Competitiveness and Private Sector Development

Western Balkans Competitiveness Outlook 2024: Serbia

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Foreword

The *Western Balkans Competitiveness Outlook (CO) 2024* is the fourth edition of the OECD's flagship publication that offers an in-depth assessment across 15 policy areas key to bolstering economic competitiveness in the Western Balkans. The CO provides comprehensive guidance to navigate economic reforms, enhance regional co-operation and help the region's economies align their legal frameworks and policies with those of the OECD and EU. It also enables policy makers to track performance over time, by comparing outcomes against those reported in the previous editions since 2016.

The *CO 2024* comprises seven reports: one regional and six economy profiles. Each economy profile evaluates performance across each of the 15 policy dimensions, highlighting areas of progress as well as those requiring continued improvement. The regional profile presents findings for the whole Western Balkans across five policy clusters – infrastructure and connectivity, skills, business environment, digital transformation and greening – and seeks to evaluate the broader regional trends in these areas.

Complementing these reports, the publication's findings are accessible for the first time through a landmark interactive digital tool: the *Western Balkans Competitiveness Data Hub*. By providing policy makers with an enhanced ability to assess and benchmark economic reforms seamlessly, the Data Hub aims to support policy makers in designing economic reforms that drive competitiveness and convergence.

The Serbia profile of the CO is the outcome of work co-ordinated by the South East Europe Division. The assessment was conducted under the guidance of Andreas Schaal, Director of the OECD Global Relations and Co-operation Directorate, and Marzena Kisielewska, Head of the OECD South East Europe Division.

Umur Gökçe and Ali-Fuad Turgut (OECD South East Europe Division) led this work, which was initially also managed by Martin Kohtze. The project also benefitted from inputs by William Tompson (OECD Global Relations and Co-operation Directorate), who served as the lead reviewer of the publication.

Our special thanks also go to the Serbian government officials and other stakeholders who have been actively involved in the data collection process and whose support and dedication have made this publication possible. We would especially like to acknowledge the contributions of Gojko Stanivuković, State Secretary of the Ministry of Finance, and Bojana Tošic, Director of the Public Policy Secretariat, as CO National Coordinators of Serbia, for their political support in conducting the assessment. On the operational level, we are thankful for co-ordination support provided by: Ministry of Finance team: Verica Ignjatović, Sanja Stojadinović and Magdalena Arsić; Public Policy Secretariat team: Sanja Mešanović, Svetlana Aksentijević, Jovan Borišić and Igor Momčilović and Nikica Rodin, the National Statistical Office Coordinator of Serbia; as well as the following individuals, who supported the data-gathering and verification process.

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The report was prepared for publication by Jennifer Allain, with the strategic support of Robert Akam (OECD Global Relations and Co-operation Directorate). It was edited and proofread by Randall Holden. The following people also contributed to the success of the project: Dardan Gashi, Vojtech Holik and Stefano Ottino.

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Reader’s guide

Assessment process

Following the first three *Western Balkans Competitiveness Outlook* assessments, published in 2016, 2018 and 2021, the fourth assessment cycle was launched on 27 April 2023. In Serbia, the Ministry of Finance and the Public Policy Secretariat held the main role of co-ordinators for the assessment process, while for each of the 15 thematic policy dimensions, a relevant line ministry was delegated as the policy dimension co-ordinator responsible for input collection. Once the assessment was launched, the OECD team introduced new digitalised frameworks for assessing each of the 15 policy dimensions. Consisting of qualitative questionnaires and a statistical data sheet, these frameworks were presented and explained by the OECD, with particular attention paid to new questions and indicators.

Following the launch of the assessment, the national co-ordinators disseminated the assessment materials among the co-ordination network and completed the assessment between April and August 2023. They assigned a score to each qualitative indicator used to assess the policy dimension in question, accompanied by a justification. The completed assessment materials were returned to the OECD team between August and October 2023. The OECD then reviewed the inputs and, where necessary, requested additional information from the National Co-ordinator. The updated assessment materials were sent back to the OECD until November 2023.

Upon final completion of the assessment materials, the OECD organised a fact-finding meeting in Belgrade on 19 October 2023 to gain a better understanding of the policy landscape, to collect additional information for indicators where necessary, and to discuss the first set of selected draft findings. Based on the additional inputs received and outcome of the discussions on preliminary analyses and recommendations, the OECD compiled the key findings for each of the 15 policy dimensions. These findings were then presented during a dedicated preliminary findings meeting held on 13 December 2023, and discussed with the national co-ordinators of the Western Balkan economies. The OECD then held consultations on these findings with local non-government stakeholders, including chambers of commerce, academia and NGOs, in January and February 2024. The draft Competitiveness Outlook economy profile of Serbia was made available to the government for its review and feedback from February to March 2024.

Assessment approach

Coverage

This publication features data from and a comprehensive analysis of the six Western Balkan economies, including Albania, Bosnia and Herzegovina, Kosovo*, Montenegro, North Macedonia, and Serbia, providing a detailed analysis of their key sectors, trends, and challenges for achieving convergence with the European Union and OECD area.

The data collection and assessment are standardised for the region, with some differences in the case of Bosnia and Herzegovina. As policy making in Bosnia and Herzegovina is much more decentralised than that of the other Western Balkan economies, information from the Federation of Bosnia and Herzegovina (FBiH) and Republika Srpska (RS) as well as the state-level has been taken into account in the assessment and scoring of policy dimensions. While Brčko District was not directly included in the assessment, its policies have been specified in various sections of the report, as appropriate. For more information on the exact methodology of the scoring, refer to the Bosnia and Herzegovina profile of the CO 2024.

Timeline

The assessment and monitoring of the policy developments were undertaken between 1 March 2021, and 1 March 2024. Any policy changes and new developments after 1 March 2024 have not been considered in the assessment.

Scoring

The assessment comprises a total of 15 policy dimensions that are key to economic competitiveness; these constitute the central building blocks under national economic reform agendas. Each policy dimension is divided into several sub-dimensions (generally between 2 and 4), which are further comprised of granular indicators.

The methodology consists of assessing a total of 147 qualitative indicators across 15 policy dimensions, presented in Table 1. In addition, there are a total of 265 quantitative indicators that provide insights into the policy outcomes, demonstrating whether policies bring out the desired results and the extent to which they help to achieve the Western Balkans' socio-economic convergence with the OECD area and EU.

The 2024 assessment retains the 0-5 scoring scale from previous cycles. However, the scoring criteria have been revised to reflect current best practices and policy trends in OECD and EU countries, as well as policy developments in the Western Balkans. Each indicator is assigned a numerical score ranging from 0 to 5 based on the level of policy development, implementation and monitoring & evaluation, enabling performance comparison across economies and over time. Level 0 represents the weakest performance, while Level 5 indicates the strongest, signifying a higher level of policy convergence towards OECD good practices and standards.

Table 1. Policy dimensions and indicators

Dimension		No. of qualitative indicators
1.	Investment policy and promotion	8
2.	Trade policy	6
3.	Access to finance	8
4.	Tax policy	11
5.	State-owned enterprises	11
6.	Anti-corruption policy	13
7.	Education policy	9
8.	Employment policy	12
9.	Science, technology and innovation	9
10.	Digital society	11
11.	Transport policy	10
12.	Energy policy	11
13.	Environment policy	10
14.	Agriculture policy	8
15.	Tourism policy	10

Each criterion that is met on the scale of Level 0 to Level 5 indicates a level of policy sophistication. This form of scoring allows for more nuanced score progression along the scale, and permits the consideration of more refined inputs in scoring. For this assessment, the OECD team has also prepared simplified versions of the scoring methodology, using benchmark criteria to better illustrate the rationale behind the scores. However, it is only a simplified representation, and does not encompass all the elements that influence the scoring. Table 2 presents an example indicator for accommodation quality (Tourism policy), with assessed criteria in the second column.

Table 2. Competitiveness Outlook scoring system: A sample indicator – accommodation quality

Score level	Policy requirements	Criterion met
Level 0	A consistent accommodation quality standard framework has been adopted.	✓
	Measures facilitating investments in high-quality private accommodation development or renovation have been adopted.	✓
	Measures facilitating investments in renovation or in building up new high-quality private accommodation are implemented.	✓
	Accommodation quality standard framework is in the process of implementation.	✓
	Energy efficiency requirements are included in the accommodation quality standard framework.	✓
	Regular inspection of quality standards is in place.	X
	Requirements for persons with disabilities are included in the quality standards for accommodation.	
	The sharing economy is regulated.	X
	Accommodation facilities that enhance energy efficiency efforts are supported by the government.	X
Level 5	Regular monitoring of the accommodation framework is conducted.	X
	An independent ex-post evaluation has been conducted to assess the effectiveness of the implemented measures and to take corrective action.	X
	Score for Serbia	**2.5**

Notes: The indicator and criteria shown in the table above do not reflect the actual score for Serbia and are included solely for demonstration purposes. Moreover, there is no methodology for specific criterion being assessed, which would translate directly into a score. In other words, each criterion does not necessarily result in a score increase.

As part of the current assessment cycle, **the *Western Balkans Competitiveness Data Hub*** (https://westernbalkans-competitiveness.oecd.org) **has also been developed to access all the scores by indicator, showcasing the fulfilment of criteria by each economy and offering the rationale behind scores**. Scores can be explored through policy dimensions as well as over time, and in comparison to other Western Balkan economies.

The final scores represent a simple average of all indicators, and not individual sub-dimensions. Table 3 illustrates an example of the dimension scoring system and thus the final scores. The number of indicators included in each sub-dimension varies depending on the complexity and scope of the concerned policy area. Therefore, the sample average of the sub-dimension scores can be different from the final dimension scores.

Table 3. Competitiveness Outlook scoring system: A sample presentation of dimension scores

Dimension	Sub-dimension	2018 score	2021 score	2024 score	2024 WB6 average
Investment policy and promotion	1.1: Investment policy framework			4.3	3.9
	1.2: Investment promotion and facilitation			4.0	3.3
	1.3: Mobilising sustainable investment			3.5	2.8
Serbia's overall score		**3.4**	**3.9**	**4.0**	**3.4**

For further details on the *Competitiveness Outlook* methodology, individual scores for each indicator, as well as the changes in the scope compared to the last assessment cycle in 2021, please refer to the detailed assessment methodology on the *Western Balkans Competitiveness Data Hub*.

Comparability

The *Western Balkans Competitiveness Outlook* reflects a continual process of methodological refinement aimed at improving the robustness and comparability of indicators. However, evolving policy trends in OECD and EU countries, alongside shifting priorities in the Western Balkans, can sometimes make comparing scores difficult over time. In the 2024 edition, scores are compared back to 2021 and 2018. Due to vast methodological changes, direct comparisons to the first edition in 2016 are not feasible.

Since the 2018 edition, indicators have also been reorganised into different subdimensions, reflecting the policy aspects that are of key importance for the Western Balkans. This does not have any impact on the overall score comparability, i.e. dimension scores remain comparable. However, subdimension scores cannot be compared across earlier editions.

Abbreviations and acronyms

5G	Fifth-generation technology standard for cellular networks
AAS	Agriculture advisory service
ABR	Agency for Business Registers
ACA	Anti-Corruption Agency
ACER	Agency for the Cooperation of Energy Regulators
ADR	Alternative dispute resolution
AEOI	Automatic exchange of information
AERS	Energy Agency of the Republic of Serbia
AES	Automated export system
AFOLU	Agriculture, forestry, and other land use
AI	Artificial intelligence
AIFMD	Alternative Investment Fund Managers Directive
AIS	Automated import system
ALMPs	Active labour market programmes
AMLD5	Fifth Anti-Money Laundering Directive
AOFI	Export Credit and Insurance Agency
APC	Agency for Prevention of Corruption
API	Application programming interface
ATONs	Aids to navigation
B2B	Business to business
BAN	Business angel network
BAT-AELs	Best available technique-associated emission levels
BCP	Border control post
BEPS	Base erosion and profit shifting
BRA	Business Registers Agency
CAP	Common Agricultural Policy
CARE	Community Database on Accidents on the Roads in Europe

CBA	Cost-benefit analysis
CBAM	Carbon Border Adjustment Mechanism
CDMS	Customs decisions Management System
CDT	Centre for Digital Transformation
CEFTA	Central European Free Trade Agreement
CEO	Chief executive officer
CEPEJ-GT-MED	European Commission for the Efficiency of Justice Working Group on Mediation
CERT	Computer Emergency Response Team
CfD	Contract for difference
CHP	Combined heat and power
CIT	Corporate income tax
CMO	Common market organisation
CO	Competitiveness Outlook
COP	Conference of the Parties
COSME	Competitiveness of Enterprises and Small and Medium-sized Enterprises
COST	European Cooperation in Science and Technology
CSW	Centres for social work
DFC	United States International Development Finance Corporation
DIH	Digital innovation hub
DLT	Distributed ledger technology
DSO	Distribution system operator
EBRD	European Bank for Reconstruction and Development
EFTA	European Free Trade Association
eID	Electronic identification
eIDAS	Electronic identification, authentication and trust services
EIGE	European Institute of Gender Equality
EMD2	Second Electronic Money Directive
EMIS	Education management information system
EPO	European Patent Office
EPR	Extended producer responsibility
EPS	Elektroprivreda Srbije (Serbia’s electric utility power company)
EQF	European Qualifications Framework
ERA	European Research Area
ERIC	European Research Infrastructure Consortium

