces challenges in rural areas, where only 57% of households are covered. Overall 5G coverage continues to improve considerably, but still remains below the EU average. As set out in its RRP, Slovenia engages considerably in EU-wide collaboration to develop infrastructure for advanced technologies by participating in multi-country projects on cloud infrastructure and services, semiconductors and quantum communication infrastructure.

The performance of Slovenia in the digitalisation of businesses slightly declined. The country performs below the EU average for SMEs with at least a basic level of digital intensity. It also scores below the EU average for the indicator that measures – in alignment with the respective Digital Decade target – the take-up of at least one of the following three technologies: cloud services, data analytics (big data) or artificial intelligence. In more detail, Slovenia has the lowest score in the EU for the use of data analytics, enterprises' performance in using cloud services has slightly declined, while it remains rather stable on AI. Moreover, there is room for improvement in the expenditure on R&D in the ICT sector. . The RRP includes measures to support the digitalisation of companies that aim to improve performance in this area. One example is the Business Digital Transformation Programme, under which consortia of large companies and SMEs collaborate to extend the use of advanced technologies and the transfer of digital competences. In 2022, 2.2% of enterprises in

([79]) Source: Eurostat – European Union Survey on ICT Usage and e-Commerce in Enterprises.

Table A10.1:**Key Digital Decade targets monitored by the Digital Economy and Society Index indicators**

	Slovenia 2022	Slovenia 2023	Slovenia 2024	EU 2024	Digital Decade target by 2030 (EU)
Digital skills					
At least basic digital skills	**50%**	**50%**	**47%**	**56%**	**80%**
% individuals	2021	2021	2023	2023	2030
ICT specialists ([1])	**4.8%**	**4.5%**	**3.8%**	**4.8%**	**20 million**
% individuals in employment aged 15-74	2021	2022	2023	2023	2030
Digital infrastructure/connectivity					
Fixed very high capacity network (VHCN) coverage	**72%**	**76%**	**79%**	**79%**	**100%**
% households	2021	2022	2023	2023	2030
Fibre to the premises (FTTP) coverage ([2])	**72%**	**76%**	**79%**	**64%**	**-**
% households	2021	2022	2023	2023	
Overall 5G coverage	**37%**	**64%**	**82%**	**89%**	**100%**
% populated areas	2021	2022	2023	2023	2030
Digitalisation of businesses					
SMEs with at least a basic level of digital intensity	**55%**	**NA**	**50%**	**58%**	**90%**
% SMEs	2021		2023	2023	2030
Data analytics	**NA**	**NA**	**19%**	**33%**	**-**
% enterprises			2023	2023	
Cloud	**38%**	**38%**	**36%**	**39%**	**-**
% enterprises	2021	2021	2023	2023	
Artificial intelligence	**12%**	**12%**	**11%**	**8%**	**-**
% enterprises	2021	2021	2023	2023	
AI or cloud or data analytics ([3])	**NA**	**NA**	**45%**	**55%**	**75%**
% enterprises			2023	2023	2030
Digitalisation of public services					
Digital public services for citizens	**69**	**71**	**77**	**79**	**100**
Score (0 to 100)	2021	2022	2023	2023	2030
Digital public services for businesses	**84**	**83**	**84**	**85**	**100**
Score (0 to 100)	2021	2022	2023	2023	2030
Access to e-health records	**NA**	**80**	**88**	**79**	**100**
Score (0 to 100)		2022	2023	2023	2030

([1]) The 20 million target represents about 10% of total employment.
([2]) The fibre to the premises coverage indicator is included separately as its evaluation will also be monitored separately and taken into consideration when interpreting VHCN coverage data in the Digital Decade.
([3]) At least 75 % of Union enterprises have taken up one or more of the following, in line with their business operations: (i) cloud computing services; (ii) big data; (iii) artificial intelligence.

Source: Digital Economy and Society Index

Slovenia reported ICT service outage due to cyberattacks (e.g. ransomware attacks, denial of service attacks). Over the same year, 27% of enterprises developed or reviewed their ICT security policy within the previous 12 months.

Slovenia performs fairly well on digitalisation of public services. It is coming closer to catching up with the EU average for digital public services for citizens and is very close to the EU average for digital public services for businesses. By contrast, access to electronic health records for citizens is above the EU average (with a score of 88 out of 100 versus 79). Many of the digital transformation measures in the Slovenian RRP are focused on public services. Among others, to remove obstacles to the provision of digital public services and processes, including to enlarge the scope of electronic procedures in administrative processes.

Slovenia is a 'moderate innovator', and the country's performance gap with the EU is becoming larger. According to the 2023 edition of the European Innovation Scoreboard ([80]), its innovation performance increased by 2.9 percentage points since 2016, at a lower rate than the EU's (8.5pp). Its overall performance remains slightly below the EU average (95.1% of the EU performance). The main obstacles hindering Slovenia's performance continue to be low levels of venture capital and of R&D expenditure in the public sector.

R&D intensity ([81]) stood at 2.11% of GDP in 2022, below the European average (2.24%) and still far from its 2013 level (2.56%). After a sharp decline between 2014 and 2017, R&D intensity has been on an increasing trend since 2018. To sustain this trend, the Slovenian scientific research and innovation strategy 2030 contains clear commitments to raising R&D investments with a view to reaching a target of 1.25% of GDP for public R&D investment and 3.5% of GDP for total R&D investment by 2030 ([82]). As such, it aims to provide a stable and predictable framework for R&I funding over the long term.

Slovenia is taking concrete steps to improve R&I governance and enhance the performance of its public research system. Public R&D intensity, which steadily declined between 2010 and 2017, has been on an increasing trend since then and reached 0.60% of GDP in 2022. It is not yet back to its 2010 level, however, and remains below the EU average. Human resources are a competitive advantage and Slovenia scores highly when it comes to population involved in lifelong learning. The percentage of new graduates in science and engineering is close to the EU average and Slovenia ranks relatively high in the number of researchers employed by the business sector. While the country's scientific performance, measured by the share of scientific publications within the top 10% most-cited publications worldwide, has improved over the last decade, it remains below the EU average. With the adoption of the Act on Research, Development and Innovation Activities, which is part of the recovery and resilience plan (RRP), Slovenia introduced a key reform aimed at introducing performance-based funding of research organisations and facilitating researchers' mobility and the recruitment of foreign talents. In addition, a new Programme Committee was recently established to improve the coordination of R&I policy among the different actors involved.

Stronger links between academia and businesses are essential for the deployment of innovations which are critical for the twin transition. While the share of public-private scientific co-publications continues to increase, reaching its highest level since its peak in 2014 (9.8% of total number of publications), Slovenia's public expenditure on R&D financed by businesses ([83]) remains low (0.032% of GDP and 5.81% of total public expenditure on R&D). The adoption of the Scientific Research and Innovation Activities Act enables more effective and consistent implementation of scientific research and innovation policy measures. A new joint Public Agency for Scientific Research and Innovation Activities of the Republic of Slovenia (ARIS) was established, adding an innovation component to existing research activities. The new ARIS introduced an innovation pillar to scientific work to enhance the link and transition from basic research to application, and the connection between scientific research and society. This makes it an important step in improving knowledge transfer. Nevertheless, supportive measures, such as improving coordination of relevant stakeholders, need to be strengthened ([84]), building on the efforts already put in place as part of Slovenia's smart specialisation strategy. These efforts aim to integrate the economy, knowledge institutions, local communities, the state, and other innovation stakeholders (quintuple helix) through the enhancement of strategic research and innovation partnerships (SRIPs).

([80]) 2023, European Innovation Scoreboard, country profile: Slovenia, ec_rtd_eis-country-profile-si.pdf (europa.eu).

([81]) Defined as gross domestic expenditure on R&D as a percentage of GDP.

([82]) Resolution on the Slovenian scientific research and innovation strategy 2030 (ReZrIS30), adopted by the National Assembly on 23 March 2022.

([83]) The indicator shows the volume of contractual research, e.g. companies funding research institutions to conduct research for them.

([84]) STIP Compass (OECD) https://stip.oecd.org/stip/interactive-dashboards/countries/Slovenia.

Table A11.1:**Key innovation indicators**

Slovenia	2010	2015	2020	2021	2022	EU average (1)
Key indicators						
R&D intensity (GERD as % of GDP)	2.05	2.2	2.14	2.13	2.11	2.24
Public expenditure on R&D as % of GDP	0.66	0.52	0.56	0.55	0.6	0.73
Business enterprise expenditure on R&D (BERD) as % of GDP	1.39	1.67	1.57	1.56	1.48	1.48
Quality of the R&I system						
Scientific publications of the country within the top 10% most cited publications worldwide as % of total publications of the country	6.2	6.8	7.75			9.6
Patent Cooperation Treaty (PCT) patent applications per billion GDP (in PPS)	3.1	1.8	1.97			3.4
Academia-business cooperation						
Public-private scientific co-publications as % of total publications	7.8	9.2	9.5	9.7	9.8	7.6
Public expenditure on R&D financed by business enterprise (national) as % of GDP	0.08	0.05	0.037	0.032		0.054
Human capital and skills availability						
New graduates in science & engineering per thousand pop. aged 25-34	13.5	14.6	15.2	16		16.9
Public support for business enterprise expenditure on R&D (BERD)						
Total public sector support for BERD as % of GDP	0.228	0.226	0.227			0.204
R&D tax incentives: foregone revenues as % of GDP	0.052	0.118	0.082			0.104
Green innovation						
Share of environment-related patents in total patent applications filed under PCT (%)	9.95	8.63	4.5			14.7
Finance for innovation and economic renewal						
Venture capital (market statistics) as % of GDP	0.001	0.009	0.002	0.003	0.007	0.085
Employment share of high growth enterprises measured in employment (%)		10.59	10.68			12.51

(1) EU average for the latest available year with the largest number of country data.
Source: Eurostat, OECD, DG JRC, Science Metrix (Scopus database and EPO's Patent Statistical Database), Invest Europe

The lack of venture capital continues to hinder innovative start-ups from scaling up in Slovenia. Venture capital investment in Slovenia amounts to 0.007% of GDP, which is the second lowest value in the EU. Access to finance during the scale-up stage remains a challenge for innovative SMEs, which affects investment-intensive sectors such as deep-tech and manufacturing (also see Annex 12). If implemented well, the recently adopted strategy for the development of the capital market could stimulate the advancement of innovative SMEs with high potential for fast and sustainable growth.

Slovenia is underperforming in developing environment-related technologies but is keen to improve. A high share of energy-intensive industry implies vulnerability in complying with climate policies and Slovenia shows weaker performance when it comes to the development of green technologies[85], as reflected in the limited share of environment-related patents in all patents filed under the PCT. The transition to a low-carbon circular economy depends on the development of new breakthrough technologies. Slovenia counts several demonstrators for low-carbon technologies funded by the EU but needs to accelerate innovation as well as pilot and demonstration activities and increase investment incentives for this purpose[86]. For 2024, the RRP for Slovenia envisages the co-financing of R&I investments that could help the country increasingly mobilise its R&I capacities towards the twin transition.

(85) 2023, European Innovation Scoreboard, country profile: Slovenia, ec_rtd_eis-country-profile-si.pdf (europa.eu). Climate change indicators compared to EU.

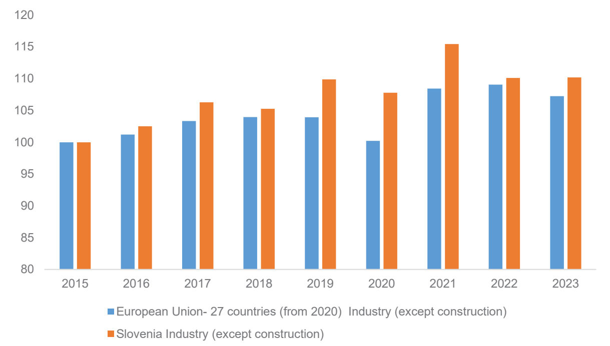
(86) Demonstrators are projects that demonstrate how technologies function in a suitable or operational environment. Their aim is to accelerate the transfer and uptake of clean innovative technologies and private and public follow-up financing for their faster deployment.

Following a quick recovery from the COVID-19 pandemic, Slovenia's competitiveness is facing challenges. The IMD World Competitiveness Center ranks the country as 42nd out of 64 in 2023. Slovenia's slight downward trend related to business and government efficiency since 2019 has continued after a small upward movement in 2022 ([87]). Inflation, high energy and raw material prices, a rising producer price index, and global supply chain constraints have particularly impacted the competitiveness of export-oriented industries (e.g. aluminium and steel and paper companies, the chemical industry and the automotive ecosystem). Competitiveness indicators have deteriorated overall (including for energy-intensive industries) with production volumes decreasing and unit labour costs increasing ([88]). These industries are also facing challenges and report a lack of funds to finance their transition to net-zero, which is also hampered by lengthy administrative procedures and a lack of investment in research and development.

Slovenia is a small, open and diversified economy with one of the highest rates of trade integration for goods in the single market. However, in terms of services trade, Slovenia is among the group of Member States with the highest restrictiveness (Table A12.1). The economy continues to integrate into global value chains, for instance by upgrading production with other functions, such as research and development. This is reflected in increasing economic complexity and a higher share of exports of medium- and high-technology intensive products ([88]). Intra-EU trade represented 61.4% of GDP in 2023 (mostly due to this high integration of trade in goods) (Table A12.1), so Slovenian exports are very concentrated. They are therefore dependent on economic developments in certain markets and vulnerable to cost pressure and decreasing foreign demand, with Germany, Italy, Austria and Croatia as Slovenia's main trading partners. Slovenia exported and imported a smaller share of goods within the single market in 2023 than in 2022, with trade in goods with non-EU countries increasing considerably (particularly exports) ([89]). However, this trend is largely due to transactions by one pharmaceutical company between its logistical centre in Slovenia and headquarters in Switzerland.