ERTMS	European Railway Traffic Management System
ESCS	Economic, social and cultural status
ESFRI	European Strategy Forum on Research Infrastructures
ESG	Environment, social and governance
ESJS	European Skills and Jobs Survey
ETC	Electronic toll collection
ETF	European Training Foundation
ETS	Emissions Trading System
EU	European Union
EU NIS	European Union Networks and Information Society
EUR	Euros
EURES	European Network of Employment Services
EVCS	Electric vehicle charging station
FADN	Farm accountancy data network
FAO	Food and Agriculture Organization of the United Nations
FDI	Foreign direct investment
FSA	Financial social assistance
FTAs	Free trade agreements
Gbps	Gigabits per second
GDP	Gross domestic product
GDPR	General Data Protection Regulation
GERD	Gross domestic expenditure on research and development
GHG	Greenhouse gas
GI	Geographical indications
GIZ	Gesellschaft für Internationale Zusammenarbeit, German Corporation for International Cooperation
GloBE	Global Anti-Base Erosion Rules
GMO	Genetically modified organism
GO	Guarantees of origin
GovTech	Government and technology
GPA	Grade point average
GRECO	Groupe d'États contre la corruption
GST	Goods and services tax
GSTC	Global Sustainable Tourism Council
GVA	Gross value added

ha	Hectares
HE	Higher education
HEI	Higher education institution
HORES	Business Association of Hotel and Restaurant Industry
IACS	Integrated administration and control system
ICO	Initial Coin Offering
ICT	Information and communication technology
ICJ	International Court of Justice
IEQE	Institute for Education Quality and Evaluation
IFIs	International financial institutions
IFRS	International Financial Reporting Standards
ILO	International Labour Organization
IMF	International Monetary Fund
IP	Intellectual property
IPA	Instrument for Pre-Accession Assistance
IPARD	Instrument for Pre-accession Assistance for Rural Development
IPO	Intellectual Property Office
IPPC	Integrated Pollution Prevention and Control
IPR	Intellectual property rights
ISCED	International Standard Classification of Education
IT	Information technology
ITE	Initial teacher education
ITE Office	Office for IT and e-Government
ITF	International Transport Forum
ITS	Intelligent transport systems
IWT	Inland waterway transport
JSI	(WTO) Joint Statement Initiative
KfW	Kreditanstalt für Wiederaufbau (Credit Institute for Reconstruction), Germany
KPIs	Key performance indicators
LAG	Local action group
LDS	Local development strategies
LFS	Labour Force Survey
LPC	Law on Prevention of Corruption
LPIS	Land parcel identification system

MAFWM	Ministry of Agriculture, Forestry and Water Management
Mbps	Megabits per second
MiFID II	Markets in Financial Instruments Directive II
MiFIR	Markets in Financial Instruments Regulation
MIT	Ministry of Information and Telecommunications
MNE	Multinational enterprises
MoE	Ministry of Education
MoESTD	Ministry of Education, Science and Technological Development
MoI	Ministry of Interior
MoSTDI	Ministry of Science, Technological Development and Innovation
MRLs	Maximum residue levels
MSCA	Marie Skłodowska-Curie Action
MW	Megawatt
MWh	Megawatt hour
NA	National Assembly
NAP	National Adaptation Plan
NBS	National Bank of Serbia
NCBTF	National Coordination Body for Trade Facilitation
NDCs	Nationally determined contributions
NEAQA	National Entity for Accreditation and Quality Assurance in Higher Education
NECP	National Energy and Climate Plan
NEET	Not in education, employment or training
NEMO	Nominated electricity market operator
NES	National Employment Service
NGO	Non-governmental organisations
NQFS	National Qualifications Framework of Serbia
NREAP	National Renewable Energy Action Plan
ODENQF	Office for Dual Education and the National Qualifications Framework
ODR	Online dispute resolution
OECD	Organisation for Economic Co-operation and Development
ÖREK	Österreichisches Raumentwicklungskonzept (the Austrian Spatial Development Concept)
ÖROK	Österreichische Raumordnungskonferenz (Austrian Conference on Spatial Planning)
OSCE	Organization for Security and Co-operation in Europe

PBMC	Performance-based maintenance contract
PDO	Protected designation of origin
PDP	Personal data protection
PERS	Public Enterprise "Roads of Serbia"
PES	Public employment service
PGI	Protected geographical indication
Ph.D.	Doctor of Philosophy
PHEVs	Plug-in hybrid electric vehicles
PISA	Programme for International Student Assessment
PIT	Personal income tax
POOC	Prosecutor's Office for Organised Crime
pp	Percentage points
PSD2	Second Payment Services Directive
QDMTT	Qualified domestic minimum top-up tax
R&D	Research and development
R&I	Research and innovation
RAI	Regional Anti-Corruption Initiative
RAMS	Reliability, availability, maintainability, and safety
RAS	Development Agency of Serbia
RATEL	Regulatory Authority for Electronic Communications and Postal Services
RCC	Regional Cooperation Council
RES	Renewable energy sources
RIAMS	Rail infrastructure asset management system
RITTD	Research, innovation, technology transfer and digitalisation
RSD	Serbian Dinar
S3	Smart Specialisation Strategy
SAA	Stabilisation and Association Agreement
SAIGE	Serbia Accelerating Innovation and Growth Entrepreneurship
SCHLC	Section for Combating High-Level Corruption
SCOC	Service for Combating Organised Crime
SDC	Swiss Agency for Development and Cooperation
SDGs	Sustainable Development Goals
SED	Strategy for Education Development
SEEPEX	South East European Power Exchange

SEPA	Single Euro Payments Area
SEPA	Serbian Environmental Protection Agency
SES II	Single European Sky II
Sida	Swedish International Development Cooperation Agency
SLA	Service Level Agreement
SME	Small and medium-sized enterprises
SOE	State-owned enterprise
SORS	Statistical Office of the Republic of Serbia
SPC	State Prosecutorial Council
SRB	Serbia
SSC	Social security contributions
STI	Science, technology and innovation
STO	Security Token Offering
STP	Science and Technology Park
TCT	Transport Community Treaty
TEN-T	Trans-European Transport Network
TERM	Transport and Environment Reporting Mechanism
TPP	Third-party payment services providers
TSA	Tourism Satellite Accounts
TSO	Transmission system operator
TTF	Technology Transfer Facility
UCITS	Undertakings for Collective Investment in Transferable Securities Directive
UN	United Nations
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UNFCCC	United Nations Framework Convention on Climate Change
UNCITRAL	United Nations Commission on International Trade Law
UNWTO	United Nations World Tourism Organization
USAID	United States Agency for International Development
UNSCR	United Nations Security Council Resolution
USD	United States Dollar
VAT	Value added tax
VET	Vocational education and training

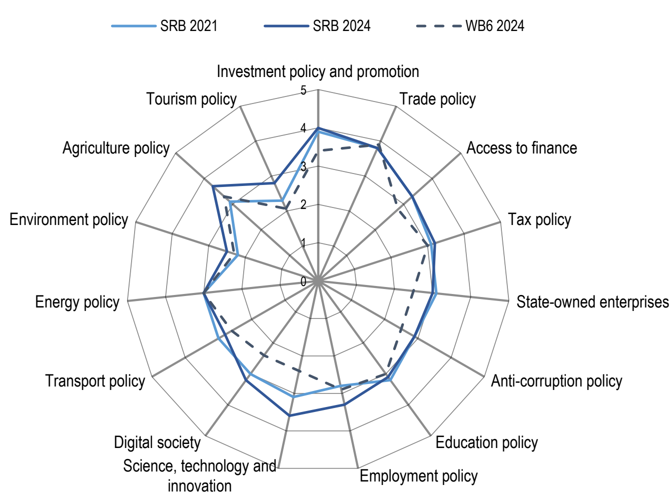
VTS	Vessel traffic services
WB6	Western Balkan Six
WBL	Work-based learning
WHO	World Health Organization
wiiw	Vienna Institute for International Economic Studies
WIPO	World Intellectual Property Organisation
WTO	World Trade Organization
WWTPs	Wastewater Treatment Plants
YUTA	National Association of Travel Agencies

Executive summary

Performance overview

Serbia has made notable progress across 8 of the 15 policy dimensions since the 2021 Competitiveness in South East Europe: A Policy Outlook (Competitiveness Outlook), with the strongest score increases in the areas of agriculture; science, technology and innovation (STI); and employment policies illustrates that Serbia is outperforming the average of the six Western Balkan (WB6) economies across 13 policy dimensions, with only trade and energy policy lagging behind. Serbia positions itself as a regional leader, with the highest score in five areas: 1) investment policy and promotion; 2) STI; 3) digital society; 4) agriculture; and 5) access to finance policies. By contrast, it scores below at least two of its Western Balkan neighbours in the areas of trade, energy and tax policies, highlighting the areas requiring improvement for achieving convergence with the European Union (EU). For additional insights into Serbia's performance across various dimensions, trends over time or comparisons with other economies, please refer to the Western Balkans Competitiveness Data Hub at: https://westernbalkans-competitiveness.oecd.org.

Figure 1. Scores for Serbia across Competitiveness Outlook policy dimensions (2021 and 2024)



Note: Dimensions are scored on a scale of 0 to 5. See the Reader's guide and the Data Hub at: https://westernbalkans.competitiveness.oecd.org for information on the assessment methodology and the individual score assigned to indicators.
Source:

StatLink https://stat.link/83cg45

Main progress areas

The main achievements that have led to increased performance for Serbia since the last assessment are as follows:

- **Efforts towards building a digital society have gained momentum**. Significant progress has been made in expanding broadband infrastructure, with fibre network access extended to rural areas, increasing from 74% in 2021 to nearly 80% by 2023. The implementation of the e-government programme has boosted the digitalisation of the public administration and the delivery of e-services. Among Western Balkan economies, Serbia has the highest percentage of individuals who use the Internet to interact with public authorities (51.1%), surpassing the EU average (50.7%). With a dedicated policy framework, Serbia is pioneering the use of emerging technologies such as artificial intelligence (AI), highlighted by establishing the Research and Development Institute for AI in 2021.
- **Foreign direct investment (FDI) inflows have surged due to an open investment regime coupled with non-distorting incentives.** Over the past decade, Serbia has successfully attracted a growing amount of FDI, with net inflows rising from USD 2.3 billion in 2015 to USD 4.5 billion in 2023. With more than one-quarter of this FDI directed into manufacturing, Serbia's productive capacity and competitiveness have been significantly bolstered. The adoption of a mix of policy measures, including cost-based incentives in line with OECD good practices, to attract investment in high-value and export-oriented sectors has been instrumental in this success.
- **The productivity of the agriculture sector has shown signs of improvement.** Despite the steady decline in total employment within the agriculture sector over the past decade, from 21.2% in 2011 to 13.9% in 2021, the sector's share of national gross domestic product (GDP) has remained constant, hovering around 6%. The improvements in irrigation and drainage infrastructure, the wide availability of producer support instruments, well-developed information systems, and growing efforts in advisory services have boosted the productivity of Serbia's agriculture sector. Notably, Serbia is the only economy in the Western Balkans with a trade surplus in its agrifood sector.
- **Employment policies addressing skills gaps and mismatches, particularly among young people, have been strengthened.** Serbia's level of young people not in education, employment or training (NEET) is 12.9%, which exceeds the EU average of 9.6%; however, it has significantly fallen from 17% in 2018 and is currently the lowest in the Western Balkans. Enhanced policy focus and measures have contributed to this achievement. In 2022, Serbia established the Office for Dual Education and implemented the National Qualifications Framework. Through engagement with employers, this institution has worked to better align curricula and educational/training opportunities with the demands of the labour market. Additionally, the adoption of the Youth Guarantee Implementation Plan has intensified policy attention on youth.
- **Governance and funding for STI policies have further improved.** The institutional setup for STI policy was streamlined in 2022 with the creation of the new Ministry of Science, Technological Development and Innovation, consolidating responsibilities and reducing the risk of overlapping mandates and conflicting priorities. Despite room for improvement, gross domestic expenditure on research and development is increasing, accounting for around 1% of GDP. Serbia has further committed itself to increasing public investments in research and development (R&D) by 50% between 2013 and 2018, and public sector spending has already begun to increase, primarily through the Science Fund. Serbia has also secured large-scale investments to further expand its network of science and technology parks (STP) and construct a state-of-the-art biotechnology park.

Policy insights

To further improve its competitiveness and boost its economic convergence with the EU and OECD, Serbia is encouraged to:

- **Foster competition and deregulation in the energy sector.** Backed by an advanced legal framework, Serbia became the first economy in the Western Balkans to establish an intraday electricity market in 2023. Nevertheless, deregulation remains limited, primarily due to the dominant position of established suppliers hindering the emergence of truly competitive power markets. To encourage competition, alternative suppliers must be incentivised. A more extensive opening of the energy market would not only enhance efficiency and reduce prices, but also foster a resilient and diversified energy landscape in Serbia. This would decrease reliance on single sources and strengthen the overall energy infrastructure.
- **Enhance trade facilitation to make it easier and more efficient for businesses to import and export goods.** Serbia stands to benefit from further digitalisation and simplification of administrative procedures, given the potential for increased trade flow and reduced costs. Currently, full-time automated processing for customs is not available, and electronic documentation has not been extended to all trade documents, necessitating notarised hard copies for various products and services. Moreover, there is a need to improve the inclusiveness of consultations with the private sector by providing adequate and timely information on regulatory changes and enhancing opportunities for the private sector to comment on trade-related regulations.
- **Explore tax policies to address informality.** High social security contributions (SSCs) and the limited progressivity of personal income tax (PIT) place a heavy tax burden on labour, particularly for lower-income workers. Reduced SSC rates and lower bottom-tier PIT rates can reduce barriers to formal employment. The design and operation of the value added tax (VAT) system also require improvements. Lowering the very high VAT threshold (EUR 68 000) and enhancing the implementation of electronic invoicing would enhance the neutrality of the tax, reduce distortions and potentially increase revenues by promoting greater formality.
- **Continue strengthening the governance of state-owned enterprises (SOEs).** Many SOEs in Serbia either do not achieve significant rates of return or operate at a loss, pointing to structural issues that hamper efficient resource allocation. To address this, it is crucial to bolster the monitoring of SOE performance. This entails a thorough analysis of the root causes of SOEs' underperformance and quantification of the impact of any public policy objectives on SOEs' finances. Good practices indicate that the costs associated with SOEs' public service obligations should be transparently identified, with only those costs being compensated from the state budget.
- **Strengthen and incentivise public bodies to step up anti-corruption efforts.** Serbia boasts robust legal frameworks and measures to combat corruption. However, effectively suppressing corruption demands more than the mere functioning of laws and institutions but necessitates comprehensive efforts across the entire public sector. Introducing a legal guarantee that ensures all planned anti-corruption actions are backed by adequate state funding would enhance the capacity of anti-corruption bodies and strengthen their activities. Furthermore, providing additional incentives for public bodies, such as integrating the progress of anti-corruption actions into key performance indicators and regularly publishing data on their implementation progress, would contribute towards a comprehensive approach.