The productivity gap with the EU average persists and is currently at levels similar to those before the 2008 financial crisis. In 2023, Slovenia's labour productivity stood at around 85% of the EU average in terms of GDP in purchasing power standards per hour worked as well as per person employed ([90]). A rather low level of private investment is hampering productivity growth as well as the country's innovation capacity. However, as regards growth of total factor productivity (TFP), Slovenia is outpacing its neighbours Croatia, Italy and Hungary. TFP therefore provides robust support to labour productivity growth, with the overall deceleration in labour productivity due to the negative contribution of capital deepening.

Graph A12.1: **Real labour productivity in industry per hour worked**



Source: Eurostat, NAMA_10_LP_A2 ; Index, 2015=100

Labour productivity in industry is above the EU average and a key driver of productivity in this very industrialised economy (see Graph A12.1). Over the last few years, Slovenia's productivity growth in industry has been faster than the EU average. Following a decline of 4.6% in 2022, which had followed a considerable growth of 7.1% in 2021 - a rebound from 2020 – 2023 saw a very modest growth of labour productivity in industry (0.1%) (see Graphs A12.1 and A12.2). Furthermore, the share of Slovenian industry in terms of value added to GDP remains higher than the EU average (28.1% in 2022 vs 23.5%) ([91]). Persistent labour shortages in industry, for which Slovenia has one of the highest

([87]) IMD World Competitiveness Ranking.

([88]) IMAD Productivity Report 2023.

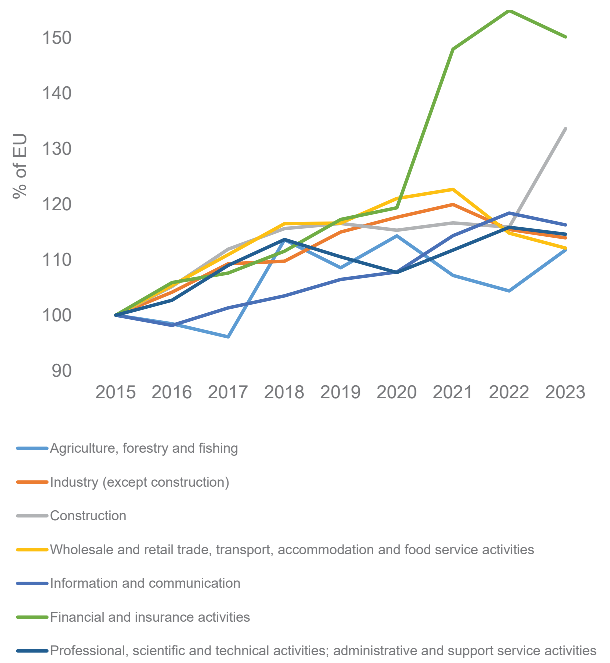
([89]) Statistical Office of the Republic of Slovenia.

([90]) AMECO database, European Commission.

([91]) World Bank - Industry, value added (% of GDP).

rates in the EU (Table A12.1), present a further challenge, with vacancy rates also above the EU average (regarding labour and skills shortages, see also Annex 14). This problem is exacerbated by an ageing population and a shrinking number of people in the most active age group (20-64 years) ([88]). A particular shortage of ICT specialists may also complicate digital transition of the economy (see also Annex 10).

Graph A12.2: **Labour productivity and unit labour costs at industry level**



Source: Eurostat, NAMA_10_LP_A21 ; Index, 2015=100

Challenges remain despite measures to improve the business environment. Slovenia has taken several measures in recent years to make it easier to do business, to reduce the administrative burden (for instance by amending insolvency legislation and establishing a one-stop-shop / single point of contact system for businesses) and to attract investment. Overall, however, obstacles to companies remain rather high and are related to, for instance, the efficiency of state institutions, excessive red tape and lengthy procedures ([92]). The Slovenian recovery and resilience plan (RRP) also aims to address such challenges through, for instance, the two Debureaucratisation Acts, which endeavour to reduce the burden of and digitalise administrative procedures.

Slovenia has successfully advanced to the production stage with the Once-Only Technical System (OOTS) ([93]), showcasing its capability through successful cross-border OOTS transactions during a test dry-run. As part of the Single Digital Gateway Regulation ([94]), the system will enable the automated cross-border exchange of evidence between competent authorities, improving online access to information, administrative procedures and assistance within the EU. The onboarding of Slovenian competent authorities is crucial for the system to function smoothly and to reduce administrative burden.

Tackling process-related barriers related to the deployment of renewables is particularly important for the energy transition, decarbonisation and ensuring Slovenia's energy security. Such barriers, as reviewed by the Single Market Enforcement Taskforce (SMET), concern lengthy permitting procedures and understaffed authorities. Slovenia is implementing measures (including through the RRP) to address these issues, but permitting procedures can still be very lengthy (see also Annex 7). Slovenia's high level of industrialisation provides opportunities regarding the manufacturing of net-zero technologies and Slovenian companies are already active in the production of heat pumps, PV modules, batteries and storage (see also Annex 7). However, Slovenia is underperforming in the development of such technologies and this is reflected in its low share of environment-related patents (see Annex 11).

Slovenia is an attractive location for foreign direct investment and its economic growth has outpaced that of many other EU Member States in recent years. However, a more modest rate of growth due to inflation, high energy prices and the impact of Russia's war of aggression against Ukraine may affect FDI in the future. In 2022, the largest FDI investor in the country was Austria (with a focus on manufacturing and trade, maintenance and repair of motor vehicles) followed by Luxembourg, Switzerland, Germany and Croatia. Regarding investment in general, a lower share of firms than the EU average is reporting investment obstacles (Table A12.1),

([92]) IMAD Development Report 2023.

([93]) Implementing Regulation (EU) 2022/1463.

([94]) Regulation (EU) 2018/1724.

despite an increase of this share in 2023 compared to 2022 [95].

With an underdeveloped equity market, financing is heavily skewed towards loans, and access to finance remains a challenge for companies (particularly SMEs). Access to loans remains above the EU average (Table A12.1 with Slovenia also having one of the lowest shares of rejected or refused loans. However, as measured by the equity composite indicator in the EIF Access to Finance Index, Slovenia remains one of the weakest performers when it comes to access to equity finance and its ranking compared with the other EU Member States even deteriorated in 2022 (compared with 2021) [96]. Furthermore, Slovenia has a very low ratio of venture capital investment to GDP, and this affects companies' innovation capacity (see also Annex 11). The number of investors in the market is small, with institutional investors only playing a limited role [97]. Strengthening their role would help preserve capital market liquidity [88]. Policy action in this area, also related to strengthening institutional investors, will benefit SMEs during their scale-up stage. Through its RRP, Slovenia has been taking action to develop its capital market and improve access to finance (for instance, through its Alternative Investment Funds Act and its Capital Markets Development Strategy).

Competition in public procurement remains a challenge. Despite a decrease in 2023 compared to the preceding 3 years, Slovenia's 44% share of contracts awarded where there was just a single bidder is still very high and significantly above the EU average of 28% [98]. In addition, a quarter of all procedures in 2023 were unsuccessful [99]. However, while Slovenia's share of direct awards was still above the EU average, it was reduced from a high 26% in 2020 to 11% in 2022 and 10% in 2023 [100]. A very low share of contracts awarded to bidders from other countries (part of the Single Market and beyond) results in a business environment with few new entrants. This further aggravates the lack of competition in this very small procurement market with its structural deficiencies, high fragmentation of the public procurement system and complex regulatory structure where public procurement legislation is subject to frequent revisions [101].

To address these challenges, Slovenia has started to implement several RRP measures to increase competition, digitalisation and professionalisation of public procurement. The implementation of reforms is ongoing. The development of the planning process, thorough preparation of public procurement procedures, automation of processes and the encouragement of foreign bidders to participate in the market could further contribute to a more competitive environment and reduce the number of contracts awarded based on the lowest price instead of on the quality criterion or the best price-quality ratio. Moreover, greater interoperability of e--procurement platforms will decrease administrative burdens and improve access to the public procurement market. In addition, an aggregation of demand techniques can also increase cost-effectiveness and professionalisation and lead to a further reduction in the share of negotiated procedures without prior publication.

The government has taken important steps to more strategically leverage the 14,11% of GDP that Slovenia spends on public procurements. In 2022, to enable the development and use of innovative solutions by public authorities, the government adopted guidelines for innovative public procurement. It has also been developing a measurement framework to monitor the environmental, social and economic effects of green public procurement (GPP). Measurement results create a baseline for the monitoring of the effects of GPP over time and can be used to improve GPP policies.

The share of SMEs in the economy is higher than the EU average in terms of employment (73.3% compared to 64.4%) and value added (66.9% compared to 51.8%) [102], with

(95) EIB Investment Survey 2022.

(96) EIF SME Access to Finance Index.

(97) Bank of Slovenia Financial Stability Review of October 2023.

(98) The currently available data are preliminary. The technical preparation of a new public procurement platform means that only the regular data available in Tenders Electronic Daily (TED) have been taken into account.

(99) Commission calculations, based on TED.

(100) European Commission Single Market Scoreboard.

(101) Ministry of Public Administration, statistical report on contracts awarded in 2022.

(102) SME Performance Review 2022/2023.

domestically-oriented SMEs generally recording lower productivity levels than export-oriented companies ([103]). The government has various schemes to support their growth and development through financial incentives and a strategy for export promotion, with the aim of ensuring long-term competitiveness and resilience as well as attracting sustainable investment. However, the most serious problem identified by Slovenian SMEs is the availability of staff with the right skills, and this may lead to an increasing workload for existing staff, increased production costs, loss of sales and reduced productivity ([104]).

Late payments can affect some businesses, (particularly SMEs), but they are not a widespread problem. The share of SMEs reporting late payments is below the EU average and decreased in 2023 (compared to 2022). Furthermore, Slovenia has the smallest payment gap in the EU (i.e. the gap between the agreed and actual payment times) when it comes to private sector/business-to-business as well as public sector payments (with an average of 12 and 9 days respectively). The payment gap for public sector payments clearly decreased in 2023 (compared to 2022) (Table A12.1). A considerably lower share of companies reports that they were asked to accept longer payment times than they felt comfortable with from the public sector compared with the private sector. However, 47% of enterprises report that they are finding it increasingly difficult in today's business environment to agree on payment terms which are fair for both sides ([105]).

The role of state-owned enterprises (SOEs) may be hampering investment, market entry and competition in some sectors. Despite improvements in the profitability of asset management of state-owned equity stakes, a lack of good corporate governance in SOEs may increase inefficiency and impair competitiveness, with research pointing to the interference of the State and politics in company operations ([92]). The Slovenian State also continues to maintain a stake in non-strategic sectors (e.g. tourism).

Barriers also remain in other areas that impact the business environment (e.g. professional services). In the past, Slovenia reduced the number of regulated professions to some extent (particularly in the crafts sector), but regulatory restrictiveness is higher than the EU average for professions such as real estate agents, lawyers, civil engineers, architects and tourist guides ([106]). Reducing regulatory barriers in the professional services sector will make entry easier and improve quality and prices (the RRP does not cover this aspect). The fragmented system regulating civil engineers could hinder the free movement of professionals. The rules dividing responsibility between different categories of professionals in the same area of activity could reduce the proportionality and efficiency of service provision. Variations in regional regulations governing tourist guides seem to hinder market access and affect both national and cross-border service providers.

Related to the country's Single Market performance, Slovenia recorded another improvement in its transposition deficit in 2023. This figure dropped to 0.8% (slightly above the EU average of 0.7%), which puts Slovenia back on track to reach the 0.5% target proposed in the Single Market Act. The conformity deficit (i.e. the percentage of all directives transposed incorrectly) improved, decreasing to 0.8%, which is now below the EU average. Slovenia remains below the EU average as regards the number of infringement cases (Table A12.1). In 2023, Slovenia solved 50% of the SOLVIT cases (8) it handled as lead centre (below the EU average of 88.3%) ([100]).

The launch of the unitary patent system on 1 June 2023 was a watershed moment in the completion of the EU Single Market for technology, with Slovenia being one of the 17 Member States that became part of the system from the very beginning. The EPO has so far issued about 11 000 unitary patents. These are mostly owned by EU-based entities. Slovenia had submitted 49 unitary patent requests by May 2024 and 48 of them had been registered ([107]).

([103]) OECD Economic Surveys: Slovenia 2022.

([104]) Flash Eurobarometer 537.

([105]) INTRUM European Payment Report 2023.

([106]) Communication on updating the reform recommendations for regulation in professional services, COM(2021)385.

([107]) European Patent Office.