1 Context

This chapter offers an overview of Serbia’s economic developments since the *Competitiveness Outlook* 2021, with a special focus on the economic impact of recent external shocks and economic convergence. The chapter also examines the progress made and challenges encountered in achieving the Sustainable Development Goals. It also recaps the progress made towards EU accession, including the financial and development support provided by the EU for Serbia's accession efforts. Altogether, this sets the stage for in-depth examination across 15 policy dimensions in the subsequent chapters, all necessary for sustaining economic competitiveness.

Economic context

Key economic developments

Serbia is the largest economy of the Western Balkans, with a total gross domestic product (GDP) of EUR 68 billion as of 2023 (IMF, 2024[1]). It is predominantly services-based: services account for 52% of its GDP. Industry and agriculture respectively contribute 25.6% and 6.5% to GDP World Bank (World Bank, 2021[2]). Meanwhile, 57% of employment is concentrated in services, while industry and agriculture comprise 29% and 14% of employment, respectively (ILO, 2024[3]). The informal sector is estimated to account for 18.7% of employment as of 2019 (ILO, 2023[4]) (Table 1.1).

Over the assessment period, Serbia's economy remained largely resilient, though growth has been slower than that in other economies in the Western Balkans. Serbia's economic downturn in 2020 from the COVID-19 pandemic was shallow, with a decline in GDP of -0.9%. GDP growth rebounded to 7.7% in 2021 and decelerated rapidly to 2.5% in 2022 and approximately 2% in 2023 (European Commission, 2024[5]; IMF, 2024[6]). On the supply side, construction, agriculture, and information and communications proved to be the main growth drivers by sector towards the end of 2023, while industry and mining also posted positive growth (European Commission, 2024[5]). On the expenditure side, Serbia's growth performance was largely supported by private consumption and investment supported by FDI inflows (European Commission, 2024[5]). Private investment, on the other hand, remains low, presenting a barrier to growth (World Bank, 2020[7]). Serbia's private sector annually invested 2.7% of GDP less than its Western Balkan neighbours and nearly 6% less than those in Central and Eastern Europe[1] (World Bank, 2020[7]), underscoring Serbia's comparatively slow growth and highlighting areas requiring further development.

Inflation has been moderately high compared to other economies in the region over the observed period. Consumer price inflation peaked at 16.2% in 2023 due to rising international food and energy prices (IMF, 2024[8]). Inflation slowed to 8% by November 2023, but still remained well above its upper target rate of 3% (European Commission, 2024[5]). Annual inflation was primarily fuelled by food prices, but they slowed down towards the end of 2023 as global food prices began to ease. Moreover, increases in electricity and gas tariffs (24% and 33%, respectively), as stipulated in the **standby-arrangement** (**SBA**) with the International Monetary Fund (IMF), also contributed to rising inflation in 2023.

Despite the significant challenges, Serbia's labour market has remained resilient, with unemployment reaching a record low of 8.7% by 2022 (ILO, 2024[3]). Labour force participation rates among adults between the ages of 15 and 64 have improved, increasing from 68% in 2020 to 73.2% in 2022 (ILO, 2024[3]). Youth unemployment declined from 27.7% in 2020 to 24.4% in 2022, while labour force participation among young people increased over the same time. Average salaries and wages have continued to rise, increasing by 14.8% in nominal terms and 2.4% in real terms over 2020 to 2023 (Statistical Office of the Republic of Serbia, 2024[9]). (See the employment policy chapter for more details on labour market developments.)

Serbia's external sector expanded considerably from 2019 to 2022 but contracted in 2023. Exports decreased by 1.5% from 2022 to 2023 (dampened by low external demand), while imports contracted by 1.2% in the same year. The negative net export growth impact in 2023 is largely attributable to the inventory buildup of gas and oil. In 2022, net FDI inflows reached 7.1%. Over the first 10 months of 2023, net FDI inflows increased by about 8% relative to 2022, being close to record levels as a share of GDP and covering multiple (3.4) times the current account deficit. Amid high international energy prices ensuing from the Russian Federation's war of aggression against Ukraine and unforeseen domestic supply disruptions, Serbia's energy imports contributed to the reduction of the current account deficit due to lower-than-expected energy prices and reduced demand resulting from mild winter conditions (IMF, 2023[10]). Serbia's exchange rate has largely held stable, as the National Bank of Serbia has continued to **intervene** in the foreign exchange market to relieve appreciation pressures on the dinar.

The government's fiscal position is still in recovery following the COVID-19 pandemic, with fiscal consolidation resuming in 2021 and a steadily improving though still negative gross government balance of -3.0% in 2022 (European Commission, 2024[5]; IMF, 2023[10])**.** Serbia's fiscal revenues increased by 11.8% over January to November 2023, propped up by social contributions, corporate income tax, personal income tax, excise duties and grants, while value added tax (VAT) also increased moderately. Government expenditures expanded in line with the increase in revenue. Public debt shot up from 52% to 57% in 2020 but declined to 52.7% by 2023, having yet to reach pre-pandemic level. In 2022, Serbia's sovereign ratings were upgraded and now stand only one notch below investment grade (IMF, 2023[10]). Serbia issued its debut green Eurobond of EUR 1 billion in September 2021, becoming one of the few European countries and the only non-EU European economy to issue the green Eurobond (National Bank of Serbia, 2024[11]). Investor demand for the bond exceeded EUR 3 billion (Scope Ratings, 2022[12]).

Table 1.1. Serbia: Main macroeconomic indicators (2019-23)

Indicator	Unit of measurement	2019	2020	2021	2022	2023e
GDP growth	% year-on-year	4.3	-0.9	7.7	2.5	..
National GDP	USD billion	51.5	53.4	63.1	63.6	..
Inflation	% average	1.8	1.6	4.1	12.0	..
Current account balance	% of GDP	-6.9	-4.1	-4.2	-6.8	..
Exports of goods and services	% of GDP	51.0	48.2	54.9	63.8	..
Imports of goods and services	% of GDP	60.9	56.5	62.9	74.8	..
Net FDI	% of GDP	7.7	6.3	6.9	7.1	..
Public and publicly guaranteed debt	% of GDP	52.7	57.8	57.1	55.6	55.4
External debt	% of GDP	61.4	65.8	68.4	69.3	..
Unemployment	% of total active population	11.2	9.7	11	9.4	..
Youth unemployment	% of total	27.5	26.6	25.5	24.3	..
International reserves	In months of imports of G&S	5.7	6.1	5.9	5.2	..
Exchange rate (if applicable local currency/euro)	Value	117.86	117.58	117.57	117.46	117.25
Remittance inflows	% of GDP	…	4.5	4.7	7.1	6.1
Lending interest rate	% annual average	2.52	1.19	0.89	2.47	..
Stock markets (if applicable)	Average index	1 584	1 544	1 639	1 720	..

Note: G&S = goods and services. "…" indicates data are collected but not available.
Sources: European Commission (2024[5]); World Bank (2021[2]).; EBRD (2023[13]); IMF (2024[14]); UNCTAD (2024[15]).

Serbia's financial sector has remained steady, while tighter financing conditions led to decreased demand for private credit. Lending growth turned negative in 2023, at -0.4% (European Commission, 2024[5]). Nonperforming loans have continued their declining trend and reached 3.0% in 2023 as a percentage of total loans (see Chapter 4 for more details on the financial sector).

Box 1.1. Economic impacts of Russia's war of aggression against Ukraine on Serbia's economy

Russia's ongoing invasion of Ukraine had muted negative economic implications for Serbia, mostly as a result of increased commodity prices. As Serbia has not aligned itself with the EU's sanctions on Russia, its trade and investment links with Russia remained less affected compared with other economies of the Western Balkans. Moreover, there is evidence that the inflow of Russian citizens contributed to the robust growth of the information and communication technology (ICT) sector, whose exports reached EUR 1.3 billion in mid-2023, 41% more than a year earlier.

Trade volumes between Serbia and Russia have steadily increased, rising nearly threefold over 2012-22. From 2021 to 2022 alone, exports from Russia to Serbia increased from EUR 1.5 billion to EUR 2.6 billion (United Nations, 2024[16]). In 2023, Russia accounted for around 4% of Serbia's total exports and 5.3% of its imports (United Nations, 2024[16]). The main products exported from Russia to Serbia were crude petroleum, petroleum gas, and nitrogenous fertilisers. Serbia's exports to Russia likewise increased, from EUR 842 million in 2021 to EUR 1 billion in 2023 (United Nations, 2024[16]).

Meanwhile, Serbia's **trade** relations with Ukraine, which represent less than 0.1% of its total trade value, have declined even further since the start of the conflict. In 2022, Serbia's exports to Ukraine totalled EUR 126 million, down from EUR 152 million in 2021 (United Nations, 2024[16]). Serbia's exports to Ukraine remained constant into 2023, at EUR 150 million. Likewise, Ukraine's exports to Serbia, which totalled EUR 165 million during 2021, dropped to EUR 114 million in 2022 and remained steady into 2023 at EUR 110 million (United Nations, 2024[16]).

Serbia's **energy** sector has also been affected, and the economy has taken steps to balance its energy needs. Prior to the conflict, Serbia had been almost entirely dependent on Russian imports of natural gas and the Russia's Gazprom had a sizable control over the economy's energy assets (Stojanovic, 2022[17]; EWB, 2023[18]). In 2023, it signed a deal to purchase 400 million cubic metres of natural gas from Azerbaijan from 2024, representing approximately 13% of its natural gas needs. The Serbia-Bulgaria gas interconnector, a flagship project of the EU's Economic and Investment Plan for the Western Balkans, was completed in December 2023. The pipeline has a transmission capacity of 1.8 billion cubic metres per year (European Commission, 2023[19]). At the same time, Serbia renewed its energy deal with Russia for another three years as of May 2022, and established a joint company with Hungary in June 2022 to route Russian gas to the EU Member State. In response to the social and economic impact of the current energy crisis generated by Russian war of aggression against Ukraine, the EU allocated EUR 165 million to Serbia under the 2023 Energy Support Package immediate measures, 90% of which has been disbursed to assist vulnerable families and SMEs in dealing with rising energy prices. The actions are also aimed at supporting policy measures to accelerate the energy transition (European Commission, 2023[20]).

In terms of **agricultural** products, the government introduced in March 2022 a five-month ban on the export of some agricultural products with the objective to offset rising food prices and address shortages from Russia's war of aggression against Ukraine. However, the European Commission states that this measure is incompatible with the EU-Serbia Stabilisation and Association Agreement. The measure included a ban of wheat, maise, wheat flour, groats and sunflower oil. Serbia's grain exports, 80% of which are routed through Black Sea ports, have lowered significantly due to rising domestic prices, government limitations in exports and lower domestic production (US Department of Agriculture, 2023[21]). The value of Serbia's global cereal exports plunged from USD 908 million in 2021 to USD 474 million in 2023 (United Nations, 2024[16]).

The spillovers from the war also triggered a temporary shock to financial stability, with temporary cash withdrawals from the banking system that peaked in the first two weeks of March 2022 (IMF, 2022[22]). Serbian authorities took quick action to mitigate the shocks, emphasising that the exchange rate would be kept stable through the crisis, and that any withdrawal requests would be honoured.

Source: United Nations (2024[16]).

Sustainable development

Serbia shows a moderate level of success in progressing towards the targets of the 2030 Agenda for Sustainable Development (Sachs et al., 2023[23]). As of 2023, Serbia had achieved or is on track to achieve 53.6% of its target indicators. The economy has made limited progress in 24.6% of indicators, while performance is worsening across 21.7% of trend indicators. Integration of the SDG Agenda into Serbia's national policy practices has further room to improve. The SDGs have been officially endorsed and mainstreamed into Serbia's national and sectoral plans. However, there is no designated lead unit responsible for the co-ordination and implementation of the SDGs across ministries; the Statistical Office of the Republic of Serbia assumes the responsibility of monitoring them (Sachs et al., 2023[23]). The Statistical Office makes available indicators and pertinent data on SDG progress on a quarterly basis via a dedicated website for SDG monitoring and an open data platform (UN-Habitat, 2023[24]). The first and only Voluntary National Review providing a comprehensive overview of the economy's progress toward achieving the SDGs took place in 2019 (UN-Habitat, 2023[24]).

Serbia has achieved or has maintained the achievement of SDGs in only one area – poverty reduction (SDG 1). Serbia nears achievement in the areas of quality education (SDG 4) and partnerships for the goals (SDG 17) but it has fallen behind since 2021 on its SDG attainment for education (SDG 4). Performance likewise decreased in the areas of affordable and clean energy (SDG 7) and climate action (SDG 13). The declining performance in these areas is mostly attributable to the increase in carbon intensity (CO_2 emissions) of energy production and exports, respectively.

Serbia is progressing in the areas of clean water and sanitation (SDG 6) and reduced inequalities (SDG 10), with further room to improve. While access to basic sanitation services has increased across the population, wastewater treatment rates remain low. Meanwhile, the Gini coefficient for inequality remains relatively high but has been on a declining trend since 2015, reaching 34.5% in 2020 and nearing the target value of 27.5% (Sachs et al., 2023[23]).

Table 1.2. Serbia's progress towards achieving the Sustainable Development Goals

SDG	Current assessment	Trends
1 – No poverty	SDG achieved	Stagnating
2 – Zero hunger	Significant challenges	Moderately improving
3 – Good health and well-being	Significant challenges	Moderately improving
4 – Quality education	Challenges remain	Stagnating
5 – Gender equality	Significant challenges	Moderately improving
6 – Clean water and sanitation	Significant challenges	On track or maintaining SDG achievement
7 – Affordable and clean energy	Significant challenges	Moderately improving
8 – Decent work and economic growth	Significant challenges	Moderately improving
9 – Industry, innovation and infrastructure	Significant challenges	Moderately improving
10 – Reduced inequalities	Significant challenges	On track or maintaining SDG achievement
11 – Sustainable cities and communities	Significant challenges	Moderately improving
12 – Responsible consumption and production	Significant challenges	Moderately improving
13 – Climate action	Significant challenges	Stagnating
14 – Life below water	Information unavailable	Trend information unavailable
15 – Life on land	Major challenges	Moderately improving
16 – Peace, justice and strong institutions	Major challenges	Stagnating
17 – Partnerships for the goals	Challenges remain	Moderately improving

Note: The order of progress (from greatest to least) is as follows: SDG achieved; challenges remain; significant challenges; major challenges.
Source: Sachs et al. (2023[23]).