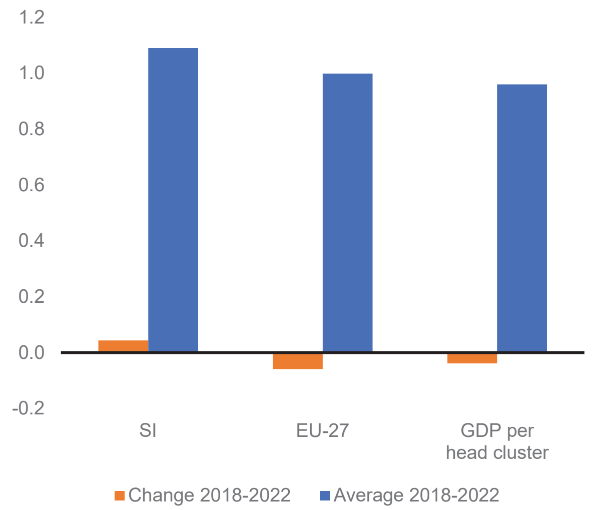
Table A12.1:**Industry and the Single Market**

Slovenia							
POLICY AREA	**INDICATOR NAME**	**2019**	**2020**	**2021**	**2022**	**2023**	**EU27 average***
HEADLINE INDICATORS							
Economic Structure	Net Private investment, level of private capital stock, net of depreciation, % GDP[1]	0	-1,9	-0,6	-0,5	1,1	**3,8**
	Net Public investment, level of public capital stock, net of depreciation, % GDP[1]	1,2	1,3	1,9	2,5	2,5	**1,2**
	Real labour productivity per person in industry (% yoy)[2]	4,4	-1,9	7,1	-4,6	0,1	**-1,24**
Cost competitiveness	Nominal unit labour cost in industry (% yoy)[2]	-0,1	4,2	0,2	12,4	12,3	**9,83**
SINGLE MARKET							
Single Market integration	EU Trade integration, % (Average intra-EU imports + average intra EU exports)/GDP[2]	60,9	55,8	61,6	70,1	61,4	**42,9**
Compliance	Transposition deficit, % of all directives not transposed[3]	0,6	1,6	1,2	1	0,8	**0,7**
	Conformity deficit, % of all directives transposed incorrectly[3]	0,9	1,2	1,3	1,3	0,8	**1,1**
	SOLVIT, % resolution rate per country[3]	85,7	100,0	90,0	80,0	50,0	**88,3**
	Number of pending infringement proceedings[3]	18	19	28	24	23	**25,9**
Restrictions	EEA Services Trade Restrictiveness Index[4]	0,07	0,07	0,07	0,07	0,07	**0,05**
Public procurement	Single bids, % of total contractors[3]	0	46	44	51	44	**28,6**
	Direct Awards, %[3]	21	26	19	11	10	**8,1**
ECONOMIC STRUCTURE							
Shortages	Material Shortage (industry), firms facing constraints, %[5]	9,9	11,4	29,4	37,8	15,4	**17,2**
	Labour Shortage using survey data (industry), firms facing constraints, %[5]	37,0	20,1	32,4	41,4	44,1	**23,3**
	Vacancy rate, % of vacant posts to all available ones (vacant + occupied)[2]	2,725	2,0	3,2	3,6	3,2	**2,5**
Strategic dependencies	Concentration in selected raw materials, Import concentration index based on a basket of critical raw materials[6]	0,17	0,17	0,16	0,15	0,24	**0,22**
	Installed renewables electricity capacity, % of total electricity produced[2]	0,4	0,4	0,4	0,4		**50**
BUSINESS ENVIRONMENT - SMEs							
Investment obstacles	Impact of regulation on long-term investment, % of firms reporting business regulation as major obstacle[7]	21,4	13,9	16,4	13,0	17,0	**22,2**
Business demography	Bankruptcies, Index (2015=100)[2]	116,3	102,7	92,8	85,1	80,0	**105,6**
	Business registrations, Index (2015=100)[2]	104,1	93,6	106,7	114,3	118,3	**120,2**
Late payments	Payment gap - corporates B2B, difference in days between offered and actual payment[8]	-	17	12	12	12	**15**
	Payment gap - public sector, difference in days between offered and actual payment[8]	-	20	11	13	9	**16**
	Share of SMEs experiencing late payments in past 6 months, %[9]	38,8	49,2	41,2	49,7	41,5	**48,7**
Access to finance	EIF Access to finance index - Loan, Composite: SME external financing over last 6 months, index values between 0 and 1[10]	0,79	0,44	0,62	0,69	-	**0,49**
	EIF Access to finance index - Equity, Composite: VC/GDP, IPO/GDP, SMEs using equity, index values between 0 and 1[10]	0,08	0,05	0,10	0,05	-	**0,17**

Source: (1) AMECO, (2) Eurostat, (3) Single Market Scoreboard, (4) OECD, (5) ECFIN BCS, (6) COMEXT and Commission calculations, (7) EIB Investment Survey, (8) Intrum Payment Report, (9) SAFE survey, (10) EIF SME Access to Finance Index.
* Own Commission calculations for the EU27 average.

Slovenia's public administration is essential for the economy's competitiveness by shaping the conditions for the twin transitions and creating a favourable business environment. The perception of government effectiveness in Slovenia is above the EU-27 average (Graph A13.1). The reform of the public pay system is a central part of Slovenia's recovery and resilience plan (RRP) for the public administration, and work is ongoing. Other government priorities include advancing digitalisation, improving working conditions for civil servants, revising municipal funding, and strengthening public procurement.

Graph A13.1: **Government effectiveness**



Average value over 2018-2022 and change over 2018-2022. The GDP per head bar shows the mean value of the government effectiveness indicator for the group of EU countries belonging to the same GDP per head cluster as Slovenia (EU countries are ranked in terms of their GDP per head and grouped into three equally sized clusters)
Source: Worldwide Governance Indicators.

Slovenia put in place new measures to increase the quality of public policies. The central government was reorganised to improve coordination and allow for more integrated policymaking. The use of expert advice and stakeholder involvement has increased via a range of strategic councils. Impact assessments of legal proposals are well established, yet they do not always consider the overall impact. However, the use of *ex post* evaluations is well below the EU-27 average.

The attractiveness of the public administration as an employer remains a major challenge for Slovenia. The share of civil servants under the age of 49 is higher than the EU average, while the share of staff under the age of 39 continues to fall. The civil service's lack of attractiveness is also illustrated by the large number of vacancies for which only one candidate applied ([108]). At the same time, the share of civil servants with higher education is well above the EU average as is the share of staff participating in adult learning. The gender parity for senior civil service positions, however, has dropped in the last few years. In addition to the public wage system reforms under the RRP, the government is working on further improving human resource management and digital skills for civil servants.

Slovenia's e-government maturity is close to the EU average. In 2023, the country made it possible to access health services with eID. This is expected to have a positive impact on the provision and uptake of digital services. In addition, Slovenia has laid down the legal basis for e-services, and the first eID cards were issued in 2022. Under its cohesion policy programme for 2021-2027, Slovenia aims to increase the availability of digital services for the public, businesses, research organisations and public authorities. This involves creating new technologies and business models, investing in digitalising public services, making the services more inclusive and improving the population's digital skills. Furthermore, in 2024, Slovenia will set up a competence centre to help develop civil servants' digital skills.

Competition in public procurement continues to be weak. The relatively high percentage of single bids and negotiated procedures without publication are a good example (see Annex 12). A lack of competition and risks of corruption can lead to overpricing in contracts as are likely to pay higher prices, which harms the public budget.

The management of public investment in Slovenia is relatively weak across all stages of the investment cycle. The planning for public investment appears to be carried out exclusively at the level of line ministries with limited coordination across sectors and no involvement from the Ministry of Finance. A medium-term plan of potential investments, integrated across sectors, levels of government, and sources of financing and anchored into a coherent set of long-term planning documents is missing. While a

([108])CSC, Annual Report, 2022 (accessed 07/11/2023).

Table A13.1: **Public administration indicators**

SI	Indicator (1)	2019	2020	2021	2022	2023	EU-27(2)
E-government and open government data							
1	Share of internet users within the last year that used a public authority website or app	n/a	n/a	n/a	81.3	78.4	75.0
2	E-government benchmark overall score (3)	n/a	69.1	66.6	68.7	74.8	75.8
3	Open data and portal maturity index	0.7	0.8	0.9	0.9	0.9	0.8
Educational attainment level, adult learning, gender parity and ageing							
4	Share of public administration employees with higher education (levels 5-8, %)	68.0	71.8	73.4 (b)	75.4	70.5 (b)	52.9
5	Participation rate of public administration employees in adult learning (%)	17.8	9.9	28.3 (b)	33.4	30.6 (b)	17.9
6	Gender parity in senior civil service positions (4)	14.8	14.6	14.2	20.2	22.0	9.2
7	Ratio of 25-49 to 50-64 year olds in NACE sector O	1.8	1.7	1.5 (b)	1.4	1.8	1.5
Public financial management							
8	Medium-term budgetary framework index	0.7	0.8	0.8	0.8	n/a	0.7
9	Strength of fiscal rules index	0.4	0.4	0.4	0.4	n/a	1.4
Evidence-based policy making							
10	Regulatory governance	n/a	n/a	1.52	n/a	n/a	1.7

(1) High values denote a good performance, except for indicator # 6. (2) 2023 value. If unavailable, the latest value available is shown. (3) Measures the user centricity and transparency of digital public services as well as the existence of key enablers for the provision of those services. (4) Defined as the absolute value of the difference between the percentage of men and women in senior civil service positions.
Flags: (b) break in time series; (d) definition differs; (u) low reliability.
Source: E-government activities of individuals via websites, Eurostat (# 1); E-government benchmark report (# 2); Open data maturity report (# 3); Labour Force Survey, Eurostat (# 4, 5, 7); European Institute for Gender Equality (# 6); Fiscal Governance Database (# 8, 9); OECD Indicators of Regulatory Policy and Governance (# 10).

standardised methodology for project assessments is in place, the lack of systematic independent scrutiny for larger projects' assessments is reflected in major upward revisions to more than half the projects under implementation. The anchoring of the investment portfolio (i.e. the National Development Programme) into the medium-term budgeting framework is missing thus leaving investment allocation - especially from national sources - vulnerable to cyclical fluctuations. Ex-post reviews of projects are carried out in an ad-hoc basis, while records of the physical state of existing assets are not maintained [109].

The Institute of Macroeconomic Analysis and Development and the Fiscal Council are Slovenia's independent fiscal institutions. Lifting the ceiling for the number of technical staff working at the Fiscal Council and an improved access to budgetary information would ease its constraints and boost its capacity.

The justice system performs efficiently overall, but it continues to face challenges, particularly in economic and financial crime court cases [110]. In 2023, the average length of proceedings at first instance courts was still around 2 years in major civil cases and around 1 year in litigious commercial cases. In appeal, these types of cases continued to be resolved more quickly in around 3 months on average. Regarding the quality of the justice system, digital tools for case management are quite advanced, particularly in courts. Electronic communication between courts and the parties involved has been further improved. On judicial independence, no systemic deficiencies have been reported.

(109) Belu Manescu, C. (2022), 'New evidence on the quality of public investment Management in the EU', European Economy Discussion Paper No 177, European Commission.

(110) For a more details, see the 2024 EU Justice Scoreboard and the Commission's 2024 Rule of Law Report (forthcoming).

ANNEX 14: EMPLOYMENT, SKILLS AND SOCIAL POLICY CHALLENGES IN LIGHT OF THE EUROPEAN PILLAR OF SOCIAL RIGHTS

The European Pillar of Social Rights is the compass for upward convergence towards better working and living conditions in the EU. This Annex provides an overview of Slovenia's progress in implementing the Pillar's 20 principles and the EU headline and national targets for 2030 on employment, skills and poverty reduction.

Table A14.1:**Social Scoreboard for Slovenia**

Policy area	Headline indicator	
Equal opportunities and access to the labour market	Adult participation in learning (during the last 12 months, excl. guided on the job training, % of the population aged 25-64, 2022)	26.5
	Early leavers from education and training (% of the population aged 18-24, 2023)	5.4
	Share of individuals who have basic or above basic overall digital skills (% of the population aged 16-74, 2023)	46.7
	Young people not in employment, education or training (% of the population aged 15-29, 2023)	7.8
	Gender employment gap (percentage points, population aged 20-64, 2023)	6.1
	Income quintile ratio (S80/S20, 2022)	3.3
Dynamic labour markets and fair working conditions	Employment rate (% of the population aged 20-64, 2023)	77.5
	Unemployment rate (% of the active population aged 15-74, 2023)	3.7
	Long term unemployment (% of the active population aged 15-74, 2023)	1.4
	Gross disposable household income (GDHI) per capita growth (index, 2008=100, 2022)	118.4
Social protection and inclusion	At risk of poverty or social exclusion (AROPE) rate (% of the total population, 2022)	13.3
	At risk of poverty or social exclusion (AROPE) rate for children (% of the population aged 0-17, 2022)	10.3
	Impact of social transfers (other than pensions) on poverty reduction (% reduction of AROP, 2022)	37.31
	Disability employment gap (percentage points, population aged 20-64, 2022)	18.8
	Housing cost overburden (% of the total population, 2022)	4.1
	Children aged less than 3 years in formal childcare (% of the under 3-years-old population, 2022)	52.3
	Self-reported unmet need for medical care (% of the population aged 16+, 2022)	3.7

Critical situation | To watch | Weak but improving | Good but to monitor | On average | Better than average | Best performers

(1) Update of 27 October 2023. Members States are categorised based on the Social Scoreboard according to a methodology agreed with the EMCO and SPC Committees. Please consult the Annex of the Joint Employment Report 2024 for details on the methodology.
Source: Eurostat.

The Slovenian labour market remained stable in 2023, with employment remaining at a high level and unemployment reaching a historical low. After reaching a record high of 77.9% in 2022, the employment rate remained high at 77.5% in 2023, which is well above the EU average (75.3%), despite a slowdown in economic growth in 2023. The unemployment rate further decreased to 3.7% in 2023, well below the EU average of 6.1%.

Despite high labour demand and low unemployment, Slovenia continues to face some long-term structural challenges. Older workers have low rates of employment and activity, particularly those with a low level of educational attainment. These groups also face persistently high long-term unemployment. Despite an increase in the retirement age and higher income incentives to work longer, the employment rate of older workers (55-64) decreased slightly from 55.2% in 2022 to 54.2% in 2023. Young people also face challenges when entering the labour market. Although the share of precarious employment is decreasing, Slovenia still has a high share of young people working on temporary contracts (36.4% vs 34.4%, the EU average in 2023) ([111]). Slovenia uses the European Social Fund Plus (ESF+) to support active labour market measures, focusing on young people, especially those neither in employment nor in education and training, and vulnerable groups, such as the long-term unemployed. Pension and unemployment insurance reforms aim to promote longer working lives and reduce the gap between the age that people stop working and the statutory retirement age. Addressing these challenges will help Slovenia to make progress towards the 2030 national employment rate target of 79.5%.

There are still significant labour shortages and participation in adult learning has fallen significantly. After reaching a record high 3.0% in 2022, the vacancy rate slightly decreased by 0.3 pps but remained high at 2.7% in 2023 and continues to reflect tightening labour market conditions. The rate was particularly high in the construction sector, industry and in services. Together with other skills and labour market challenges, this undermines Slovenia's potential to improve its economic competitiveness. Cyclical and structural factors, such as an ageing workforce, changing skills requirements and unfavourable working conditions contribute to labour shortages. At the same time, participation in education and training among adults (25-64) has decreased significantly since 2016 (40.3%): in 2022 only around a quarter of adults (26.5%) participated in education and training. Men participate much less frequently (22%) than women (31.2%). Participation was particularly low among those with medium and low levels of skills and among older workers. The share of individuals with basic overall digital skills fell from 55.13% in 2019 to

([111])IMAD, Development report, 2023.