Moderate progress has also been made in the areas of health and well-being (SDG 3); economic growth (SDG 8); industry, innovation and infrastructure (SDG 9); sustainable urban development (SDG 11); and responsible production and consumption (SDG 12). The most significant gaps remain in the areas of protection of terrestrial ecosystems (SDG 15) and institutional integrity (SDG 16). Protection of terrestrial ecosystems remains hindered due to low rates of protected terrestrial and freshwater sites important to biodiversity. Impediments to progress in SDG 16 lie in persistent corruption, continuance of unlawful expropriation practices, poor timeliness of administrative proceedings, and declining performance in press freedom. Being a landlocked economy, no data are available for the area of marine life (SDG 14) (Sachs et al., 2023[23]).

EU accession developments

Serbia's EU integration process began in 2008 when it signed its Stabilisation and Association Agreement (SAA) with the EU. It then formally submitted its application for EU membership in December 2009. In March 2012, Serbia was granted official candidate status for EU membership, and accession negotiations formally began in January 2014, when the negotiating framework with Serbia was presented at the first Intergovernmental Conference. At the time of writing, Serbia had opened 22 out of 35 negotiating chapters and provisionally closed two. These are Chapter 25 on Science and Research and Chapter 26 on Education and Culture.

In February 2020, the Commission presented an enhanced enlargement methodology to the accession negotiations, which Serbia officially accepted at the Intergovernmental Conference held in June 2021. The revised methodology emphasises credible fundamental reforms, stronger political direction, and increased dynamism and predictability of the process (European Commission, 2021[25]). The negotiating framework includes the new approach to negotiations concerning judiciary and fundamental rights, as well as justice, freedom, and security, along with the normalisation of relations between Serbia and Kosovo (European Commission, 2021[25]).

According to the EU's 2023 enlargement report, Serbia shows some level of preparation in relation to the political criteria for accession (European Commission, 2023[26]). Serbia shows a moderate level of preparation around public administration reform and has made limited progress in this area – particularly by strengthening e-governance services and capabilities – though it still lacks key mechanisms in policy co-ordination and public financial management. Regarding its judicial system, Serbia has a modest level of preparation and has made important progress towards strengthening the independence and accountability of the judiciary. Further efforts are needed in the electoral framework, co-operation between the government and civil society, corruption, organised crime, and freedom of expression. In the area of foreign, security and defence policy, no progress has been made over the period; alignment patterns remained unchanged and some of Serbia's actions and statements went against EU positions on foreign policy (European Commission, 2023[20]). Regarding the normalisation of relations with Kosovo, in February 2023 under the auspices of EU facilitation, both Serbia and Kosovo expressed readiness to proceed with the implementation of the EU Proposal "Agreement on the Path to Normalisation between Kosovo and Serbia" (EEAS, 2023[27]). However, neither Serbia nor Kosovo has started the implementation of their respective obligations and negative developments have hampered the progress (European Commission, 2023[28]).

Regarding economic criteria, Serbia has shown solid progress towards developing a functioning market economy and has made some progress towards coping with competitive pressure within the EU (European Commission, 2023[20]). Serbia's Economic Reform Programme has propelled progress in competitiveness and inclusive growth by facilitating further alignment of legislation with the EU *acquis* (European Commission, 2023[26]). Serbia has successfully attracted significant FDI in recent years, securing more than half of the investments allocated to its Western Balkan neighbours -its strong performance is directly linked to its progress towards integrating into the EU market, and further progress on the EU accession path is poised to further boost FDI levels. While economic integration with the EU remains high, progress has been limited in most areas regarding preparation for the requirements of the EU internal market particularly those for resources, agriculture, and cohesion, and no progress was registered in the area of free movement of capital (European Commission, 2023[20]). Further efforts are also needed towards reducing the state's role in the economy and improving the governance of state-owned administrations, as well as to ensure proper implementation of public investment management, public procurement and state-aid procedures to increase transparency, cost effectiveness and fair competition.

On 8 November 2023, the European Commission adopted a new Growth Plan for the Western Balkans to improve the level and speed of convergence between the Western Balkans and the EU (European Commission, 2023[29]). Backed by EUR 6 billion in non-repayable support and loan support, the Growth Plan has the potential to boost socio-economic convergence and bring WB6 closer to the EU single market (Gomez Ortiz, Zarate Vasquez and Taglioni, 2023[30]; European Commission, 2023[29]). The new Growth Plan is based on four pillars, aimed at:

1. "Enhancing economic integration with the European Union's single market, subject to the Western Balkans aligning with single market rules and opening the relevant sectors and areas to all their neighbours at the same time, in line with the Common Regional Market.
2. Boosting economic integration within the Western Balkans through the Common Regional Market.
3. Accelerating fundamental reforms, including on the fundamentals cluster[2], supporting the Western Balkans' path towards EU membership, improving sustainable economic growth including through attracting foreign investments and strengthening regional stability.
4. Increasing financial assistance to support the reforms through a Reform and Growth Facility for the Western Balkans" (European Commission, 2023[29]).

The new Growth Plan builds on the existing enlargement methodology and creates a package of mutually reinforcing measures. The aim is to speed up accession negotiations by providing incentives to economies to accelerate the adoption and implementation of the EU *acquis,* while narrowing the gap between the Western Balkans and EU Member States. In that context, the OECD has recently released the *Economic Convergence Scoreboard for the Western Balkans 2023* to track the region's performance in achieving economic convergence towards the EU and the OECD area, and to highlight policy bottlenecks that hinder faster economic growth in a sustainable and inclusive way (OECD, 2023[31]) (Box 1.2).

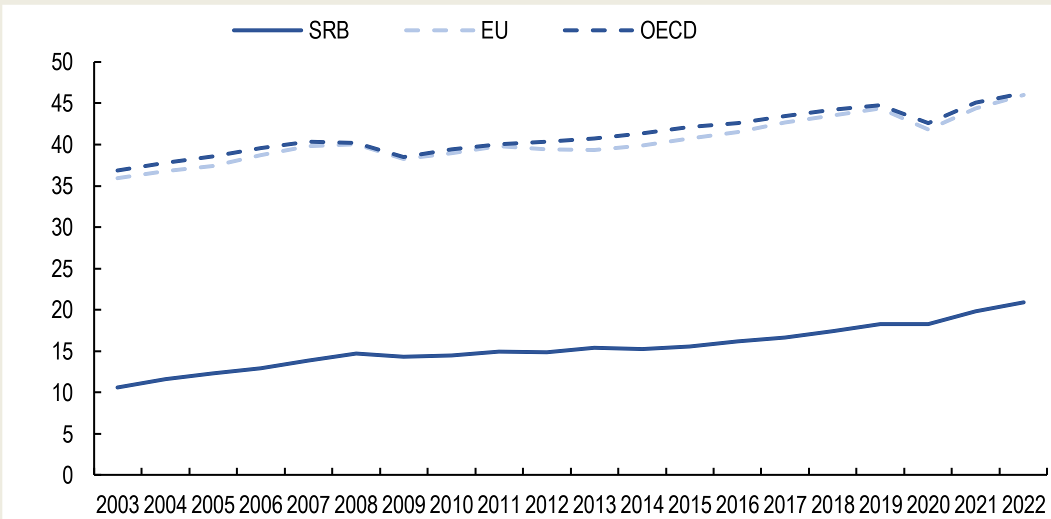
As part of the new Growth Plan, the Western Balkans have been asked to submit to the European Commission economy-specific Reform Agendas listing several structural reforms that would need to be implemented in order to access part of the Plan's funding. All Reform Agendas are structured along the same four policy areas: 1) business environment and private sector development, 2) green and digital transformation, 3) human capital development and 4) fundamentals (of the EU accession process). They replace Economic Reform Programmes' chapter IV on structural challenges, as, going forward, the Economic Reform Programmes will only cover macrofiscal aspects.

Box 1.2. Economic Convergence Scoreboard for the Western Balkans 2023: Spotlight on Serbia

Serbia's GDP per capita doubled from 2003 to 2022, contrasting with the EU and the OECD area's increases of 27% and 25%, respectively. This growth has helped narrow the economic gap, halving the percentage difference in GDP per capita between Serbia and the EU-OECD averages. However, with Serbia's 2022 GDP per capita at USD (PPP international $) 20 885 (EUR 19 840[1]) – less than half of the EU's USD 45 978 (EUR 43 679) and the OECD area's USD 46 208 (EUR 43 897) – the economy faces continued challenges in achieving economic convergence. These trends highlight the complexities of convergence and the need for comprehensive policy development to foster a productive and competitive workforce.

Figure 1.1. Serbia's GDP per capita convergence with the OECD area and the European Union (2003-2022)

In Purchasing Power Parity 2017 USD (thousands)



Sources: World Bank (2022[32]); OECD (2014[33]).

StatLink https://stat.link/v4nayz

In this context, the OECD developed the *Economic Convergence Scoreboard* for the first time in 2023, marking the establishment of a recurring assessment mechanism and dedicated tool designed to evaluate the extent of economic convergence of the Western Balkans with the European Union and the OECD area. Prepared to inform discussions at the Berlin Process Western Balkans Leaders' Summit 2023 and grounded in a decade-long series of policy assessments, the Scoreboard offers a thorough analysis of the region's progress across five key policy areas, or clusters, crucial for attaining sustainable and inclusive economic growth. These clusters are *business environment*, *skills*, *infrastructure and connectivity*, *greening*, and *digital transformation*.

Since 2008, Serbia achieved noteworthy advances across the five policy clusters, underscoring not only the adoption of policies in alignment with EU *acquis* and OECD standards but also the effective implementation of these policies. In the *business environment* cluster, Serbia made notable progress, particularly in attracting foreign direct investment (FDI). Between 2018 and 2022, Serbia's net inflows of FDI as a percentage of its GDP consistently outperformed fourfold those of the EU. Additionally, Serbia has made positive strides in *digitalisation*. For instance, the adoption of digital payment methods among the population has seen a significant increase, moving from 77% of the EU's level of performance in the period from 2013 to 2017 to nearly achieving parity with the EU by 2022.

By contrast, the *skills* and *greening* clusters necessitate further attention. Foremost, Serbia's output per hour worked hovers around one-third of the EU performance and has consistently regressed – this partially points to a relatively unproductive labour force, lacking the skills needed for a competitive economy. As for *greening*, renewable energy consumption and waste generation – areas where Serbia had previously excelled compared to the EU – have seen substantial declines *vis-à-vis* the EU performance over the observed periods (2008-2012; 2013-2017; and 2018-2022), decreasing by 22% and 79%, respectively. Moreover, CO_2 emissions are greater than those of the EU but are slowly declining. These trends underscore a need for prioritising and reinforcing green policies, as Serbia's broader convergence efforts are not fully integrated with sustainable practices.

In the context of aligning with OECD good practices and standards, Serbia has demonstrated overall progress, albeit with setbacks in the areas *OECD Services Trade Restrictiveness Index* and *Digital Services Trade Restrictiveness Index,* and *Competitiveness Outlook* (CO) anti-corruption and agriculture policies. Notably, advances have been made in CO access to finance, transport and science, technology and innovation policies, with Serbia nearing convergence with the OECD area relating to these policies.

1. The 2022 market exchange rate has been used to convert PPP constant 2017 international dollars into EUR.
Source: OECD (2023[31]).

EU financial and development support

Since embarking upon its EU accession journey, Serbia has received significant financial assistance from the EU for socio-economic development and fundamental reforms, through both temporary support packages and long-term investment programmes. Funding to Serbia has been facilitated mainly through the Instrument for Pre-accession Assistance (IPA), European Investment Bank loans, and Western Balkans Investment Framework grants.

Over 2007-13, the EU's financial support to Serbia through the Instrument for Pre-accession Assistance (IPA I) has amounted to approximately EUR 170 million per year (European Court of Auditors, 2014[34]). The total allocation under IPA II (2014-20) amounted to EUR 1.54 billion for Serbia and introduced priority sectors for assistance (European Commission, 2024[35]). Priority sectors covered under the period included democracy and governance, rule of law and fundamental rights, environment and climate action, transport**,** energy, competitiveness and innovation, education, employment and social policies, and agriculture and rural development.

For 2021-23, IPA III funding for Serbia's national programmes amounted to EUR 571 million. This includes the dedicated EUR 165 million from the 2023 Energy Support Package immediate measures, which have been almost entirely disbursed toward assistance to vulnerable families and SMEs in dealing with rising energy prices (European Commission, 2023[20]). The actions are also aimed at supporting policy measures to accelerate the energy transition. Additionally, the Economic and Investment Plan for the Western Balkans 2021-27, which has already mobilised EUR 5.7 billion in investments for Serbia (of which EUR 1.1 billion is in the form of grants), has set out flagship investments for the economy in the areas of sustainable transport, clean energy, environment and climate, digital infrastructure and human capital.

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Notes

[1] According to the World Bank's report, Central and Eastern Europe (CEE) includes Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania and the Slovak Republic.

[2] In line with Communication on "Enhancing the accession process – A credible EU perspective for the Western Balkans" COM(2020)57, the fundamentals cluster includes: chapter 23 – Judiciary and Fundamental Rights, chapter 24 – Justice, Freedom and Security, the economic criteria, the functioning of democratic institutions, public administration reform, chapter 5 – Public procurement, chapter 18 – Statistics and chapter 32 – Financial control (European Commission, 2023[29]).

2 Investment policy and promotion

Creating an attractive environment for investors is essential to stimulate economic activity and foster sustainable economic growth. This chapter assesses the scope and effectiveness of existing policies and strategies that aim to enhance investment volume and quality. The first sub-dimension, investment policy framework, assesses the robustness of legal framework for investment, the efficiency of dispute settlement mechanisms, as well as intellectual property rights enforcement and awareness-raising capacity. The second sub-dimension, investment promotion and facilitation, focuses on investment promotion agency structures, investment promotion strategies and investor incentives, all geared towards attracting foreign direct investment. The third sub-dimension, mobilising sustainable investment, explores the strategic framework for sustainable investment governance while also reflecting on the scope of financial and technical support allocated to sustainable investment.

Key findings

Since the last assessment cycle, Serbia's score has slightly improved in investment policy and promotion at 4.0. Serbia outperforms the region in all three sub-dimensions and remains among the best-performing economies in the Western Balkan region for investment policy and promotion (Table 2.1).

Table 2.1. Serbia's scores for investment policy and promotion

Dimension	Sub-dimension	2018 score	2021 score	2024 score	2024 WB6 average
Investment policy and promotion	1.1: Investment policy framework			4.3	3.9
	1.2: Investment promotion and facilitation			4.0	3.3
	1.3: Mobilising sustainable investment			3.5	2.8
Serbia's overall score		**3.4**	**3.9**	**4.0**	**3.4**

The **key findings** are:

- Since 2021, Serbia has adopted a mix of policy measures to attract investment, particularly in high-value and export-oriented sectors. Offering subsidies, reimbursements and tax incentives, these initiatives are expected to have an impact on the composition of incoming foreign direct investment (FDI) in favour of high value-added industrial sectors.
- As of May 2023, Serbia has made online company registration mandatory, a move poised to streamline the process and lead to substantial savings in both time and costs.
- Despite implemented judicial reforms for court efficiency, alternative dispute resolution, particularly mediation, still lags, accounting for less than 1% of civil court proceedings.
- While Serbia has recently updated its Intellectual Property Rights (IPR) laws since the last assessment and is actively working on legislation reform, particularly with the new Law on Copyright and Related Rights, there is a need for further alignment with the EU *acquis*.
- The economy advanced in reinforcing the framework for sustainable investment. While still without a dedicated framework *per se,* the environmental, social and governance (ESG) criteria for FDI were set, making a mixture of mandatory and voluntary sustainability disclosure requirements available to businesses and investors.

State of play and key developments

Having dipped slightly in 2020 and 2021 during the COVID-19 pandemic, foreign direct investment inflows to Serbia fully recovered to reach a record EUR 4.5 billion in 2023 (National Bank of Serbia, 2024[1]). Despite the slight decrease in average annual net FDI inflows, from 7.6% of GDP during 2017-19 to 7% during 2020-22 (World Bank, 2023[2]), Serbia attracted more than half of the total FDI inflows allocated to the Western Balkans (National Bank of Serbia, 2024[1]). Since 2010, Serbia's stock of inward FDI has increased by 28 percentage points to reach 81% of GDP by 2022, representing the second-largest such increase during the period after Albania, and the second-highest level in the region after Montenegro (UNCTAD, 2023[3]).

FDI remains primarily concentrated in the manufacturing and construction sectors, amounting to EUR 1.3 billion and EUR 2 billion in 2022, respectively (National Bank of Serbia, 2024[1]). The majority of FDI comes from the EU (59% of flows from 2010 to 2022), followed by China, the Russian Federation and Switzerland. China was the single most important source of FDI during the 2020-22 period, accounting for 22% of the total, ahead of the Netherlands (11%) (National Bank of Serbia, 2023[4]).

Sub-dimension 1.1: Investment policy framework

Serbia maintains a clear and comprehensive **legal framework for investment**, with cohesive regulation that applies to both domestic and foreign investors. Further progress has been achieved since the last assessment cycle. While there have been no updates to the stand-alone Law on Investments since 2018, several economy-wide and sector-specific changes have been aimed at improving the environment for business activities and attractiveness for inward investments. Serbia has introduced successive amendments to its Regulation on determining criteria for granting incentives for attracting direct investments in 2019 and 2023.[1] Finally, of relevance to the strategic investment regime, a new Law on Planning and Construction came into force in March 2023. The law allows for a unified procedure for issuing construction permits for a maximum of 28 days.[2] After an initial phase-in period, this process will become entirely electronic, further streamlining the procedure. In addition, among other changes, fees have been eliminated for converting land use to ownership rights on construction land; certification of buildings' energy efficiency and environmental impact has become mandatory; electrical vehicle chargers must be installed in new buildings and parking spaces; and investors now require third-party liability insurance. The new law aims to make it easier to get licences and carry out construction projects, to benefit both foreign investors and the domestic construction industry. Moreover, the government expects this will significantly increase the scope for developing clusters and industrial parks in Serbia.

There have been some developments in providing additional guarantees against expropriation and protection for investors and improving public consultation processes concerning the legal framework for investment. These advances have come about mostly through dedicated agreements on awarding incentives and through Bilateral Investment Agreements, which, once ratified, become an integral part of the legal framework. The Ministry of Economy, with assistance from the World Bank, has been in the process of formulating an additional strategy for foreign direct investments with a more targeted focus. At the time of writing, this strategy is in the developmental stage and has not been made available for public discussion or draft review.

Serbia maintains a predominantly open market with limited **exceptions to national treatment.** According to the latest OECD FDI Regulatory Restrictiveness Index, the economy achieved a score of 0.05 in 2019, indicating a less restrictive FDI regime than the average for OECD economies (0.064). This suggests that foreign investment rules in Serbia do not present substantial obstacles to FDI (OECD, 2020[5]). However, it is noteworthy that specific restrictions persist in the services sector, particularly within media and transport.

While Serbia's efforts to align its legal system with those of the EU and the EU *acquis* have underpinned important advances in recent years, challenges remain with respect to judicial reform and **dispute settlement,** especially alternative dispute resolution. Serbia has advanced in reinforcing the independence and accountability of the judiciary by promptly enacting most of the legislation needed to operationalise the constitutional amendments of 2022. A suite of legislation implementing these amendments was adopted in February 2023,[3] following several months of public consultation. Efforts to improve human resources and case management in the judicial system are also under way. In particular, the authorities adopted a new human resources strategy and action plan in December 2021, while work on a case management system for courts began in September 2021 and is due to be finalised by the end of 2024 (European Commission, 2023[6]). These reforms should help improve judicial performance over the medium term. However, the number of mediations as a proportion of civil court proceedings remains below 1%. In addition to improving legislation and providing additional resources, there is still significant scope to raise awareness among stakeholders of the available alternative dispute resolution mechanisms (European Commission, 2023[6]). Despite low awareness of mediation as an alternative dispute resolution, Serbia has almost twice the regional average of mediators per 100 000 inhabitants, amounting to 24.7, compared to 14 in the WB6 economies (CEPEJ, 2022[7]).

Serbia's **intellectual property rights legal framework** is modern, robust and broadly aligned with the EU, although there remains room for improvement in **enforcement**. Recent years have seen the introduction of several new or amended laws[4] to further strengthen the economy's IPR regime. Legislative reform is ongoing, with a draft new Law on Copyright and Related Rights under preparation.[5] Nevertheless, Serbia still needs to harmonise its IPR laws with EU Directives on copyrights[6] and online media transmissions.[7]

In March 2023, a new unit was established in the Intellectual Property Office – the main IP body in Serbia – tasked with the consolidation of co-operation efforts and the more proactive inclusion of its work to improve the efficiency of IPR enforcement. Nonetheless, human resources dedicated to IPR enforcement have not kept pace with increased mandates while high caseloads and a lack of specialised training mean that the judiciary's capacity to handle IPR cases remains constrained (European Commission, 2023[6]). In accordance with the guidelines, experiences and best practices of the World Intellectual Property Organization (WIPO), the IP Office, the Ministry of Justice and the competent domestic courts[8] signed a memorandum of understanding on Co-operation for Enhancing of the Use of Mediation in Intellectual Property Disputes. For its part, the IP Office has engaged in regular IPR **awareness-raising** events through its Education and Information Centre since 2010. In more recent years, this has been done increasingly in co-operation with institutions representing the economy's innovation ecosystem, such as Science and Technology Parks, the Innovation Fund, and various research and development bodies.

Sub-dimension 1.2: Investment promotion and facilitation

Serbia retains a solid **investment promotion agency structure and strategy** for promotion and facilitation, with further progress having been made since 2021. The Ministry of Economy[9] has formal authority over investment promotion. Within its jurisdiction, the Development Agency of Serbia (RAS) promotes and facilitates investment projects and supports SME development. As such, the agency is of central importance in implementing core national objectives, such as the Industrial Policy Strategy 2021-30 (Box 2.1), which aims to attract inward investment into the industrial processing sector to drive increasingly high value-added export-led growth. At the same time, RAS, alongside the Ministry of Science, Technological Development and Innovation and the Chamber of Commerce and Industry of Serbia, promotes activities related to digital transformation, notably through advocating a digital transformation support programme. In terms of sectoral focus, this centres on the manufacturing of computers, electronic and optical products, electrical equipment, motor vehicles, and other means of transportation.

RAS is funded by the state budget, in addition to contributions from the EU's Instrument for Pre-accession Assistance. The agency has seen a slight increase in financial resources in recent years (from an average of 0.03% of GDP during 2016-17 to 0.05% in 2023) and is well staffed compared to similar bodies in the WB6 region (27 during 2016-17, increasing to 32 in 2023).

There have been modest improvements in **investment facilitation services and aftercare activities.** In late 2021, the authorities adopted amendments to the Law on Registration Procedure at the Business Registers Agency, the notable upshot of which was that online company registration became mandatory as of 17 May 2023.[10] This is expected to reduce the cost and time required to register a business in Serbia. RAS has an **aftercare** unit that remains in continuous contact with foreign investors doing business in Serbia, to get feedback on where it could better assist the company or how the business environment could be improved. The aftercare services provided include regulatory and administrative assistance, structured trouble-shooting with individual investors, provision of databases of local suppliers, matchmaking between investors and local firms, capacity-building support for local firms, and high-level networking facilitation connections with academia and R&D institutions.

Box 2.1. Industrial Policy Strategy of the Republic of Serbia from 2021 to 2030

Adopted on 5 March 2020, the vision of the successor Industrial Policy Strategy of the Republic of Serbia from 2021 to 2030 is one of an "open, regionally and globally competitive, investment active, educated, innovative and digitally transformed Serbian industry". Of most salience for investment policy and promotion is the strategy's fifth intervention (of seven), such that "all investors wish to invest in Serbian industry and the Republic of Serbia offers modern physical, digital and social infrastructure, and equal opportunities to all to create multiplied value". Supportive of this are the fourth and seventh intervention areas, focused respectively on increasing internationalisation and improving the business and institutional climate. Meanwhile, all four intervention areas are of particular relevance to the sustainable investment agenda – and to the twin green and digital transitions as well – relating, respectively, to human capacity, digital transformation, innovation, and the circular economy.

The strategy incorporates five "specific objectives", broken down into 23 individual measures. Objective 3 – the increased total volume of industrial investments, accompanied by the improved quality of investments – targets an increase in investment as a share of GDP from its 2018 baseline of 20.1% to 25% by 2030. In turn, this objective comprises five implementing measures: i) adjusting the criteria for attracting industrial investments aimed at increasing the share of domestic gross value added; ii) an incentive programme for investments in industrial production; iii) promotion of the Republic of Serbia as an investment destination; iv) a support programme for the development of infrastructure for the needs of industrial zones; and v) balancing regional industrial development.

Notwithstanding Serbia's success in delivering on its objective to attract a significant amount of inward investment, and the continued centrality of this approach to the new strategy, one independent analysis of the new strategy has stressed the potential pitfalls "of a growth model that relies primarily on outward processing FDI with limited linkages to the domestic economy" (Uvalic, 2021[8]). While RAS does implement programmes aimed at connecting domestic suppliers with multinational companies, ensuring stronger linkages between the domestic and multinational sectors going forward should be further prioritised. That need not require a deep shift in strategic emphasis – since many of the policy reforms suggested in this analysis are conducive to improving the investment climate for domestic and foreign investors alike – but rather a reinforcement of efforts to proactively develop those interlinkages.

Sources: OECD (2022[9]); Ministry of Economy (2020[10]); Uvalic (2021[8]).

The economy introduced a broad range of new **investor incentives**. In addition to its existing suite of tax incentives, further economy-wide and sector-specific incentives have been introduced in recent years. In

May 2021, the authorities introduced a decree[11] that allows investors to participate in funding allocation for food industry projects aiming to increase productivity, the number of domestic suppliers, and the use of local raw materials. Funding starting at EUR 1 million was made available, with recipients required to contribute a minimum of 25% from non-state aid sources. Funding limits range from 50% for large companies to 70% for small ones, with restrictions on investments over EUR 50 million or EUR 100 million respectively, in line with EU-compliant state aid rules (Government of Serbia, 2021[11]).

In February 2022, to target higher value-added sectors the government introduced a decree[12] under which funds can be assigned for investment projects focusing on automation and innovation, with a minimum investment threshold of EUR 5 million. Beneficiaries can receive 25% of eligible costs for investments in automation, and an additional 5% for either forming a supply chain or developing a new final product with a high degree of production complexity (Government of Serbia, 2022[12]). Finally, in December 2023, a new decree was introduced so that both domestic and foreign filmmakers could apply for a refund of 25% of qualifying costs. For film projects over EUR 5 million, the government offers a refund of up to 30% of qualifying costs (Government of Serbia, 2023[13]). The Council for Economic Development of Serbia,[13] formed under the Law on Investments, is responsible for deciding on awarding investment incentives.

Sub-dimension 1.3: Mobilising sustainable investment

Although not dedicated to sustainable investment *per se,* the Industrial Policy Strategy of the Republic of Serbia 2021-30 nonetheless provides a reasonably solid **strategic framework and governance for sustainable investment.** It targets not only increased total volume of industrial investments, but also improved investment quality. Moreover, the strategy, as well as its implementation Action Plan for the 2021-23 period, included sustainability objectives relating to productivity and innovation, job quality and skills, and decarbonisation. Together, the overall strategy, its objectives and implementing measures can be interpreted as being broadly aligned with the approach of the OECD FDI Qualities Policy Toolkit, although more explicit incorporation of SDG-linked decarbonisation objectives could be foreseen, and there is scope to incorporate a gender equality axis. Nevertheless, Serbia upholds fundamental investment principles, including safeguarding investor rights, protecting intellectual property, and ensuring non-discrimination, especially in sectors aimed at attracting sustainable investments. These practices are integrated into either specific institutional operational structures or broader multi-sectoral frameworks.

Furthermore, domestic legislation reflects minimum international standards related to sustainable development connected to all four of the SDG-linked policy objectives under the OECD FDI Qualities Indicators (OECD, 2022[9]). Since 1 January 2021, the ESG criteria relating to FDI have been established by Article 37 of the Law on Accounting, while a mixture of mandatory and voluntary sustainability disclosure requirements is in place for both investors and businesses. The Law stipulates that all firms with more than 500 employees include these disclosures in non-financial reports.