46.7% in 2023 (EU: 56%). The activation of underrepresented groups and incoming migration, together with investments in adult learning, skills development and training programmes, could make a significant contribution to maintaining a sufficient labour supply in the coming years and to improving the overall level of skills. To address these challenges, Slovenia has adopted a mix of measures, supported by the ESF+, including the development of a platform for long term skills forecasting, a nationwide lifelong learning campaign and the modernisation of labour market institutions and their services.

Table A14.2:**Situation of Slovenia on 2030 employment, skills and poverty reduction targets**

Indicators	Latest data	Trend (2016-2023)	2030 target	EU target
Employment (%)	77.5 (2023)		79.5	78
Adult learning[1] (%)	26.5 (2022)		60	60
Poverty reduction[2] (thousands)	8 (2023)		-9	-15,000

(1) Adult Education Survey, adults in learning in the past 12 months, special extraction excl. guided on-the-job training.
(2) Change in the number of persons at risk of poverty or social exclusion (AROPE), reference year 2019.
Source: Eurostat, DG EMPL.

The education and training system is performing well, however obstacles remain for some groups. In the PISA 2022 survey, Slovenian pupils outperformed the EU average in mathematics and science but achieved overall lower results than in 2018 (see Annex 15). Slovenia has one of the lowest rates of early school leavers and there is a high level of tertiary educational attainment. However, there are still significant differences on the basis of gender and between people born in and outside Slovenia. And although Slovenia has a well-established vocational education and training (VET) system, with 7 out of 10 upper secondary students taking part in VET programmes in 2021, improving its appeal and alignment with the labour market requires additional efforts, particularly in light of labour shortages. Moreover, Slovenia continues to face a shortage of teachers, especially in STEM subjects. The low level of participation in learning activities by people from the most vulnerable, less educated and older age groups remains a structural challenge. The ESF+ promotes lifelong learning and flexible upskilling and reskilling opportunities, and a national campaign on lifelong learning is expected to be launched in 2024. Additional efforts, such as improving outreach to low-skilled and older workers could contribute to reaching the national target of at least 60% of all adults participating in education and training every year by 2030.

Slovenia has a well-functioning social protection system, but poverty among older people remains a concern. In 2022, Slovenia had the lowest level of income inequality among all EU countries and the share of people at risk of poverty or social exclusion (AROPE), despite a slight increase of 0.5 pps compared to the previous year, stood at a low level in 2023 at 13.3%. However, in particular older women are at risk: the AROPE rates of women over 65, at 23.4% and over 75, at 27.5%, represent a further deterioration, and were almost twice as high as for the general population. This may indicate an inadequate level of pensions: nearly half of the old age pensioners receive pensions below the national threshold of those at risk of poverty (EUR 827 per month in 2022) (112). Following a significant decrease of more than 6 pps between 2021 and 2022, the impact of social transfers (other than pensions) on poverty reduction further decreased by almost 2 pps from 37.31% in 2022 to 35.53% in 2023.

While the housing cost overburden rate remains well below the EU average, housing affordability is a challenge for some. The housing cost overburden rate was at a generally low level in 2023 (3.7%). However, housing affordability does not only affect vulnerable groups, such as single person households, people with disabilities or migrants, but has also become and remains a concern for others. While decreasing by 1.3 pps from 2022, the housing cost overburden rate of single-parent households remained relatively high at 11.2% in 2023. And even though the housing cost overburden rate for tenants renting at market prices remained stable compared to the previous year, after decreasing continuously since 2016, the rate (17.9%) remains more than four times higher than the rate for the general population. Under its recovery and resilience plan, Slovenia intends to purchase or construct nearly 5 000 non-profit flats by 2026 to improve access to non-profit rented housing for young families, socially deprived individuals and people from marginalised groups. In combination with the ESF+, further policy action can contribute

(112)ZPIZ, Annual report 2022, 2023.

to reaching the national target of having at least 9 000 fewer people at risk of poverty by 2030.

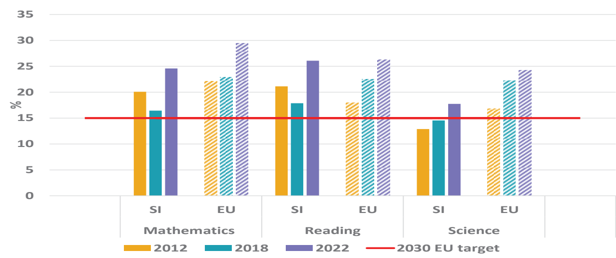
This Annex outlines the main challenges of Slovenia's education and training system based on the 2023 Education and Training Monitor and the 2022 OECD Programme for International Student Assessment (PISA) results ([113]).

In Slovenia, the share of students with low basic skills in mathematics and reading increased significantly between 2018 and 2022 but remains below the EU average. In 2022, 24.6% of 15-year-olds did not achieve minimum level of proficiency in mathematics and 26.1% in reading (EU 29.5% in mathematics and 26.2% in reading). Between 2018 and 2022, the rate of underachieving students rose (by 8.2 pps) both in mathematics and reading (vs 6.6 pps and 3.7 pps in the EU). In science, it rose by 4.9 pps over the last decade (2012-2022) but remains among the lowest rates in the EU (17.8% vs 24.2% in the EU). The socio-economic gap between advantaged and disadvantaged students ([114]) in mathematics (31.3 pps) is also below the EU average (37.2 pps), but it increased considerably (by 9.9 pps) between 2018 and 2022. Migrant students tend to have a more disadvantaged socio-economic background and in 2022, 51.2% of foreign-born students did not achieve minimum level of proficiency in mathematics.

Boys are more frequently represented among underachieving students. The gender gap is the second highest in the EU in reading (17.6 pps) and above the EU average in science (6.9 pps vs 2.9 pps in the EU). Contrary to most Member States, there is also a significant gender gap in mathematics with 3.7 pps more low-performing boys than girls.

The share of Slovenian top performers decreased in both mathematics and reading. The rate of top-performing 15-year-olds in mathematics dropped from 13.6% in 2018 to 9.4% in 2022 but remained above the EU average (7.9%). In reading, top performance dropped from 7.8% in 2018 to 4.4% in 2022, which is below the EU average at 6.5%. In science, the share of top performers slightly increased between 2018 and 2022 to 8%, which is above the EU average (6.9% in 2022). While Slovenia currently has a strong skills base, the recent decline in basic skills performance among young people may affect skills supply and skills shortages in future, as well as the innovation capacity and competitiveness of the economy, which is already facing challenges (see more analysis in the Annex 12).

Graph A15.1: **Underachievement rates by field, PISA 2012, 2018 and 2022**



Source: OECD (2023).

Slovenia faces challenges in recruiting qualified teachers. The demand for human resources in education might increase further ([115]) while around 6 500 teachers are expected to retire in the coming decade ([116]). Teacher salaries are slightly below those of other tertiary-educated workers in Slovenia (0.91 in primary and 0.94 in upper secondary) ([117]). Negotiations between the government and trade unions continue within the general reform of the public sector wage system, where a specific pillar for education, research and culture workers is envisaged.

Participation in early childhood education (ECEC) is relatively high and early school leaving in Slovenia remains low. Participation in early childhood education for children from 3 years to compulsory primary school age reached 92.3% in 2021, around the EU average. Children from vulnerable groups participate less frequently in ECEC. For example, of the 5-year-olds in south-eastern Slovenia, around 35% of Roma children are estimated not to be participating in preschool education ([118]). In 2023, 5.4% of young people

([113])OECD (2023), Programme for International Student Assessment.

([114])As defined by the PISA index of economic, social and cultural status (ESCS). See: https://www.oecd-ilibrary.org/sites/03c74bdd-en/index.html?itemId=/content/component/03c74bdd-en#chapter-d1e5625-0ddb24f583

([115])Employment Service of Slovenia, August 2022.

([116])Ministry of Education, 2023.

([117])OECD 2022

([118])Child Guarantee National Action Plan of Slovenia 2022-2030.

Table A15.1:**EU-level targets and other contextual indicators under the European Education Area strategic framework**

Indicator			Target	2012 Slovenia	2012 EU-27	2018 Slovenia	2018 EU-27	2023 Slovenia	2023 EU-27
[1]Participation in early childhood education (age 3+)			96%	87.9% [2013]	91.8% [2013]	91.1%	92.2%	92.3% [2021]	92.5% [2021,d]
[2]Low-achieving 15-year-olds in:		Reading	< 15%	21.1%	18.0%	17.9%	22.5%	26.1% [2022]	26.2% [2022]
		Mathematics	< 15%	20.1%	22.1%	16.4%	22.9%	24.6% [2022]	29.5% [2022]
		Science	< 15%	12.9%	16.8%	14.6%	22.3%	17.8% [2022]	24.2% [2022]
Early leavers from education and training (age 18-24)	[3]Total		< 9 %	4.4%	12.6%	4.2%	10.5%	5.4% [b]	9.5%
	[3] *By gender*	*Men*		5.4%	14.5%	5.3% [u]	12.1%	5.8% [bu]	11.3%
		Women		3.2% [u]	10.6%	3.0% [u]	8.7%	4.9% [bu]	7.7%
	[4] *By degree of urbanisation*	*Cities*		4.4% [bu]	11.2%	3.5% [u]	9.4%	5.4% [bu]	8.6%
		Rural areas		5.2% [b]	14.0%	4.4% [u]	11.0%	4.5% [bu]	9.9%
	[5] *By country of birth*	*Native*		4.2%	11.3%	3.6%	9.2%	4.5% [b]	8.2%
		EU-born		: [u]	26.2%	: [u]	22.4%	: [bu]	21.0%
		Non EU-born		10.9% [u]	30.1%	11.2% [u]	23.0%	14.8% [bu]	21.6%
[6]Socio-economic gap (percentage points)				26.9	:	21.7	29.5	31.3 [2022]	37.2 [2022]
[7]Exposure of VET graduates to work-based learning			≥ 60% (2025)	:	:	:	:	55.3%	64.5%
Tertiary educational attainment (age 25-34)	[8]Total		45%	35.3%	34.1%	40.7%	38.7%	40.7% [b]	43.1%
	[8] *By gender*	*Men*		25.4%	29.1%	29.8%	33.3%	29.8% [b]	37.6%
		Women		45.6%	39.2%	53.1%	44.2%	53.4% [b]	48.8%
	[9] *By degree of urbanisation*	*Cities*		42.2% [b]	43.5%	50.5%	49.0%	48.4% [b]	53.3%
		Rural areas		33.8% [b]	24.8%	38.0%	27.7%	38.8% [b]	31.7%
	[10] *By country of birth*	*Native*		36.8%	35.4%	42.8%	39.7%	44.5% [b]	44.2%
		EU-born		32.4% [u]	29.3%	: [u]	36.7%	40.7% [bu]	40.2%
		Non EU-born		11.5% [u]	24.2%	19.7%	31.0%	15.1% [bu]	37.1%
[11]Participation in adult learning (age 25-64)			≥ 47% (2025)	:	:	40.3% [2016]	37.4% [2016]	26.5% [2022]	39.5% [2022]
[12]Share of school teachers (ISCED 1-3) who are 55 years or over				14.1% [2013]	22.7% [2013]	22.3%	23.8%	23.7% [2021]	24.5% [2021]

Notes: b = break in time series; d = definition differs; e = estimated; p = provisional; u = low reliability; : = data not available.
Source: 1,3,4,5,7,8,9,10,12=Eurostat; 11= Eurostat, Adult Education Survey; 2,6=OECD, PISA.

aged 18-24 left education and training early (vs 9.5% in the EU), which is a relatively stable outcome over the last decade. Further efforts are needed to foster inclusion of children with special needs. Only around 26% of all secondary school facilities in Slovenia are adapted for children with reduced mobility ([119]).

The share of tertiary-educated people aged 25-34 was 40.7% in 2023. This outcome is below the EU average (43.1%) and below the EU-level target (45%) (see also Annex 11). The gender gap in tertiary educational attainment is the highest in the EU (23.6 pps vs 11.2 pps in the EU in 2023). The gap between native-born and non-EU born people with tertiary education is also high and increasing (from 26.3 pps in 2021 to 34.1 pps in 2022). The share of graduates in science, technology, engineering and mathematics increased (2016-2021) by 3.1pps to 28,1% (EU average 25.4 %, 2021). The recent declines in top performance in mathematics and reading among students may affect innovation capacity and competitiveness in the future. In vocational education and training, further efforts are needed to improve its labour market relevance, and adult participation in lifelong learning is well above the EU average (see more in the Annex 14).

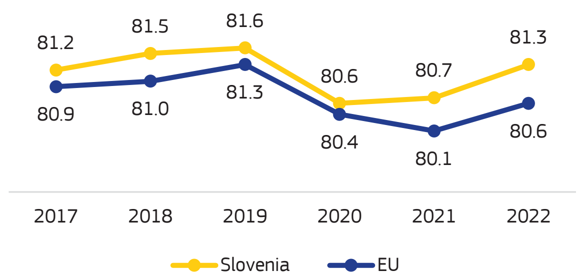
In 2024, Slovenia plans to adopt the National education programme until 2033 and continue in curricular reforms. Several measures to address teacher shortage were adopted in 2023 and a new communication strategy on increasing attractiveness of the teacher profession will be launched in 2024. The Slovenian multi-fund EU cohesion policy programme for 2021-2027 and, in particular, the European Social Fund Plus are expected to substantially support relevant actions in education, training, and skills, with a total investment of EUR 207.6 million over 2021-2027. Furthermore, the RRP allocates around EUR 71.24 million to investments in the digitalising of higher education. With EUR 59.98 million, 30 pilot projects for integrating digital and sustainable development competences in the curricula are currently being implemented.