There are currently **financial and technical supports for sustainable investment** in place relating to three of the four SDG-linked policy objectives under the OECD FDI Qualities Indicators framework, namely productivity and innovation, job quality and skills, and gender equality. The latter includes, for example, incentives aimed at female entrepreneurs. Through its export promotion activities, RAS supports SMEs attempting to enter global value chains. While it is common for financial support to be financed from domestic sources, technical supports are primarily donor-financed. Donor-funded supports typically target improvements in the investment climate, and address two of the four SDG-linked policy objectives, namely gender equality and productivity and innovation. Donor-funded supports are subject to monitoring and impact evaluation. Serbia has not yet conducted a comprehensive needs assessment to ascertain the scope and scale of additional financial and technical support that may be required to address the remaining market failures hampering sustainable development.

Overview of implementation of Competitiveness Outlook 2021 recommendations

Serbia's progress in implementing the *Competitiveness Outlook 2021* Recommendations has been mixed. Considerable advancements were observed in efforts to reinforce the IPR framework and boost enforcement, as well as in implementing reforms to the legal framework for investment. Moderate progress was achieved in streamlining the efficiency of the courts, with room for improvement remaining, especially in promoting alternative dispute resolution. The latter has seen little progress, as there is considerable scope for improving the take-up of mediation mechanisms (Table 2.2).

Table 2.2. Serbia's progress on past recommendations for investment policy and promotion

Competitiveness Outlook 2021 recommendations	Progress status	Level of progress
Accelerate reforms to the legal and regulatory investment framework	There have been several economy-wide and sector-specific changes to improve the environment for business activities and attractiveness for inward investments, e.g., amendments to its Regulation on determining criteria for granting the incentives for attracting direct investments in 2019 and 2023.	Strong
Reinforce the independence, resources, and capacity of the courts, particularly for commercial disputes	Key constitutional amendments were adopted in February 2022 and the relevant implementing legislation in February 2023, aimed at enhancing the independence and accountability of the judiciary. Work got under way on a new case management system for the judiciary in September 2021, while a new human resources strategy was initiated in December 2021.	Moderate
Increase the take-up of mediation mechanisms	No evidence of progress under this recommendation.	None
Reinforce efforts to implement the IPR framework and strengthen enforcement bodies	Human resources had not kept pace with increased mandates, at least until 2022. However, the IP Office established a new unit in March 2023 to consolidate co-operation efforts and drive more proactive inclusion efforts with a view to improving the efficiency of IPR enforcement.	Strong
Reinforce IPR awareness-raising efforts	The IP Office has collaborated with institutions representing the economy's innovation ecosystem to deliver awareness-raising events through its Education and Information Centre. In 2023, the IP Office organised 43 educational events, which gathered over 2 000 participants.	Strong
Continue to strengthen the capacity of RAS's staff	Progress was limited in this respect.	Limited
Reinforce the investment facilitation role of RAS through better co-ordination with other government bodies and agencies	Progress was moderate with respect to reinforcing the RAS's investment facilitation. Nevertheless, there have been modest advances in terms of facilitation more broadly, with online company registration having become mandatory as of 17 May 2023. Despite not being in the RAS's direct remit, this will positively impact investment facilitation activities in the economy.	Moderate

The way forward for investment policy and promotion

Serbia has been remarkably successful in attracting FDI in recent years. With other economies in the region continuing to improve their own attractiveness as a destination for FDI, however, it will be important for Serbia to introduce timely and targeted reforms and policy adjustments. Indeed, several policy Recommendations from *Competitiveness Outlook 2021* remain valid, due to limited progress in the intervening period. Priorities for reform should therefore include the following areas:

- **Accelerate reforms to the legal and strategic investment framework.** In order to retain its competitiveness as a leading destination for FDI, Serbia should continue to improve its legal framework for investment. Moreover, Serbia should prioritise finalising and adopting a comprehensive strategy for foreign direct investment attraction, which could provide essential guidance to the Council for Economic

Development, the Ministry of Economy, and RAS, particularly in defining sectoral and geographic priorities, which are currently lacking.

- **Increase the take-up of mediation mechanisms.** While Serbia has developed mediation mechanisms that are aligned with EU standards, their use remains limited, preventing them from alleviating the pressure on the courts. Raising public awareness of alternative dispute mechanisms could represent a first step towards this goal**.** That would entail educating the public about the benefits and processes of mediation, thereby encouraging more parties to consider it as a viable option for resolving disputes outside of traditional court proceedings. Through such efforts, the legal system can reduce its caseload and allocate resources more efficiently while providing parties with a quicker and potentially more amicable resolution process (see Box 2.2).

Box 2.2. Raising awareness on mediation – EU Mediation Development Toolkit

Since 2006, the European Commission for the Efficiency of Justice Working Group on Mediation (CEPEJ-GT-MED) has been steadily developing guidelines and recommendations for developing mediation mechanisms.

In 2018, CEPEJ-GT-MED released the Mediation Development Toolkit, offering a structure for EU Member States and mediation stakeholders that is customisable according to their requirements and circumstances. One of the tools is dedicated specifically to raising awareness about the mediation mechanism, outlining the key steps to take to improve the take-up of alternative dispute resolution.

Despite the universal availability of mediation, as is the case in Serbia, a notable lack of awareness among the judiciary, legal professionals, users of the justice system and the general public can impede the take-up of mediation. The Toolkit outlines the following measures:

To improve awareness among court users:

- Adapt the local court forms to clearly state the availability of a mediation mechanism in the relevant proceedings. Parties may also be requested to mark a checkbox on the court form to express their preference for engaging in mediation.
- Introduce readily available promotional materials (leaflets, pamphlets, posters) to inform court users about mediation.
- Send information on the availability of proceedings through mediation via electronic channels directly to relevant parties.
- Establish a dedicated mediation centre or information point in the courts.

To improve awareness among the judiciary:

- Organise dedicated information sessions along with both initial and in-service training programmes.
- Arrange seminars with all judges within the courts and meetings between the judges and the respective mediators.

To improve awareness among lawyers:

- Encourage bar and lawyer associations to provide information on mediation for their members.
- Encourage lawyers to openly communicate the option of mediation to their clients and modify the court forms to incorporate a checkbox indicating whether they prefer that option.

To improve the awareness of the public:

- Organise promotion events, such as open days, to inform the public about available mediation mechanisms.

The guidelines are part of a management checklist for establishing a Court Mediation Pilot.

Source: European Commission for the Efficiency of Justice (2018[14]).

- **Strengthen IPR enforcement.** High caseloads and insufficient specialised training for judges restrict their capacity to handle IPR cases. Allocating sufficient resources to strengthen IPR enforcement to handle increasing caseloads and providing judges with comprehensive and specialised training to enhance their understanding of the complexities of intellectual property matters would contribute to improved protection of intellectual property rights and a business environment conducive to innovation. Where appropriate, increased use of alternative dispute settlement mechanisms like mediation can improve outcomes while reducing the caseload on commercial and other courts.
- **Conduct a comprehensive needs assessment to ascertain the scope and scale of additional financial and technical supports that may be required to address remaining market failures hampering sustainable development.** Such support should be subject to rigorous cost-benefit analysis, with the results made publicly available. The provision of such support forms should be transparent and subject to regular review, monitoring and evaluation. The extension of support should consider market maturity and be subject to parliamentary oversight.
- **Further strengthen the presence of sustainability objectives in key policy documents.** There is scope for more explicit integration of decarbonisation objectives in crosscutting policy documents (Action Plan covering the 2024-26 period, implementing the Industrial Policy Strategy of the Republic of Serbia from 2021 to 2030). Moreover, the scope should be explored to incorporate a gender equality axis in line with the national Gender Equality Strategy, which also covers the 2021-30 period.

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Notes

[1] Notably, following the 2023 amendments, a number of criteria have been added with respect to the expert analysis of an investment project, namely consideration of i) the effect of the investment on production capacities, export structure and value added in the processing industry; ii) the effect of low environmental impact production equipment and technologies on sustainability and performance; and iii) the effect of low environmental impact production equipment and technologies on the attraction for and training or retraining of the workforce.

[2] Serbian Ministry of Construction, Transport & Infrastructure: www.mgsi.gov.rs/en/odsek/law-planning-and-construction.

[3] Namely, the Law on Organization of Courts, the Law on Judges, the Law on the High Judicial Council, the Law on Public Prosecution, and the Law on the High Prosecutorial Council.

[4] In 2021, the Law on Protection of Trade Secrets was introduced to harmonise national legislation with the EU Directive 2016/943 on the protection of undisclosed knowledge and experience and business information from illegal acquisition, use and disclosure. The Law on Patents was also amended in 2021

with the aim of harmonising with EU Regulation No. 2019/933 of the European Parliament concerning the supplementary protection certificate for medicinal products. The Law on Trademarks was adopted and entered in force on 1 February 2020.

[5] The new Copyright and Related Rights Law aims to achieve complete compliance with the EU *acquis* regarding collective rights management and orphan works.

[6] Digital Single Market Directive: https://eur-lex.europa.eu/eli/dir/2019/790/oj.

[7] Directive (EU) 2019/789 on the exercise of copyright and related rights applicable to certain online transmissions of broadcasting organisations and retransmissions of television and radio programmes: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.L_.2019.130.01.0082.01.ENG.

[8] The Commercial Court in Belgrade, the Commercial Court of Appeal, and the Higher Court of Appeal in Belgrade.

[9] Sector for Investments.

[10] As part of its digitalisation project, the Business Registers Agency (BRA) has allowed electronic registration for entrepreneurs since 1 January 2018. Amendments to the Law on the Registration Procedure in 2021 obliged the agency to accept applications for the establishment of new businesses in electronic form, which is in line with Serbia's e-Government Development Programme (2020-22). From 17 May 2023, the BRA would no longer accept paper applications for business registration.

[11] Decree on Defining Conditions for Approving Incentives in Attracting Direct Investments in the Automation of Existing Capacities in the Food Processing Industry.

[12] Decree on Defining Conditions for Approving Incentives in Attracting Direct Investments in the Automation of Existing Capacities and Innovation.

[13] Comprising key government officials, including Ministers of Economy, Finance, and Labour as well as the President of the Chamber of Commerce, the Council has been operational since 2015.

3 Trade policy

Effective trade policy is vital for regional integration and alignment with the European Union. This chapter examines how the government of Serbia uses trade policy to ease market access and harness digitalisation for enhanced trade facilitation. The first sub-dimension, trade policy framework, assesses the government's ability to formulate, implement and evaluate trade policy, examining the institutional formulation and co-ordination of trade policy, public-private consultations, and the network of free trade agreements. The second sub-dimension, digital trade, focuses on the legal framework for digital trade policy and digital trade facilitation and logistics. The third sub-dimension, export promotion, explores the effectiveness of export promotion agencies and programmes, especially in the context of deepening regional integration.

Key findings

Serbia's score on trade policy remained the same as the 2021 assessment cycle (Table 3.1), mainly because of underperformance in digital trade facilitation, owing to deficiencies in domestic legislation. By contrast, some progress has been achieved, especially in the trade policy framework and public-private consultations.

Table 3.1. Serbia's scores for trade policy

Dimension	Sub-dimension	2018 score	2021 score	2024 score	2024 WB6 average
Trade	2.1: Trade policy framework			4.5	4.4
	2.2: Digital trade			3.3	3.8
	2.3: Export promotion			3.8	3.6
Serbia's overall score		**3.3**	**3.8**	**3.8**	**3.9**

The **key findings** are:

- Despite improved inclusivity and access to the public-private consultation process through the digital eConsultations portal, public-private consultations remain underused. In 2022, consultations occurred for only 29% of draft laws and 30% of draft regulations.
- There have been advances in digitalising trade, with the eCustoms programme standing out as a noteworthy initiative expected to enhance the efficiency of customs procedures by digitalising the border processes. Nonetheless, monitoring and evaluation of digital measures are underdeveloped.
- On the back of the strengthened legal and strategic framework for digital trade, e-commerce volumes have increased, with the e-commerce channel accounting for 28.9% of total business sales in 2023, marking the highest percentage in the region.
- Serbia has strengthened its digital trade policy, having advanced in aligning its digital trade laws with best international practices.
- Serbia is the only economy in the region to track carbon emissions from trade in line with OECD best practices, but the data are not yet available on line.
- Limited export capacity remains challenging among companies, signalling a need for intensified capacity-building efforts.

State of play and key developments

Since 2015, Serbia has experienced consistent growth in its exports of goods and services. In 2023, the positive trend in exports persisted, registering a year-on-year increase of 3.7%. This growth was primarily fuelled by a boost in manufacturing exports. Additionally, services exports saw a substantial rise of 18.1% compared to the previous year, driven by the information and communication technology (ICT), transportation, and business services sectors (National Bank of Serbia, 2024[1]).

The EU remains Serbia's biggest trade partner, accounting for 64.6% of total exports in 2023. Serbia mainly trades with certain EU Member Countries, with Germany being the top partner for both imports and exports. Other partners include Italy, Hungary, and Romania. In 2023, around 15.1% of Serbia's exports went to Germany, 6.9% to Bosnia and Herzegovina and an additional 6.2% to Italy. On the import side, 13.1% came from Germany, and 12.2% from China, overtaking Italy as the second-biggest import source in 2023 (National Bank of Serbia, 2024[1]).

Serbia has been in the process of a considerable structural transformation, which is reflected in the economy's latest score on the economic complexity index.[1] The heightened economic complexity can be attributed in part to a rise in the export of high-knowledge goods and services, particularly in the field of ICT. Partially supported by the influx of Russian citizens, in 2023, Serbia's ICT service exports amounted to EUR 2.6 billion (USD 2.8 billion), which amounts to 24.4% of total service exports, exceeding the OECD average of 13.2% and the EU average of 16.8% (World Bank, 2023[2]).

Sub-dimension 2.1: Trade policy formulation

Serbia has a well-established legal framework for **trade policy formulation,** further improved by its strong inter-institutional co-ordination. Collaboration among expert groups, co-ordination bodies, and civil society engagement is led by the Ministry of Trade, Tourism, and Telecommunications, which has been restructured into the Ministry of Domestic and Foreign Trade in 2022. The primary objective behind this restructuring was to pivot towards a strategic emphasis on trade, making it the central focus of the ministry's mission and activities. The ministry is supported by the National Coordination Body for Trade Facilitation (NCBTF), which meets at least twice a year.[2] It plays a crucial role in co-ordinating initiatives across diverse stakeholders, including government agencies, organisations, the business community, and other foreign trade stakeholders. Four expert working groups have been established and are in charge of approving the action plans.