([119])The Advocate of the Principle of Equality in Slovenia (2022).

A healthy population and an effective, accessible and resilient health system are prerequisites for a sustainable economy and society. This Annex provides a snapshot of population health and the health system in Slovenia.

Life expectancy at birth in Slovenia remains above the EU average. There was a drop in life expectancy in Slovenia with the onset of the COVID-19 pandemic in 2020. As mortality from COVID-19 declined in 2022 ([120]), life expectancy increased again, although not to pre-pandemic levels. The rate of treatable mortality is below the EU average. In 2021, the leading causes of death were diseases of the circulatory system ('cardiovascular diseases') and cancer, followed by COVID-19. Cancer incidence rates are higher than the EU averages. Shortages in treatment resources may restrict access to treatments and contribute to Slovenia's relatively high cancer mortality rate. Suicide rates are a matter of concern, remaining higher than across the EU, despite falling faster than the EU average.

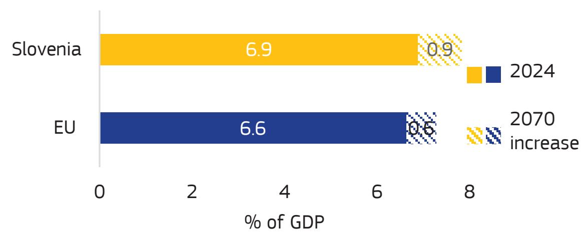
Graph A16.1: **Life expectancy at birth, years**



Source: Eurostat

Health expenditure relative to GDP in 2021 was below the EU average. Provisional data for 2022 suggest that total healthcare spending fell back to 9.2% of GDP. Per capita health expenditure in 2021 is about two thirds of the EU average and publicly funded health expenditure accounts for 73.8% of total health spending, below the EU average of 81.1%. The main source of healthcare funding is the employment-based statutory health insurance. In 2024 the government is transforming the complementary voluntary health insurance into a mandatory contribution to the statutory health insurance. This change is expected to increase the share of publicly funded health expenditure and keep the share of out-of-pocket payments below the EU average (12.9% of total health expenditure in Slovenia in 2021, compared to 14.5% across the EU). Outpatient care receives the largest share of health spending, followed by inpatient care and spending on pharmaceuticals. Based on the age profile of the Slovenian population, public spending on health is projected to increase by 0.9 percentage points (pps) of GDP by 2070, higher than the EU average of 0.6 pps (see Graph 16.2). Population ageing raises fiscal sustainability concerns for Slovenia in the medium term (see Annex 21).

Graph A16.2: **Projected increase in public expenditure on healthcare over 2024-2070**



Baseline scenario
Source: European Commission / EPC (2024)

In 2021, spending on prevention in Slovenia amounted to 5.4% of total spending on healthcare, compared to 6.0% for the EU overall. Between 2019 and 2021, spending on preventive care increased by around 70%, compared to a 106% increase for the EU overall. In Slovenia, the main factors behind the increase in preventive care spending in 2021 were immunisation and early disease detection programmes (both increased by around 150% due to COVID-19 measures).

Despite various measures, timely access to publicly funded health services in Slovenia is still a matter of concern. The list of fully funded health services is decreasing, posing further access challenges, especially for people with low income. Short-term measures for additional funding, mainly for primary care teams, have helped to scale up several programmes to address preventable and treatable mortality (especially for chronic conditions and vulnerable groups). In 2022, the proportion of the Slovenian

([120]) Based on data provided directly by Member States to the European Centre for Disease Prevention and Control, under the European Surveillance System.

Table A16.1:**Key health indicators**

	2018	2019	2020	2021	2022	EU average (latest year)
Treatable mortality per 100 000 population (mortality avoidable through optimal quality healthcare)	77,4	72,0	69,8	66,9	NA	93.3 (2021)
Cancer mortality per 100 000 population	309,3	290,1	290,7	277,3	NA	235.4 (2021)
Current expenditure on health, % GDP	8,3	8,5	9,4	9,5	9,2	10.9 (2021)
Public share of health expenditure, % of current health expenditure	72,8	72,8	73,2	73,8	NA	81.1 (2021)
Spending on prevention, % of current health expenditure	3,1	3,2	3,2	5,4	NA	6.0 (2021)
Available hospital beds per 100 000 population	443	443	428	425	NA	525 (2021)
Doctors per 1 000 population	3,2	3,3	3,3	3,3	NA	4.1 (2021)*
Nurses per 1 000 population	3,4	3,8	4,3	4,5	NA	7.9 (2021)
Total consumption of antibacterials for systemic use, daily defined dose per 1 000 inhabitants per day ***	13,2	13,0	10,2	10,2	12,4	19.4 (2022)

Note: The EU average is weighted for all indicators except for doctors and nurses per 1 000 population, for which the EU simple average is used. Doctors' density data refer to practising doctors in all countries except Greece, Portugal (licensed to practise) and Slovakia (professionally active). Nurses' density data refer to practising nurses in all countries except Ireland, France, Portugal, Slovakia (professionally active) and Greece (hospital only).
Source: Eurostat Database; except: * OECD, ** Joint Questionnaire on non-monetary healthcare statistics, *** ECDC, **** Council Recommendation on stepping up EU actions to combat antimicrobial resistance in a One Health approach.

population reporting unmet needs for medical care (3.7%) was higher than the EU average (2.2%), although differences between income groups were smaller than in 2021. However, the percentage of people declaring the same unmet needs in 2022 remained unchanged from 2021 and above the EU average. The primary drivers for unmet needs are long waiting times, mainly for specialists, elective surgery, primary care physicians and emergency care. Recent reforms and investments to tackle this issue have not yet produced significant results. For instance, long waiting lists are reportedly the most frequent barrier to accessing mental health services ([121]). Fragmented management of mental health services and lack of specialised staff are further challenges that need to be overcome to improve prevention and care for mental health conditions.

Health workforce density is below the EU average and may restrict timely access to needed care. There are particular concerns regarding the numbers of primary care doctors and hospital nurses. The low attractiveness of the nursing profession (working conditions, work–life balance) is reflected in a low density of nurses in Slovenia. According to the newly adopted Eurostat definition of nurses, following the EU Directive 2005/36/EC on the recognition of professional qualifications, there are only 4.5 nurses per 1 000 population in Slovenia compared to an EU average of 7.9. The number of nursing graduates per 100 000 population is among the lowest in EU. The number of doctors per 1 000 population (3.3 in 2021) is also below the EU average (4.1 in 2021). Further reforms targeting primary healthcare and health workforce issues are planned (scholarships for young graduates in primary care specialisation, plans for reforms of the public sector salary system).

Through its recovery and resilience plan (RRP), Slovenia plans to invest EUR 166.8 million (6.21% of the RRP's total value) in health system resilience and quality of care. The RRP plans reforms and investments for training of primary care staff, care networks (integrated care, mental care and community-based services), healthcare infrastructure for communicable diseases and support for the digital transformation of the National Health Service. Significant funding for healthcare (EUR 103 million) is also planned under the 2021-2027 EU cohesion policy funds. Planned investments target physical infrastructure of public healthcare institutions, medical equipment, urgent and preventive health services, digitalisation of healthcare, and various measures to improve the accessibility, effectiveness and resilience of health services in Slovenia ([122]).

([121])https://europa.eu/eurobarometer/surveys/detail/3032

([122])The EU cohesion policy data reflect the status as of 13 May 2024.

Annex 17 showcases the economic and social regional dynamics in Slovenia. It provides an analysis of economic, social, and territorial cohesion in the Slovenian regions and assesses emerging investment and subnational reform needs to foster economic growth, social development and competitiveness in the country.

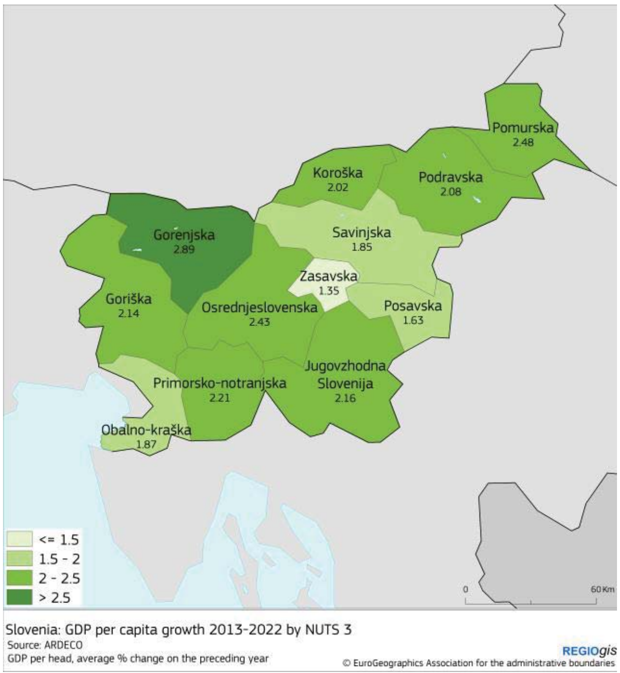
Overview of economic and social performance at regional level

Regional disparities in Slovenia have remained prominent despite solid recent overall growth. While overall GDP growth in Slovenia in 2022 (2.6%) and in 2023 (1.6%) was solid, the gap between the capital region and other regions has hardly reduced and is still very pronounced. In 2022, GDP per capita in purchasing power standards (PPS) at NUTS-3 level compared to the national average, the Ljubljana region stands out at 146%, which was almost 3 times higher than in the Zasavska region at 54% (2021: 147% and 53%). These figures are among the biggest differences observed since the monitoring of these data began.

There has been sustainable long-term convergence with the rest of the EU, but disparities between the regions remain. GDP per capita growth in the capital region (2%) was higher than the national average of 1.5% per year after 2012, and twice the EU average of 0.97%. Ten of the 12 NUTS-3 regions in Slovenia outperformed the EU average, with Pomurska as the frontrunner at 2.1%. However, Obalno-Kraška (0.2%) and Zasavska (0.4%) had the lowest annual growth in 2012-2021 (Map A17.1).

Convergence between the NUTS-2 Slovenian regions has not improved in recent years. In 2022, eastern Slovenia (82%) continued to lag behind western Slovenia (120%) in terms of GDP per capita of the national average. This is a consolidation of the recent situation back in 2021 and 2020, where figures stood at 82% and 120% and at 83% and 119% respectively. Both NUTS-2 regions contain NUTS-3 regions with a GDP below the national average. As the capital region is part of western Slovenia, however, the NUTS-2 region is therefore considerably more advanced for statistical reasons.

Map A17.1: **Slovenia, NUTS-3: GDP per capita growth 2013-2022**



Source: DG REGIO

The regional differences in GVA per employee are more nuanced reflecting the high level of daily commuting. At NUTS-3 level in 2022, the capital region accounted for 111% of the national average, while the lowest-performing Pomurska region stood at 87%. Data from 2023 confirm that the lower difference - compared to GDP per capita as above - is predominantly due to the intense daily commuting into the capital region ([123]), mainly by passenger cars. This has largely contributed to the 30% increase in the country's transport carbon-footprint between 2005 and 2020. The two main reasons for the high level of commuting are the greater number of jobs and the considerably higher cost of housing in the capital region.

Decarbonisation of energy production is a core regional challenge for Slovenia. In the Savinjsko-Šaleška region, the coal mining in Velenje and the Šoštanj lignite power plant will be phased out by 2033. The Zasavska region faces an incomplete transition away from coal. Slovenia's

([123])In 2023, more than half a million people in Slovenia, equalling 55.4% of the working population, commuted daily to another municipality for work. 142.500 commuted into Ljubljana (280.000 inhabitants). The nationwide share of work commuters has increased by almost one third since 2003 when the share stood at 42.3%.

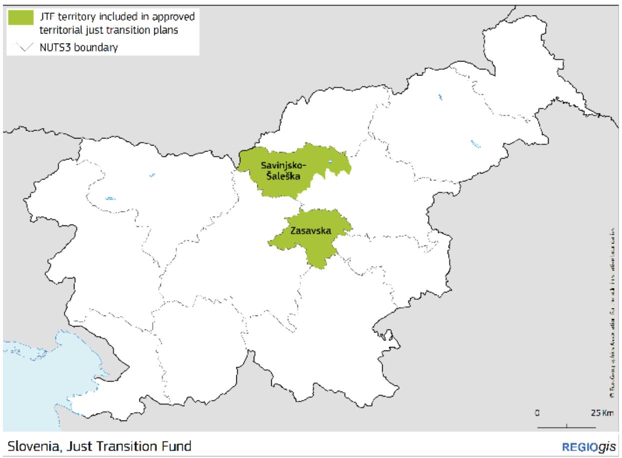
Table A17.1:**Selected indicators at regional level in Slovenia**

NUTS-2 Region	GDP per head (PPS)	Productivity (GVA (PPS) per person employed)	Real productivity growth	GDP per head growth	Population growth	Unemployment rate	Regional Competitiveness Index	CO_2 emissions per head	Innovation performance
	EU27=100, 2022	EU27=100, 2022	Avg % change on preceding year, 2013-2022	Avg % change on preceding year, 2013-2022	Total % change, 2013-2021	% of active population, 2023	EU27=100, 2022	tCO_2 equivalent, 2022	EU Regional Innovation Scoreboard, 2023
European Union	100	100	0.7	1.44	1.6	6.1	100.0	8.0	
Slovenija	90	81.7	1.1	2.32	2.6	3.7		8.7	
Vzhodna Slovenija	73	74.5	1.1	2.04	0.7	3.8	99.4	10.6	Moderate innovator o
Zahodna Slovenija	109	88	1.1	2.46	4.7	3.5	109.6	6.5	Strong innovator o

Source: Eurostat, EDGAR database

transition towards the EU's 2030 climate targets and a zero-carbon economy by 2050 requires the full phase-out of coal. The challenges in these two coal regions are different in scale, but centre around decarbonisation and expansion of renewable energies, economic diversification, and creating new job opportunities. These eastern Slovenian regions benefit from support under the Just Transition Fund (JTF; Map A17.2).

Map A17.2: **Territories most affected by the climate transition in Slovenia (NUTS-3 and below)**

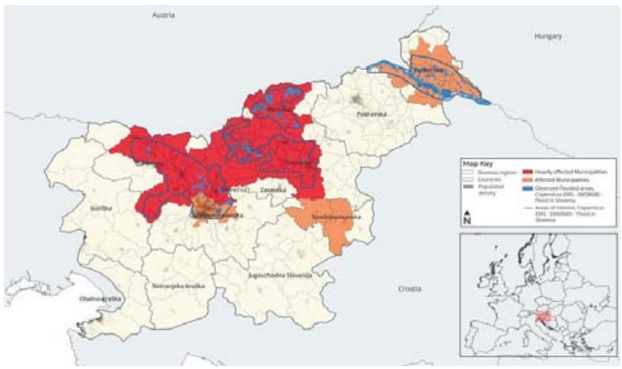


Source: DG REGIO

Slovenia has a very robust labour market, with high employment (77.5%) and low unemployment (3.7%) across the regions. The country outperforms the EU average (75.3% and 6.1% respectively). In 2023, the employment rate (age 20-64) reached 79.2% in western Slovenia and 75.9% in eastern Slovenia. Unemployment rates were also low in both regions, standing at 3.5% in western Slovenia and 3.8% in eastern Slovenia. The figures suggest that, on the whole, lower levels of GDP do not lead to considerably lower levels of employment.

The devastating floods of August 2023 had a massive regional impact. In what was the heaviest torrential rain ever recorded in Slovenia and its neighbouring regions, considerable amounts of infrastructure were destroyed or damaged in several regions (Map A17.3). Against some very substantial overall damage, flood-protection recovery and climate-mitigation measures have become a medium and long-term priority for the entire country.

Map A17.3: **Regional impact of the August 2023 floods in Slovenia**



Source: International Federation of Red Cross Societies (IFRC)

Investment and subnational reform needs ahead

Investments in recovery and climate adaptation require proper planning and coordination. High levels of investment in climate adaptation measures in Slovenia, in particular flood protection, are expected when combining EU support from cohesion policy funding, the recovery and resilience plan (RRP), and the Solidarity Fund (EUSF), alongside national funds. Successful implementation will therefore depend on careful planning, and sound coordination. Factors such as the limited capacity of the relevant public services, the shortage of labour and material, and demand-driven price increases need to be considered to ensure maximum complementary and efficiency of investments from different sources.

Green investments can play a beneficial role with flood-protection measures. On climate-adaptation measures co-financed by cohesion policy and other types of EU support, nature-based solutions (NBS) are a priority. Flood-protection measures would benefit from climate and environmental action, such as the restoration of natural water-retention areas, free-flowing rivers, wetlands, pillage areas, or re-forestation all can help achieve the horizontal biodiversity investment and EU Nature Restoration Law targets.

Investments in sustainable transport would profit from timely and coordinated implementation. Slovenia is facing the challenge of a fairly high CO^2 footprint and air pollution from transport due to the current unsustainable reliance on individual passenger car transport. In contrast, the number of passengers travelling by bus or train is falling. The number of public-transport bus passengers has dropped by 15-20% between 2010 and 2022. The number of train passengers has dropped by 11% since 2008. Car sharing has dropped by 16% since 2017, and the average number of passengers in a car currently stands at 1.5. It appears crucial for public transport, in particular in non-urban areas, to be upgraded to provide a viable alternative to the car. The substantial cohesion policy funding that is planned for upgrading the railway infrastructure are a useful contribution in this regard and should be implemented on time together with the complementary RRP support. Multimodal transport and the prospective alternative-fuel infrastructure can help to achieve the much-needed green transition of transport in Slovenia.

Strengthening the administrative capacity can help to manage cohesion policy funding more efficiently and speed up implementation. To help front-load timely implementation of projects, it would be useful to strengthen the capacity of the public administration. Both, potential beneficiaries and local authorities often receive information on upcoming calls for projects only at relatively short notice. There is thus a need for more strategic implementation in order for applicants to have sufficient time and information to prepare for the calls. The partnership principle is to be widely applied at each step of the implementation.

The upcoming reform of the Balanced Regional Development Act would benefit from a strategic approach. The Balanced Regional Development Act, adopted in 2016 and currently under revision, is an opportunity to provide a comprehensive all-encompassing definition of a Regional Development Strategy for the first time in Slovenia. It would be useful if this Strategy included, as main elements, a better consideration and better coordination of development needs on the level of functional territorial areas, a more inclusive approach towards stakeholders (business, NGOs, municipalities, and ministries), and the provision of a continuous and stable regional development funding source from the national budget alongside the types of EU support.

The regional development agencies could play an active role in regional policy. In the process of updating the Balanced Regional Development Act, the existing Regional Development Agencies (RDAs) could be more involved regional policy implementation, both in an EU and national context. Multi-level governance needs to be strengthened to ensure better coordination between the national, regional, and local level, also in view of a tentative transfer of spatial planning competencies to the regional level.

The new laws on the restructuring of the coal regions are scheduled for adoption in 2024. They can help boost decarbonisation in Slovenia. To successfully implement the green transition of energy production in Slovenia, a prospective legislative framework is under preparation concerning the exit from coal, including for the gradual closure of the Velenje coal mine and the restructuring of the Savinjsko-Šaleška coal region. The implementation is going hand in hand with additional investments in renewable energy sources which, together with a timely adoption, will help to boost the decarbonisation of electricity production in Slovenia and deliver a just transition.

Slovenia could benefit from the opportunities of the STEP initiative to boost investments in critical technologies to support industry transformation.

ANNEX 18: KEY FINANCIAL SECTOR DEVELOPMENTS

Slovenia's banking sector has performed well thanks to improving asset quality and a rise in net interest income. Return on equity has systematically exceeded 9% since 2017, and reached a record high of 17.0% in the first 9 months of 2023 (vs 9.9% in the EU), mainly thanks to an increase in net interest income and low impairments. However, the new banking tax of 0.2% of total assets (about 0.19% of GDP) announced by the government on 4 September 2023 could significantly reduce banks' future profits over the next 5 years. The capital adequacy ratio has slightly increased over the last 12 months, and reached 19.3% in September 2023 (vs 19.6% in the EU). The non-performing-loan ratio has continued to improve, and fell to 1.5% in September 2023 (vs 1.8% in the EU), down from 1.9% a year earlier. However, the rise in inflation and interest rates may still negatively impact the debt sustainability of borrowers in the future. With a loan-to-deposit ratio of 70.1% (vs 93.3% in the EU), banks benefit from a substantial excess of deposits over loans. This ensures a relatively stable funding basis and abundant liquidity, allowing banks to significantly reduce the funding they take from the ECB from 5.91% in August 2021 to 0.20% in December 2023 (vs 1.43% in the euro area). Thanks to an increase in the liquidity buffer and a decline in net liquidity outflows, the liquidity coverage ratio improved from 255% in September 2022 to 314% in September 2023. However, this generally positive outlook could be threatened in the future by political or legal developments. There is still no lasting solution to the legacy portfolio of loans issued by Slovenian banks in Swiss francs ([124]), and adverse court rulings on this issue remain a real possibility, even if the issue only concerns a few banks.

Credit growth has fallen due to less attractive lending conditions. Due to the rise in interest rates, year-on-year credit growth has plunged since its peak of September 2022 and turned deeply negative to reach -4.8% (vs 0.4% in the euro area) for lending to non-financial corporations in December 2023. Lending to households held up better with year-on-year growth of 3.7% (vs 0.3% in the euro area). Between June 2022 and November 2023, interest rates on new loans to households and SMEs soared by around 4 percentage points to levels unseen since the global financial crisis. In November 2023, interest rates on new loans to households for house purchases at floating/variable rates reached 5.66%, quite significantly above the euro area average of 4.87%, while interest rates on new loans to SMEs reached 5.51%, slightly below the 5.65% observed on average in the euro area.

Real estate vulnerabilities have declined as the residential real estate market has been cooling since Q1-2022. Annual growth in residential real-estate prices has slowed down from a peak of 17.0% in Q1-2022 to 7.4% in Q2-2023 and the number of sales also fell over this period. Demand for housing loans has been reduced by higher interest rates, the weaker outlook for the real-estate market, and declining consumer confidence. Household resilience to rising debt-servicing costs has increased in recent years, thanks in part to macroprudential restrictions on household lending, although these restrictions were slightly loosened in July 2023. On 22 December 2023, the Bank of Slovenia decided to increase its countercyclical capital buffer from 0.5% to a positive neutral rate of 1% as of 1 January 2025.

Sustainable finance is not yet very developed in Slovenia, but some recent initiatives have shown growing awareness of the sector's potential. In June 2021 and January 2023, Slovenia issued sovereign 'sustainability' bonds of EUR 1 billion and EUR 1.25 billion respectively. On 27 June 2023, the European Bank for Reconstruction and Development invested EUR 35 million in a senior preferred green bond as part of Nova Ljubljanska Banka's EUR 500 million public issuance. In July 2021, the Bank Association of Slovenia issued guidelines summarising key regulatory requirements in sustainable financing and providing banks with non-binding guidelines for the development of sustainable financing according to the principle of proportionality. In August 2022, the Bank Association of Slovenia also prepared a sample questionnaire to assess

([124])See previous country reports for more details on the issue of loans denominated in Swiss francs.

Table A18.1:**Financial soundness indicators**

	2017	2018	2019	2020	2021	2022	2023	EU	Median
Total assets of the banking sector (% of GDP)	94.0	88.6	87.8	98.1	94.5	90.9	86.7	257.0	184.6
Share (total assets) of the five largest banks (%)	61.5	60.8	60.9	67.3	68.7	71.1	-	-	69.6
Share (total assets) of domestic credit institutions (%)[1]	54.2	54.0	51.0	48.3	49.1	51.5	51.7	-	62.9
NFC credit growth (year-on-year % change)	1.9	1.5	2.7	0.3	7.2	12.4	-4.8	-	2.4
HH credit growth (year-on-year % change)	7.2	6.8	6.1	0.7	5.3	7.7	3.7	-	1.4
Financial soundness indicators:[1]									
- non-performing loans (% of total loans)	9.2	6.0	3.4	3.0	2.1	1.8	1.5	1.8	1.8
- capital adequacy ratio (%)	18.1	17.9	18.5	18.3	18.4	18.5	19.3	19.6	20.1
- return on equity (%)[2]	9.1	10.7	10.3	11.3	9.5	13.3	17.0	9.9	13.2
Cost-to-income ratio (%)[1]	63.7	59.9	59.4	59.5	59.8	56.0	42.1	52.8	44.9
Loan-to-deposit ratio (%)[1]	74.7	73.1	73.3	66.6	65.4	70.3	70.1	93.3	80.2
Central bank liquidity as % of liabilities	3.5	3.3	2.8	3.5	5.5	1.7	0.2	-	0.7
Private sector debt (% of GDP)	76.1	72.5	68.5	69.5	66.2	66.0	-	133.0	118.4
Long-term interest rate spread versus Bund (basis points)	64.3	53.4	52.8	59.0	44.4	74.9	97.0	107.7	104.2
Market funding ratio (%)	34.0	34.0	32.2	32.2	30.6	27.9	-	50.8	39.8
Green bonds outstanding to all bonds (%)[3]	-	-	-	0.2	0.2	0.2	1.2	4.0	2.7

1-3	4-10	11-17	18-24	24-27	Colours indicate performance ranking among 27 EU Member States.

(1) Last data: Q3 2023.
(2) Data are annualised.
(3) Data available for EA countries only, EU average refers to EA area.
Source: ECB, Eurostat.

the environmental, social and management (ESG) aspects of the companies financed by banks ([125]).

The Bank of Slovenia has set up a fintech innovation hub. This dedicated, single point of contact aims to: (i) facilitate the exchange of information related to innovative business models; and (ii) clarify regulatory requirements for the areas within the competence of the Bank of Slovenia. The innovation hub targets businesses planning to provide solutions based on financial technologies in Slovenia or within the European Economic Area ([126]).

The insurance market is highly concentrated and largely state-owned. It is dominated by Zavarovalnica Triglav (31% market share), followed by Zavarovalnica Sava (19%) and Generali (16%). Together, these companies controlled two-thirds of the insurance market in 2023. Generali significantly increased its market share in 2020 by acquiring Adriatic Slovenica Zavarovalna druzba. The two largest insurers are controlled by the Slovenian state.

Insurers' profitability deteriorated in 2022 due to inflation, but average solvency remains adequate. Insurance corporations' gross written premium increased again in 2022 (+6.2%), with an especially strong increase in the general insurance segment. Non-life insurers' combined ratio deteriorated from 86% in 2021 to 92% in 2022 but remains below the EU average (96%) and the critical profitability threshold of 100%. This deterioration was mostly due to high inflation, which led to a rise in the average cost of claims that was only partly offset by an increase in premiums. Insurers' profit decreased by 14.4% between 2021 and 2022. Overall capital adequacy remained adequate (at least on average) at 233% in 2022, slightly up from 231% in 2021. On 6 July 2023, the Slovenian Parliament decided to replace the complementary private health insurance system with a mandatory public insurance system managed by the public health insurance fund ZZZS as of 1 January 2024. This reform may reduce the profitability of insurers that have been active in this segment.

Slovenian capital markets remain less liquid and developed than the EU average, but reforms are underway. Slovenian corporations rely more on bank funding and less on market funding than the EU average. Assets under management by the investment-fund sector totalled EUR 3.9 billion at the end of 2022, down 10.0% year-on-year, due to the revaluation of equity funds, which accounted for 65.6% of domestic mutual funds' total assets under management in 2022. Despite the increased volatility and high uncertainty in financial markets, net inflows into domestic mutual funds remained positive but still declined by 54.9% between 2021 and 2022. Domestic mutual funds hold most of their assets in equity and investment-fund shares/units, which exposes them to market risk. The equity investments of domestic mutual funds

([125])Združenje bank Slovenije (ZBS), ESG questionnaire

([126])Banka Slovenije, Fintech innovation hub focus mostly on the US. The recovery and resilience plan includes plans for two reforms to strengthen capital markets in Slovenia, namely: (i) the adoption of a new act on alternative investment funds; and (ii) the implementation of a new strategy for the Slovenian capital market, setting out specific measures for further development.