The NCBTF implemented the 2022-23 Action Plan, which included further harmonisation of technical regulations with European Union legislation, streamlining of mandatory documents and shipment procedures, mutual recognition of certificates, increased connectivity between different customs authorities, and establishment of a National Single Window. Despite the established results indicators for each of the activities, their quantifiability varies in scope.[3] Similarly, the evaluation of the trade policy formulation mechanism follows a systematic approach, with strategies and programmes undergoing assessment no later than 120 days after their expiration. The final report must be submitted within six months of its validity expiration. Adjustments to the trade policy formulation mechanism are then made based on the results of these evaluations, and often include the revision of quota reductions and extension or elimination of a particular trade measure.

Serbia is one of the only Western Balkan economies that has made strides in estimating the environmental impact of trade. Due to its size and the industrial nature of its trade flows, Serbia is expected to have higher total carbon emissions related to trade compared to smaller economies with less industrial trade compositions (WTO, 2021[3]). In line with OECD best practice,[4] Serbia collects data on trade-related carbon emissions; however, they are not available on line at the time of writing, highlighting an area for potential improvement in transparency and accessibility.

Serbia has a well-developed framework for **public-private consultations**, which has further improved thanks to leveraging digitalisation. The adoption of the Law on the Planning System 2018 and subsequent amendments to the Law on State Administration in 2018 have mandated public-private consultation processes at all stages of developing public policy legislation; the emphasis is on early public participation in the preparation of laws, regulations, and acts, including those related to trade. When a new or changing regulation is adopted, the proponent of the regulation is obliged to conduct consultations with interested parties as well as conduct a public debate. Notably, every year, each ministry is involved in policy formulation, including trade, plans for organising public-private consultations, and a budget for these purposes according to the yearly allotments. There was an almost fourfold decrease of the budget allocated to public-private consultations,[5] due to digitalisation (Box 3.1).

In June 2021, the government approved the establishment of the "eConsultations" portal, which serves as a platform for electronic consultations and public discussions of legal documents and strategies, including for trade policies. While the implementation of the eConsultations portal has improved the consultation process for each regulation and public policy document, its use remains limited at the local level among public institutions, and no oversight body has been established to determine the effectiveness of public-private consultations. Moreover, while public consultations were carried out for every draft policy planning document in 2022, such consultations occurred for only 29% of draft laws and 30% of draft regulations (European Commission, 2023[4]). The limited use of public-private consultations in the digitalised format can be partially attributed to the local governments' limited capacity, including staffing, technical resources, and equipment. Effectively implementing new digital solutions can then pose a challenge without additional support in the form of funding, personnel, and training.

Box 3.1. eConsultations in Serbia

The "eConsultations" portal was formally launched in December 2021 and led to enhanced efficiency, transparency, and inclusivity in the trade policy-making process.

The process of public discussion commences with a public announcement posted on the proponent's website and the eConsultations portal. There is a 15-day window for individuals to submit their initiatives, proposals, suggestions, and comments in writing or electronically from the start of the public announcement. The public discussion period must be extended for a minimum of 20 days. The proponent is required to provide a report on the outcomes of the public discussion on both its website and the eConsultations portal, and this report should be made available no later than 15 days after closure. The introduction of eConsultations streamlined the submission of trade-related documents for public comments.

The improved and digitalised public-private consultation process facilitates efficient two-way communication between government entities and private stakeholders. This improved communication helps clarify policy objectives and address concerns from groups potentially affected by the proposed measure.

Source: Government of Serbia (2024[5]).

In the second quarter of 2024, the eConsultations platform is set to undergo an update that will introduce a new functionality, allowing the evaluation of consultations in alignment with predefined indicators. This enhancement is poised to further refine and streamline the evaluation process, enhancing the effectiveness and responsiveness of public engagement in the policy-making arena. Additional explanations on the trade measures are currently missing on the platform; publishing them alongside information about the implications of planned trade measures would benefit potential exporters (UNECE, 2021[6]).

Despite improvements in the digitalisation of the public-private consultation process, some temporary trade restrictions were introduced unilaterally and without consultation with the trade community. This contributed to the lack of predictability for the business environment and the reduced reliability of supply chains (European Commission, 2023[4]). Following the start of the Russian war of aggression against Ukraine, Serbia intermittently imposed temporary trade restrictions in 2022, including export bans or quotas on various products. These measures, encompassing agricultural goods, milk and butter products, certain raw wood items, raw wood quotas, wood pellets, diesel fuel and natural gas, were all rescinded during the course of 2023, although new restrictions were introduced in March 2024.

Since the last assessment cycle, Serbia has expanded its network of **free trade agreements** (FTAs), with two entering into force in 2021, such as the one with the Eurasian Economic Union.[6] The recent FTA that came into force is the United Kingdom-Serbia Partnership, Trade and Cooperation Agreement in May 2021. The agreement covers a wide range of topics: trade in goods, including provisions on preferential tariffs, tariff rate quotas, rules of origin, trade in services, and intellectual property, covering geographical indications, and government procurement. In October 2023, Serbia signed an FTA with China, which will most likely enter into force in June 2024. The Serbia-China free trade agreement covers over 10 000 tariff lines for each economy. Initially, 66% of traded goods will be tariff-free, with phased liberalisation for the rest: some after five years, others after ten or fifteen years, and the 10.1% remaining excluded. The agreement particularly benefits agricultural producers, especially fruit exporters who will be able to export to China without tariffs, and will have a positive impact on the metal, machinery and pharmaceutical sectors. Given that bilateral trade volume between Serbia and China amounted to almost EUR 6 billion in 2022 (Serbian Ministry of Foreign Affairs, 2022[7]), the FTA can further boost bilateral trade by reducing additional trade barriers and costs. In September 2023, Serbia started negotiations on a bilateral FTA with the United Arab Emirates, while negotiations with South Korea are due to start at the end of 2024. In 2022, Serbia also announced plans for an FTA with Egypt. The negotiations have been formally launched; however, no official negotiation rounds have taken place at the time of writing. Despite the expansion in its network of multilateral and bilateral FTAs, progress on finalising WTO accession has been limited.

Sub-dimension 2.2: Digital trade

Since the last assessment cycle, Serbia has boasted a robust e-commerce policy framework and has undergone significant revisions in response to the evolving digital trade sector. **Digital trade policy** is within the competency of multiple entities, including the Ministry of Internal and Foreign Trade, the Ministry of Information and Telecommunications, the National Bank of Serbia, the Customs Administration, the Ministry of Finance and the Statistical Office of Serbia. Serbia's institutional framework facilitates efficient co-ordination among these ministries and agencies concerning digital trade policy formulation.

In December 2021, the enactment of the new Consumer Protection Law laid the foundation for enhancing the performance of online businesses in Serbia. Additionally, the 2021 amendment to the Law on Electronic Document, Electronic Identification, and Trust Services in Electronic Business introduced standardised regulations concerning electronic documents, electronic contracts, electronic identification systems, and qualified trust services (Ministry of Trade, Tourism, and Telecommunications, 2021[8]). The Law stipulates that public authorities communicate through electronic means, following the legal framework established for general administrative procedures and electronic administration. The provision also includes mention of a "qualified electronic delivery service", which suggests that a recognised and authorised electronic service is used to facilitate these communications. This service likely ensures the security, authenticity, and reliability of electronic transmissions between the public authorities and the involved parties (Ministry of Trade, Tourism, and Telecommunications, 2021[8]). While not directly trade-related, this regulation has implications for digital trade as the streamlined and legally compliant electronic communication and delivery processes between public authorities and parties create a more conducive environment for efficient and secure digital transactions.

These laws are part of a larger framework encompassing national digitalisation strategies, specifically the Information Society and Information Security Development Strategy 2021-26, and the Strategy of Digital Skills Development 2020-24. Both of these strategies are geared toward promoting digital transformation in both public and private sectors, fostering economic growth that aligns with EU objectives. This enhanced policy framework for digital trade is likely to have played a role in boosting e-commerce activity. Notably, the share of e-commerce sales for enterprises witnessed a rise, increasing from 27% in 2021 to 28.9% in 2023, marking the highest percentage among the Western Balkan economies (Eurostat, 2023[9]).

Serbia is proactively aligning its digital trade legislation with the pertinent EU *acquis*. A significant portion of Serbia's digital trade regulations has already undergone harmonisation, signifying substantial progress in this endeavour. Currently, there are ongoing efforts to bring remaining regulations that impact digital trade into conformity with EU norms. Notably, the Law on Postal Services is scheduled to be harmonised by the end of 2024, indicating a dedicated approach to ensuring that all aspects of digital trade are consistent with European standards.

However, despite the developed policy landscape governing e-commerce, further enhancing compliance with the EU Digital Services Act and Digital Markets Act is crucial in the e-commerce sector to ensure predictability for the business community (European Commission, 2023[4]). With that goal in mind, Serbia also improved in solving commercial disputes on line, with the information system for alternative dispute resolutions launched in July 2022 by the Ministry of Domestic and Foreign Trade. The online platform for alternative dispute resolution is in the process of implementation with feasibility studies and a training needs assessment launched in late 2023. A shortcoming previously addressed in *Competitiveness Outlook 2021*, the lack of an online dispute resolution (ODR) mechanism in Serbian legislation, contributed to the lack of consumer confidence in the digital economy and further restricted trade in services (OECD, 2021[10]). ODR can enhance the accessibility of legal proceedings by expediting and reducing the cost of court access, ultimately enhancing the effectiveness and efficiency of dispute resolution, including in disputes arising from digital trade (Council of Europe, 2021[11]).

The Statistical Office of Serbia issues annual e-commerce performance indicators. These reports encompass data on enterprises that employ computers or the Internet for business activities. Additionally, the National Bank of Serbia releases information pertaining to e-commerce, including details on payment transactions for online purchases of goods and services. However, the official register of legal business entities in Serbia does not provide information regarding whether a specific legal entity engages in online sales. Additionally, the absence of an official database for e-commerce businesses further complicates the availability of such information.

While Serbia made progress in reinforcing its digital trade policy framework, its regulation on facilitating cross-border data flows leaves room for further development. Considering the progressing digital transformation, global trade and related production rely significantly on the seamless flow, storage, and use of data, both locally and internationally. Similarly, integration into global value chains heavily relies on a cross-border flow of data. In the context of international trade, regulations impacting the ability to exchange and transfer data across borders are of special significance. These regulations may appear as prerequisites for cross-border data transfers or stipulations regarding local storage (Casalini and López González, 2019[12]). Since 2020, Serbia has been a signatory to the Council of Europe's Convention 108+, which ensures the protection of individuals regarding the processing of personal data.

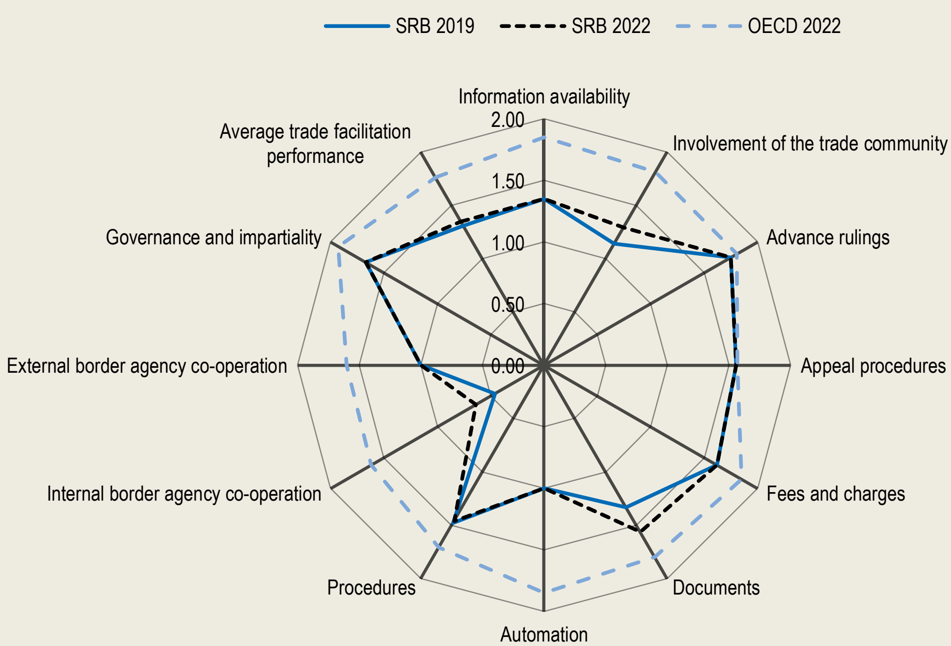
Regulating cross-border data flows is becoming increasingly prevalent in designing trade policy; trade agreements progressively contain binding provisions on cross-border data flows, consumer protection and protection of personal data. In fact, when used as a proxy for cross-border data flows, digital connectivity has shown complementarity with trade agreements, which results in up to a 1.5% increase in international trade for each 1% increase in bilateral digital connectivity (López González, Sorescu and Kaynak, 2023[13]). While four of the free trade agreements[7] in force for Serbia contain provisions involving digital trade and e-commerce, only two[8] contain provisions on data protection. A positive signal is that one of these agreements, the Partnership, Trade and Cooperation Agreement with the United Kingdom of Great Britain and Northern Ireland, is recent, having been signed in 2021, reflecting the growing importance of the digital economy and technology in international trade and the recognition that traditional trade rules need to be updated to address the unique challenges and opportunities presented by the digital age. However, there is room for improvement in including provisions on the free movement of data, establishing a mechanism to address barriers in data flows, and banning or limiting data localisation. Currently, none is included in Serbia's free trade agreements currently in force (Burri, Vasquez Callo-Müller and Kugler, 2022[14]).

Serbia focuses on drawing from digital technologies to streamline cross-border transactions, reduce trade barriers, and enhance the efficiency of customs and regulatory processes. As such, it has readily progressed on the implementation of **digital trade facilitation measures,** which has partially contributed to improvements under the OECD Trade Facilitation Indicators (Box 3.2).