This annex provides an indicator-based overview of Slovenia's tax system. It includes information on the tax structure (the types of tax that Slovenia derives most of its revenue from), the tax burden on workers, and the progressivity and redistributive effect of the tax system. It also provides information on tax collection and compliance.

Slovenia's tax revenues in relation to GDP are slightly lower than the EU aggregate and some relatively growth-friendly taxes are underused. Slovenia's labour tax revenues as a percentage of GDP were slightly below the EU aggregate in 2022 (see Table A19.1). The country's strong reliance on labour taxation was reflected in a share of labour taxes in total tax revenues that was above the EU aggregate (see Graph A19.1). Starting in 1 July 2025, a mandatory contribution to long-term care will be charged at 2% of gross wages (1% paid by employers and 1% by employees). In January 2024, the government abolished the voluntary supplementary health insurance and replaced it with an additional mandatory health contribution. The health contribution is initially being charged at EUR 35 per month and will later be indexed to average gross wage growth. Revenues from consumption and environmental taxes as a share of total taxation were above the EU aggregate, but revenues from capital taxes were below. The December 2023 Act on Reconstruction, Development and the Provision of Financial Resources increased the corporate income tax rate by 3 pps to 22% and introduced a tax on banking assets for 2024-2028. Revenue will be used to finance reconstruction after the August 2023 floods. Environmental tax revenue as a percentage of total tax revenue and GDP was above the EU aggregate and was (as was the case for other EU Member States) almost entirely composed of energy and transport taxes (see Graph A19.1). However, there could be potential to strengthen the application of the 'polluter pays' principle. Slovenia has implemented three of the six main types of pollution and resources taxes (i.e. taxes on waste landfilling, discharge of waste into water and plastic products). There could be scope to expand waste disposal taxes (including on incineration) and to implement the three other types (i.e. taxes on NOx emissions, pesticides and fertilisers). However, revenues from recurrent property taxes, which are considered to be particularly conducive to growth, were clearly below the EU aggregate. A greater use of recurrent property taxes could increase tax revenue and boost economic growth.

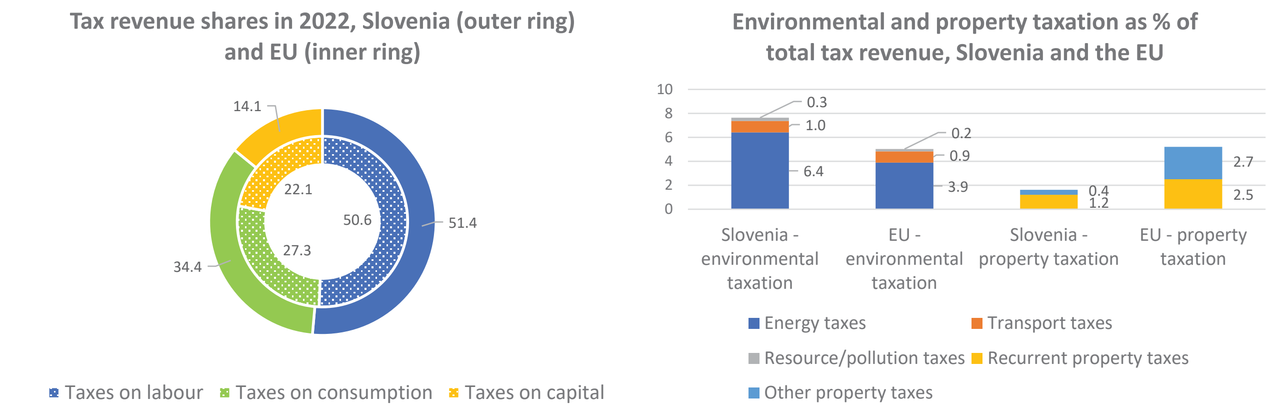
Slovenia's labour tax wedge is high across different wage levels and the labour tax burden is less progressive than the EU average. Slovenia's labour tax wedge was higher in 2023 than the EU average at various income levels, in particular for single people at 50% of the

Table A19.1:**Taxation indicators**

		Slovenia					EU-27				
		2010	**2020**	**2021**	**2022**	**2023**	**2010**	**2020**	**2021**	**2022**	**2023**
Tax structure	Total taxes (including compulsory actual social contributions) (% of GDP)	38.0	37.8	38.4	37.5		37.9	40.0	40.4	40.2	
	Labour taxes (as % of GDP)	19.6	20.0	19.9	19.3		20.0	21.3	20.7	20.3	
	Consumption taxes (as % of GDP)	13.7	12.6	13.1	12.9		10.8	10.7	11.2	11.0	
	Capital taxes (as % of GDP)	4.7	5.1	5.4	5.3		7.1	8.0	8.6	8.9	
	Of which, on income of corporations (as % of GDP)	1.8	2.0	2.5	2.3		2.4	2.5	3.0	3.4	
	Total property taxes (as % of GDP)	0.6	0.6	0.6	0.6		1.9	2.3	2.2	2.1	
	Recurrent taxes on immovable property (as % of GDP)	0.5	0.5	0.5	0.5		1.1	1.2	1.1	1.0	
	Environmental taxes as % of GDP	3.6	3.3	3.1	2.9		2.4	2.2	2.3	2.0	
Progressivity & fairness	Tax wedge at 50% of average wage (Single person) (*)	33.7	37.2	39.5	39.3	37.2	33.9	31.7	32.1	31.8	31.7
	Tax wedge at 100% of average wage (Single person) (*)	42.5	43.1	43.5	42.9	43.3	41.0	40.1	39.9	40.0	40.2
	Corporate income tax - effective average tax rates (1) (*)		17.4	17.4	17.4			19.5	19.0	19.0	
	Difference in Gini coefficient before and after taxes and cash social transfers (pensions excluded from social transfers) (2) (*)	10.6	9.5	8.5	8.3		8.6	8.1	8.2	7.9	
Tax administration & compliance	Outstanding tax arrears: total year-end tax debt (including debt considered not collectable) / total revenue (in %) (*)		6.1	4.8				40.9	35.5		
	VAT Gap (% of VAT total tax liability, VTTL)(**)	8.6	5.4	2.0				9.7	5.4		

(1) Forward-looking effective tax rate (OECD).
(2) A higher value indicates a stronger redistributive impact of taxation.
(*) EU-27 simple average.
(**) Forecast value for 2022, if available. For more details on the VAT gap, see European Commission, Directorate-General for Taxation and Customs Union, 2023, *VAT gap in the EU*, https://data.europa.eu/doi/10.2778/911698.
For more data on tax revenues as well as the methodology applied, see the Data on Taxation webpage, https://ec.europa.eu/taxation_customs/taxation-1/economic-analysis-taxation/data-taxation_en.
Source: European Commission, OECD

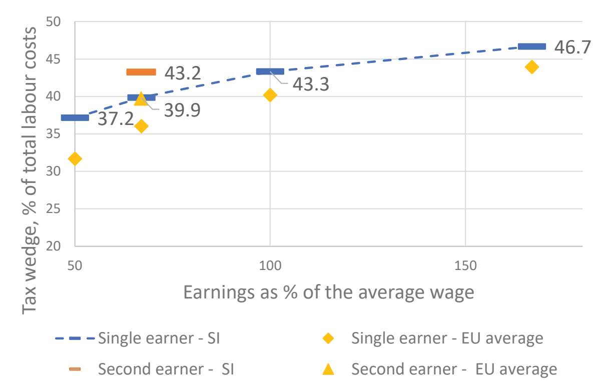
Graph A19.1: **Tax revenues for different tax types as % of total taxation**



(1) Values for EU are GDP-weighted EU averages (EU aggregates)
Source: European Commission

average wage (see Graph A19.2). Second earners at a wage level of 67% of the average wage, whose spouses earn the average wage, were also subject to a tax wedge considerably above the EU average. However, the difference between their tax wedge and that of single earners at the same wage level was slightly below the EU average. Slovenia is one of the Member States with the lowest income inequality (as measured by the GINI coefficient) and the tax benefit system helped reduce income inequality by more than the EU average in 2022.

Graph A19.2: **Tax wedge for single and second earners as a % of total labour costs, 2023**



The second earner tax wedge assumes a first earner at 100% of the average wage and no children. For the methodology of the tax wedge for second earners, see OECD, 2016, *Taxing Wages 2014-2105*.
Source: European Commission

Slovenia is making good progress in digitalising its tax administration, and this can help reduce tax arrears and compliance costs. Outstanding tax arrears declined slightly by 1.3 pps. to 4.8% of total net revenue in 2021. This was significantly below the EU-27 average of 35.5%, but that average was inflated by very large values in a few Member States. Slovenia is among the best performing countries with respect to on-time filing of corporate income tax returns but is the worst performer for on-time filing rates of personal income tax, according to the International Survey on Revenue Administration. The VAT compliance gap (the gap between revenues actually collected and the theoretical tax liability) decreased to 2.0%, even if this was at least partly due to the COVID-19-induced economic crisis. At any rate, it was clearly below the EU-wide gap of 5.4%. The VAT refund procedure of Council Directive 2008/9/EC has been fully digitalised since September 2023, reflecting the ongoing efforts to enhance efficiency and compliance.

ANNEX 20: TABLE WITH ECONOMIC AND FINANCIAL INDICATORS

Table A20.1:**Key economic and financial indicators**

	2004-07	2008-12	2013-20	2021	2022	2023	forecast 2024	forecast 2025
Real GDP (y-o-y)	5.2	-1.0	2.3	8.2	2.5	1.6	2.3	2.6
Potential growth (y-o-y)	.	1.8	1.5	2.4	2.4	3.0	2.9	2.9
Private consumption (y-o-y)	3.1	0.9	1.7	10.3	3.6	1.3	1.5	2.2
Public consumption (y-o-y)	2.9	0.9	2.0	6.1	-0.5	2.4	6.9	2.0
Gross fixed capital formation (y-o-y)	7.8	-8.9	1.7	12.6	3.5	9.5	3.8	3.4
Exports of goods and services (y-o-y)	13.1	0.6	4.1	14.5	7.2	-2.0	2.3	3.8
Imports of goods and services (y-o-y)	12.6	-1.6	3.8	17.8	9.0	-5.1	4.6	3.6
Contribution to GDP growth:								
Domestic demand (y-o-y)	4.2	-1.5	1.6	8.8	2.5	3.2	3.0	2.3
Inventories (y-o-y)	0.8	-0.9	0.2	0.4	1.0	-4.4	1.0	0.0
Net exports (y-o-y)	0.1	1.5	0.5	-1.0	-1.0	2.8	-1.6	0.3
Contribution to potential GDP growth:								
Total Labour (hours) (y-o-y)	.	0.1	0.3	0.7	0.6	0.9	0.6	0.6
Capital accumulation (y-o-y)	.	0.6	-0.1	0.3	0.4	0.7	0.8	0.9
Total factor productivity (y-o-y)	.	1.2	1.4	1.5	1.4	1.4	1.4	1.4
Output gap	4.1	-1.4	-1.4	2.9	3.0	1.6	1.1	0.9
Unemployment rate	5.9	6.9	6.8	4.8	4.0	3.7	3.7	3.6
GDP deflator (y-o-y)	2.8	1.7	1.3	2.7	6.5	8.9	3.3	3.0
Harmonised index of consumer prices (HICP, y-o-y)	3.1	2.7	0.6	2.0	9.3	7.2	2.8	2.4
HICP excluding energy and unprocessed food (y-o-y)	2.5	1.8	1.0	1.0	6.8	7.8	3.4	2.2
Nominal compensation per employee (y-o-y)	6.3	2.7	3.0	8.1	5.0	11.8	6.1	4.4
Labour productivity (real, hours worked, y-o-y)	5.1	-0.1	1.9	2.8	-1.5	0.0	1.4	1.8
Unit labour costs (ULC, whole economy, y-o-y)	2.2	2.9	2.3	1.1	5.4	11.4	4.3	2.3
Real unit labour costs (y-o-y)	-0.6	1.2	1.0	-1.5	-1.0	2.3	0.9	-0.6
Real effective exchange rate (ULC, y-o-y)	0.1	0.8	0.5	1.2	1.4	3.6	-0.8	-0.3
Real effective exchange rate (HICP, y-o-y)	0.1	0.2	-0.1	-0.3	-0.3	1.1	.	.
Net savings rate of households (net saving as percentage of net disposable income)	9.6	5.0	6.4	12.1	.	.	.	.
Private credit flow, consolidated (% of GDP)	14.0	3.6	-1.2	3.5	5.2	.	.	.
Private sector debt, consolidated (% of GDP)	80.8	111.9	79.0	66.2	66.0	.	.	.
of which household debt, consolidated (% of GDP)	20.3	29.0	27.4	26.3	25.9	.	.	.
of which non-financial corporate debt, consolidated (% of GDP)	60.5	83.0	51.6	39.9	40.0	.	.	.
Gross non-performing debt (% of total debt instruments and total loans and advances) (1)	.	.	8.0	1.7	1.4	.	.	.
Corporations, net lending (+) or net borrowing (-) (% of GDP)	-6.7	0.0	2.7	1.0	-3.1	1.4	-0.2	0.2
Corporations, gross operating surplus (% of GDP)	18.8	18.9	19.9	20.3	18.7	18.6	15.7	15.0
Households, net lending (+) or net borrowing (-) (% of GDP)	4.8	3.6	5.3	8.3	4.6	5.3	4.9	3.8
Deflated house price index (y-o-y)	12.8	-3.7	3.1	7.9	4.3	-0.2	.	.
Residential investment (% of GDP)	3.7	3.4	2.2	2.4	2.8	3.1	.	.
Current account balance (% of GDP), balance of payments	-2.6	-1.3	5.6	3.3	-1.0	4.5	1.3	1.2
Trade balance (% of GDP), balance of payments	-0.7	0.8	8.4	5.9	2.3	6.8	.	.
Terms of trade of goods and services (y-o-y)	-0.7	-0.9	0.5	-2.1	-3.1	2.7	0.3	0.1
Capital account balance (% of GDP)	-0.3	0.0	-0.2	0.3	-0.4	-0.3	.	.
Net international investment position (% of GDP)	-15.2	-41.4	-24.8	-7.7	-1.5	3.7	.	.
NENDI - NIIP excluding non-defaultable instruments (% of GDP) (2)	-8.0	-37.8	-10.1	9.4	15.2	19.4	.	.
IIP liabilities excluding non-defaultable instruments (% of GDP) (2)	72.5	107.5	98.9	91.5	82.3	83.7	.	.
Export performance vs. advanced countries (% change over 5 years)	.	.	7.9	15.1	6.4	2.5	.	.
Export market share, goods and services (y-o-y)	.	.	.	.	.	.	.	.
Net FDI flows (% of GDP)	0.5	-0.3	-1.6	-0.8	-2.3	-0.8	.	.
General government balance (% of GDP)	-1.1	-4.7	-2.4	-4.6	-3.0	-2.5	-2.8	-2.2
Structural budget balance (% of GDP)	-3.1	-4.0	-1.4	-5.9	-4.4	-2.8	-2.7	-2.1
General government gross debt (% of GDP)	25.6	38.9	75.8	74.4	72.5	69.2	68.1	66.4

(1) domestic banking groups and stand-alone banks, EU and non-EU foreign-controlled subsidiaries and EU and non-EU foreign-controlled branches.
(2) NIIP excluding direct investment and portfolio equity shares.
Source: Eurostat and ECB as of 2024-5-17, where available; European Commission for forecast figures (Spring forecast 2024).

This annex assesses fiscal sustainability risks for Slovenia over the short, medium and long term. It follows the multi-dimensional approach of the European Commission's 2023 Debt Sustainability Monitor, updated based on the Commission 2024 spring forecast.

1 – Short-term risks to fiscal sustainability are low. The Commission's early-detection indicator (S0) does not point to any major short-term fiscal risks (Table A21.2) ([127]). Government gross financing needs are expected to remain broadly constant at around 7% of GDP on average over 2024--2025 (Table A21.1, Table 1). The sovereign credit rating has been unchanged and between A3 and AA- since autumn 2020. The credit rating outlook is stable at all four major rating agencies by the cut-off date of this report.

2 – Medium-term fiscal sustainability risks appear medium.

The DSA baseline shows that the government debt ratio is expected to slightly decline until 2026 before rising to around 73% of GDP in 2034 (Graph 1, Table 1) ([128]). The debt dynamics relies on the assumption of a structural primary deficit (excluding changes in cost of ageing) of 1.2% of GDP as of 2025. Compared to historical data since 1980, this appears plausible, as 56% of past fiscal positions were more stringent than the one assumed in the baseline. (Table A21.2) ([129]).

On the other hand, the debt dynamics benefit from a still very favourable but declining snowball effect (around -1.6 pps. of GDP annually on average over 2025--2034), which is also supported by the impact of Next Generation EU.

The baseline projections are stress-tested against four alternative deterministic scenarios to assess the impact of changes in key assumptions relative to the baseline (Graph 1). Under the *historical structural primary balance (SPB) scenario* (i.e. the SPB returns to its historical 15-year average of -1.4% of GDP) the debt ratio would only slightly increase in 2034 compared with the baseline (by around 1 pp.). Under the *adverse interest-growth rate differential scenario* (i.e. the interest-growth rate differential deteriorates by 1 pp. compared with the baseline), the debt ratio would be higher than under the baseline by around 5 pps. in 2034. Under the *financial stress scenario* (i.e. interest rates temporarily increase by 1 pp. compared with the baseline) the government debt ratio would remain broadly unchanged in 2034 compared with the baseline (+0.3 pp.). Finally, under the *lower structural primary balance scenario* (i.e. the projected cumulative improvement in the SPB over 2023--2024 is halved) the debt ratio would be higher than the baseline by about 2 pps. in 2034.

The stochastic projections indicate medium risk, pointing to the moderate sensitivity of these projections to plausible unforeseen events ([130]). These stochastic simulations indicate a 42% probability that the debt ratio will be higher in 2028 than in 2023, implying medium risks given the high debt level. In addition, the uncertainty surrounding the baseline debt projections (as measured by the difference between the 10th and 90th debt distribution percentiles, reaching around 29% of GDP in five years' time) is medium (Graph 2).

3 – Long-term fiscal sustainability risks appear overall high. This assessment is based

([127])The S0 is a composite indicator of short-term risk of fiscal stress. It is based on a wide range of fiscal and financial-competitiveness indicators that have proven to be a good predictor of emerging fiscal stress in the past.

([128])The assumptions underlying the Commission's 'no-fiscal policy change' baseline include in particular: (i) a structural primary deficit, before ageing costs, of 1.2% of GDP from 2024 onwards; (ii) inflation converging linearly towards the 10-year forward inflation-linked swap rate 10 years ahead (which refers to the 10-year inflation expectations 10 years ahead); (iii) the nominal short- and long-term interest rates on new and rolled over debt converging linearly from current values to market-based forward nominal rates by T+10; (iv) real GDP growth rates from the Commission 2024 spring forecast until 2025, followed by the EPC/OGWG 'T+10 methodology projections between T+3 and T+10 (average of 2.3%); (v) ageing costs in line with the 2024 Ageing Report (European Commission, Institutional Paper 279, April 2024). For information on the methodology, see the 2023 Debt Sustainability Monitor (European Commission, Institutional Paper 271, March 2024).

([129])This assessment is based on the fiscal consolidation space indicator, which measures the frequency with which a tighter fiscal position than assumed in a given scenario has been observed in the past. Technically, this consists in looking at the percentile rank of the projected SPB within the distribution of SPBs observed in the past in the country, taking into account all available data from 1980 to 2023.

([130])The stochastic projections show the joint impact on debt of 10 000 different shocks affecting the government's budgetary position, economic growth, interest rates and exchange rates. This covers 80% of all the simulated debt paths and therefore excludes tail events.

on the combination of two fiscal gap indicators, capturing the required fiscal effort to stabilise debt (S2 indicator) and bring debt to 60% of GDP (S1 indicator) over the long term ([131]). This assessment is driven by the unfavourable initial budgetary position and above all by the projected rise in ageing costs mainly driven by pensions. Hence, these results are conditional on the country maintaining a sizeable SPB over the long term.

The S2 indicator points to high fiscal sustainability risks. The indicator shows that, relative to the baseline, the SPB would need to improve by 6.3 pps. of GDP in 2025 to ensure debt stabilisation over the long term. This result is underpinned by the projected rise in ageing-related costs (contribution of 4.7 pps.) and an unfavourable initial budgetary position (1.6 pps.). Ageing costs' developments are primarily driven by a projected increase in pension expenditure (3.1 pps.), as well as long-term and health care expenditure (0.9 pp. each) (Table A21.1, Table 2). Hence, while a number of investments and reforms in the RRP contribute to supporting the efficiency of the Slovenian health and long-term care systems, additional measures may be required to further improve the overall fiscal sustainability.

The S1 indicator points to medium fiscal sustainability risks. The indicator shows that the country would need to improve its fiscal position by 4.7 pps. in 2025 to reduce its debt to 60% of GDP by 2070. This result is driven by the current unfavourable initial budgetary position (contribution of 0.9 pp.) and the projected rise in age-related public spending (2.5 pps.).

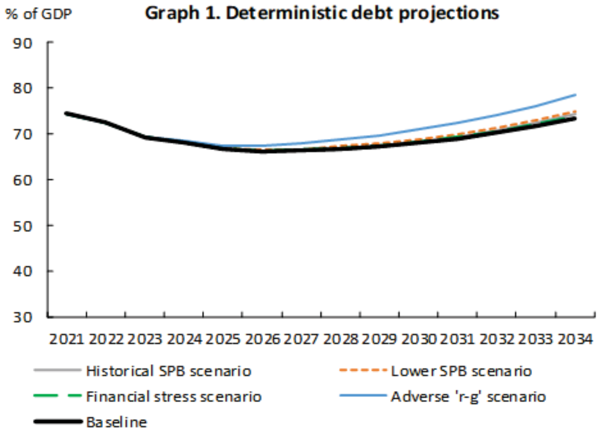
4 – Finally, several additional risk factors need to be considered in the assessment. On the one hand, risk-increasing factors are related to the recent increase in interest rates, and the large share of government debt held by non-residents. In addition, risks stemming from the housing sector due to fast increasing house prices. On the other-hand, risk-mitigating factors include the stabilisation of debt maturity at high levels in recent years and relatively stable financing sources with a diversified and large investor base and a high share of debt held by domestic central bank.

([131])The S2 fiscal sustainability indicator measures the permanent SPB adjustment in 2025 that would be required to stabilise public debt over an infinite horizon. It is complemented by the S1 indicator, which measures the permanent SPB adjustment in 2025 to bring the debt ratio to 60% by 2070. The impact of the drivers of S1 and S2 may differ due to the infinite horizon component considered in the S2 indicator. For both the S1 and S2 indicators, the risk assessment depends on the amount of fiscal consolidation needed: 'high risk' if the required effort exceeds 6 % of GDP, 'medium risk' if it is between 2% and 6% of GDP, and 'low risk' if the effort is negative or below 2% of GDP. The overall long-term risk classification combines the risk categories derived from S1 and S2. S1 may notch up the risk category derived from S2 if it signals a higher risk than S2. See the 2022 Debt Sustainability Monitor for further details.

Table A21.1:**Debt sustainability analysis – Slovenia**

Table 1. Baseline debt projections	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Gross debt ratio (% of GDP)	**74.4**	**72.5**	**69.2**	**68.1**	**66.7**	**66.1**	**66.3**	**66.7**	**67.2**	**68.0**	**69.0**	**70.2**	**71.7**	**73.5**
Changes in the ratio	-5.2	-1.9	-3.3	-1.1	-1.4	-0.6	0.1	0.4	0.5	0.8	1.0	1.2	1.5	1.8
of which														
Primary deficit	3.3	1.9	1.2	1.4	1.3	1.2	1.6	1.9	2.1	2.3	2.4	2.6	2.8	2.9
Snowball effect	-6.7	-5.1	-5.7	-2.3	-2.5	-1.8	-1.5	-1.5	-1.6	-1.5	-1.4	-1.3	-1.3	-1.1
Stock-flow adjustments	-1.8	1.3	1.2	-0.2	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross financing needs (% of GDP)	10.4	8.2	6.9	7.4	7.3	7.4	7.9	8.4	8.7	9.1	9.4	9.8	10.3	10.7

Graph 1. Deterministic debt projections



Graph 2. Stochastic debt projections 2024-2028

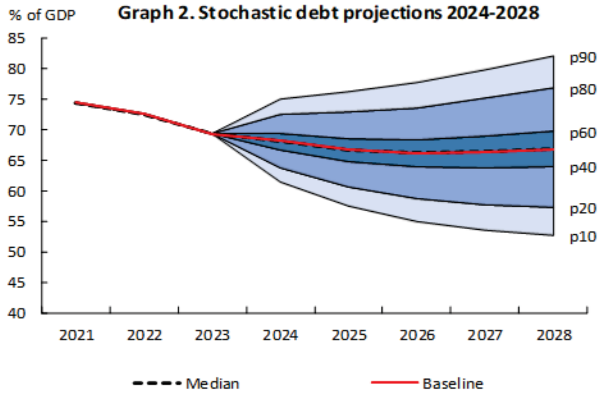


Table 2. Breakdown of the S1 and S2 sustainability gap indicators

		S1	S2
Overall index (pps. of GDP)		**4.7**	**6.3**
of which			
Initial budgetary position		0.9	1.6
Debt requirement		0.2	
Ageing costs		3.7	4.7
of which	*Pensions*	2.5	3.1
	Health care	0.7	0.9
	Long-term car	0.6	0.9
	Education	-0.2	-0.2

Source: Commission services.

Table A21.2:**Heat map of fiscal sustainability risks – Slovenia**

Short term	Medium term - Debt sustainability analysis (DSA)								Long term		
Overall (S0)	Overall		Deterministic scenarios: Baseline	Historical SPB	Lower SPB	Adverse 'r-g'	Financial stress	Stochastic projections	S2	S1	Overall (S1 + S2)
LOW	MEDIUM	Overall	MEDIUM	MEDIUM	MEDIUM	MEDIUM	MEDIUM	MEDIUM	HIGH	MEDIUM	HIGH
		Debt level (2034), % GDP	73.5	74.3	74.9	78.4	73.8				
		Debt peak year	2034	2034	2034	2034	2034				
		Fiscal consolidation space	56%	61%	62%	56%	56%				
		Probability of debt ratio exceeding in 2028 its 2023 level						42%			
		Difference between 90th and 10th percentiles (pps. GDP)						29.3			

(1) Debt level in 2034. Green: below 60% of GDP. Yellow: between 60% and 90%. Red: above 90%. (2) The debt peak year indicates whether debt is projected to increase overall over the next decade. Green: debt peaks early. Yellow: peak towards the middle of the projection period. Red: late peak. (3) Fiscal consolidation space measures the share of past fiscal positions in the country that were more stringent than the one assumed in the baseline. Green: high value, i.e. the assumed fiscal position is plausible by historical standards and leaves room for corrective measures if needed. Yellow: intermediate. Red: low. (4) Probability of debt ratio exceeding in 2028 its 2023 level. Green: low probability. Yellow: intermediate. Red: high (also reflecting the initial debt level). (5) the difference between the 90th and 10th percentiles measures uncertainty, based on the debt distribution under 10000 different shocks. Green, yellow and red cells indicate increasing uncertainty. (For further details on the Commission's multidimensional approach, see the 2023 Debt

Source: Commission services.