Box 3.2. Serbia's performance under the OECD Trade Facilitation Indicators

To support governments in streamlining their border procedures, cutting trade costs, boosting trade volume, and maximising benefits from international trade, the OECD has developed a series of **Trade Facilitation Indicators (TFIs)** as indicated in Figure 3.1.

Figure 3.1. Trade Facilitation Indicators for Serbia and the OECD, 2019 and 2022



Note: These indicators pinpoint areas for improvement and enable impact assessment of potential reforms. Covering a comprehensive range of border procedures, the OECD indicators apply to over 160 countries, spanning various income levels, geographical regions, and developmental stages. Utilising estimates derived from these indicators allows governments to prioritise trade facilitation initiatives and strategically channel technical assistance and capacity-building efforts for developing nations. Moreover, the TFIs serve as a tool for economies to visualise the status of policy implementation across different areas and measures outlined in the WTO Trade Facilitation Agreement. The assessment is conducted every three years.
Source: OECD (2022[15]).

StatLink https://stat.link/s9dq8e

Since 2019, Serbia improved in only three of the eleven indicators: involvement of the trade community, documents, and internal border agency co-operation. Despite improvements in some of the TFIs, Serbia's scores remained stagnant in seven of the indicators and deteriorated in one, which covers procedures, such as the streamlining of border control (inspections, clearance), implementation of trade single windows, or certified trader programmes. Serbia outperformed the Western Balkan region in terms of information availability, advance rulings, appeal procedures, documents, procedures, external border co-operation, governance, and impartiality. The economy's average trade facilitation performance is on par with the Western Balkan average. Despite positioning itself as one of the leaders in the region, Serbia still lags behind the OECD average under all of the assessed indicators.

In June 2023, the Customs Administration began implementation of the e-Customs initiative, which entails AIS (Automated Import System), AES (Automated Export System), and CDMS (Customs Decisions Management System). These three systems are progressing as scheduled and are expected to go live in December 2025 and become fully operational in 2026. The primary goal of this project is to achieve compatibility of customs procedures with the European Union. This alignment will not only optimise the efficiency and effectiveness of customs operations but also mark a noteworthy advancement in the continuous drive to digitalise and modernise all aspects of customs procedures. Moreover, Serbia partially implemented the electronic exchange of sanitary and phytosanitary certificates, including SMEs in the Authorized Economic Operators' programme, and partially implemented trade facilitation measures for digital trade, such as provisions in new free trade agreements. Serbia is also actively developing an Electronic Single Window, with the initial target completion date set for the end of 2025. The Electronic Single Window will enable the electronic exchange of customs declarations, and other relevant trade documents; currently the Customs Administration of Serbia does not have electronic systems in place for the exchange of Certificates of Origin.

Despite progress, there is no monitoring and evaluation mechanism in place for digital trade facilitation measures, which implies a lack of assessment of the effectiveness, impact, and progress of initiatives related to facilitating digital trade. Without such mechanisms, it becomes hard to gather insights into the success or shortcomings of digital trade facilitation efforts, hindering the ability to optimise policies.

In the area of adhering to international instruments governing digital trade, Serbia has yet to ratify key instruments, including the UN Electronic Communications Convention and the United Nations Commission on International Trade Law (UNCITRAL) Model Law on Electronic Commerce, which advocate for standardising national laws governing e-commerce transactions. These instruments play a crucial role in establishing regulatory standards for e-transaction frameworks, e-authentication, e-signatures, and electronic contracts (OECD, 2021[16]). Additionally, Serbia has not aligned with the OECD Recommendation on Consumer Protection in e-commerce, which outlines general principles for customer protection and encourages collaboration among consumer protection authorities. While Serbia's legal framework supports electronic transactions, aligning domestic legislation with international standards is essential for credibility in the global digital economy. This alignment not only opens doors to broader markets and increased international trade but also promotes interoperability, allowing Serbian businesses to engage seamlessly in cross-border transactions and collaborate with global partners.

Table 3.2. OECD Digital Trade Inventory

	Instrument	Description	Serbia's adherence
E-transaction frameworks	JSI Participant	World Trade Organization (WTO) Joint Statement Initiative comprises a discussion on trade-related aspects of e-commerce, including cybersecurity, privacy, business trust, transparency, and consumer protection.	✕
	UN Electronic Communication Convention	Convention encourages the standardisation of national laws and regulations governing e-commerce transactions.	✕
Consumer protection	OECD Recommendation of the Council on Consumer Protection in e-commerce	The OECD Recommendation on Consumer Protection in e-commerce provides guidelines and recommendations for member countries to enhance consumer protection in this area. The recommendations typically cover various aspects of online transactions to ensure that consumers can engage in e-commerce with confidence and trust.	✕
Paperless trading	WTO Trade Facilitation Agreement	The Trade Facilitation Agreement (TFA) includes clauses aimed at accelerating the transit, release, and clearance processes for goods, encompassing those in transit, and outlines measures for fostering efficient collaboration between customs and relevant authorities concerning trade facilitation and customs compliance matters.	✕
Cross-border data transfer/Privacy	Convention 108	Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data is the first legally binding international treaty dealing with privacy and data protection.	✓
	2001 Additional Protocol to the Convention	The Additional Protocol reinforces the protection of individuals' rights in the context of automated processing of personal data and encourages international co-operation on privacy and data protection matters.	✓
	Convention 108+	2018 Amending Protocol to Convention 108 updates the provisions on the flow of personal data between signatories.	✓
Cybersecurity	Convention on Cybercrime of the Council of Europe (Budapest Convention)	An international treaty aimed at addressing crimes committed via the Internet and other computer networks. It serves as a framework for international co-operation in combating cyber threats and promoting a harmonised approach to cybercrime legislation.	✓
Goods market access	Information Technology Agreement	The Information Technology Agreement, on a most-favoured-nation basis, removes tariffs for a broad range of IT products, including computers and telecommunications equipment.	✕
	Updated ITA concluded in 2015	Covers the expansion of products covered by the Information Technology Agreement by eliminating tariffs on an additional list of 201 products.	✕

Note: Regarding the WTO Trade Facilitation instrument, Serbia cannot adhere to it until it becomes a WTO member.
Source: OECD (2021[16]).

Sub-dimension 2.3: Export promotion

Serbia further scaled up its efforts to promote exports, solidifying its position as a frontrunner in this domain. The Development Agency of Serbia (RAS) serves as the economy's **export promotion agency** and offers a range of business support services. RAS's activities are complemented by the Serbian Export Credit and Insurance Agency (AOFI), which is responsible for the insurance and financing of exports for Serbian export-oriented companies, and the Chamber of Commerce and Industry, assisting in the broader internationalisation of Serbian companies.

Despite RAS's broad scope of activities, the agency's budget for export promotion remained limited. However, there has been an over twofold increase in the staff since 2020 when just five employees were working on the Export Promotion Programme, to twelve in 2022, the highest number in the Western Balkan economies. The government is responsible for approving RAS's budget and the programme framework, but the organisation has autonomy in how it carries out the implementation of its programmes and projects. The additional expansion would fulfil the new goals set in the Export Promotion Programme. These include indicators on the quantity of public calls issued; the proportion of programme beneficiaries achieving their first export within a year of programme implementation; the percentage of beneficiaries experiencing export growth of at least 20% compared to the year before programme implementation; and improvements in productivity. RAS's target achievement is monitored through evaluation conducted by RAS's planning and analysis division, which is separate from the support for SMEs division, responsible for export promotion. Nevertheless, the reports on the agency's export promotion programmes are not published, hindering further monitoring and evaluation.

RAS supports companies through two main export promotion programmes. The Export Promotion Programme was launched in 2020, and since its inception, four public calls for participation in the programme have been issued, the latest one having been published in December 2023. This programme is funded exclusively from the national budget.[9] As part of the programme, skilled RAS personnel carry out diagnostics of export capabilities for the programme's beneficiaries and assist companies in increasing their export volumes through international trade fair participation and trade missions. Between 2020 and 2022, there were 25 beneficiaries. Potential beneficiaries seeking grants can benefit from RAS, which offers reimbursement of up to 60% of their total submitted project cost. The type of support encompasses consulting for developing target market strategies, facilitating export marketing initiatives, entering and positioning in target markets, improving export capabilities, participating in international fairs and B2B events, and acquiring equipment to bolster production capacities. Potential beneficiaries stay informed about the Export Promotion programme through its website, social media channels, and various relevant export promotion events.

Although direct assistance for environmental initiatives may not be directly provided, applicants are eligible for support in adhering to environmental standards, attestations, or certifications crucial for entering new markets or strengthening positions in existing ones. Notably, potential beneficiaries are not obliged to meet specific environmental criteria to qualify for support under the export promotion programme. The SME Internationalisation Programme encourages individual engagement in international fairs and offers institutional assistance to export-oriented SMEs with the goal of expanding their foreign trade activities. The budget dedicated to the SME Internationalisation Programme remained unchanged at 0.004% of the value of exports since 2019 until 2022, with a brief spike to 0.008% in 2020. The staff allocated to the programme has remained unchanged since 2019, amounting to four employees. Financial support granted through the export promotion programme is monitored with annual reports, audits and impact assessment reports. The two programmes often overlap in terms of the scope of activities and there is no co-ordination mechanism to ensure the lack of duplication of efforts.

RAS has a strong implementation capacity when it comes to regional development, with 16 accredited regional development agencies[10] spread across the economy to ensure equal opportunities for SMEs situated outside the capital. RAS has reinforced its position as the main authority governing export promotion, which has been reflected in its perception among Serbian businesses. In 2022, 6% of surveyed businesses quoted the lack of a competent authority that could provide information on export procedures as one of the export deterrents, the highest percentage in the Western Balkan region. That percentage decreased to 3% in 2023, signalling RAS's increasing competence in supporting companies in their export endeavours (Balkan Barometer, 2023[17]).

Despite RAS being the best-staffed export promotion agency in the Western Balkans, intensified capacity building and advisory support would be particularly beneficial for Serbia to improve its integration into global value chains (OECD, 2022[18]). 23% of surveyed companies quote lack of export capacity as the main reason for not exporting in 2023, up from 22% in 2022 (Balkan Barometer, 2023[17]). Therefore, allocating additional staff to improve the provision of training and capacity building – particularly focusing on foreign expansion, market access, certification and standardisation – would have more tangible benefits for companies than participation in trade fairs.

Overview of implementation of the Competitiveness Outlook 2021 recommendations

Serbia made considerable progress in implementing *Competitiveness Outlook 2021* Recommendations, with the strongest progress observed in expanding the bilateral and multilateral free trade agreements network and strengthening the legal framework for e-commerce. The latter was achieved by implementing an online dispute resolution mechanism for cross-border e-commerce disputes. There has been some progress in improving the quality of public consultation processes; however, the processes are underutilised as many trade-related decisions are still adopted without prior consultations with the public or with little notice.

Table 3.3. Serbia's progress on past recommendations for trade policy

Competitiveness Outlook 2021 recommendations	Progress status	Level of progress
Enhance the quality of the public consultation process	The process of public-private consultations has been digitalised by introducing the eConsultations platform. However, little progress has been made in adopting trade rules or restrictions through exceptional and shortened procedures without prior notice. Despite advancements in the digitalisation of public-private consultations, the sudden introduction of certain temporary trade restrictions with minimal notice has disrupted the predictability of the business environment.	Moderate
Expand the network of bilateral and multilateral FTAs	Serbia has broadened its scope of free trade agreements (FTAs), witnessing the implementation of numerous agreements in 2021, including one with the Eurasian Economic Union. Notably, the most recent addition to this growing network is the UK-Serbia Partnership, Trade, and Cooperation Agreement, which has been in effect since May 2021. No progress was made in Serbia's WTO accession.	Strong
Strengthen the regulatory framework for e-commerce and digitally enabled services	The implementation of the new Consumer Protection Law established the groundwork for improving the operations of online businesses in Serbia. Furthermore, the 2021 revision to the Law on Electronic Document, Electronic Identification, and Trust Services in Electronic Business introduced standardised provisions related to electronic documents, electronic contracts, electronic identification systems, and qualified trust services.	Strong

The way forward for trade policy

While the government has made notable strides in enhancing its trade policy framework, particularly in trade policy formulation and digital trade, there remains room for further improvement in the following policy-making areas:

- **Prioritise the transition to paperless trade.** Serbia's progress in digitalising procedures and simplifying administrative processes has not yet extended to trade documents. Traders still need to submit notarised copies for various product and service categories. Electronic documentation would improve efficiency, minimise errors, and reduce processing times. Additionally, paperless trade fosters a transparent and traceable supply chain, building trust among partners. Ultimately, this shift positions Serbia for cost savings, increased trade competitiveness, and a more resilient trade environment.
- **Advance the compliance with WTO rules to finalise the accession process.** Serbia should place a high priority on completing its accession to the WTO. Making the necessary internal regulatory alignment and completing the remaining bilateral market access negotiations would allow Serbia to expedite its accession process to strengthen its position in the global trading system.

- **Incorporate provisions on digital trade in free trade agreements.** Including such provisions facilitates the flow of information and digital services and encourages innovation, efficiency, and competitiveness. The prevalent digital trade provisions in RTAs typically cover aspects such as privacy and data protection, consumer protection, unsolicited commercial electronic messages, electronic authentication, paperless trading, cross-border data flow (Box 3.3), and cybersecurity. Moreover, there is an emerging trend of digital economy agreements, which mirror free trade agreements, but they go beyond the usual scope of FTAs to include co-operation on open government, artificial intelligence and other digital economy aspects (IMF et al., 2023[19]).

Box 3.3. Cross-border data flows in trade agreements in OECD countries

Across OECD economies and beyond, provisions on cross-border data flows are increasingly common in free trade agreements. Since 2008, 29 trade agreements involving 72 economies have included clauses related to data flows. However, the comprehensiveness of these provisions varies. Roughly 45% of the agreements have enforceable commitments covering all types of data flows. Additionally, all agreements with data flow provisions include clauses on privacy or consumer protection frameworks, often referring to plurilateral arrangements.

Countries both within the OECD area and beyond employ a range of instruments to facilitate cross-border data transfers, including unilateral mechanisms, standards, technology-driven mechanisms, plurilateral arrangements, and trade agreements and partnerships.

Examples of such agreements include the Comprehensive and Progressive Agreement for Trans-Pacific Partnership and the United States-Mexico-Canada Agreement, which feature binding data flow provisions, and free trade agreements between South Korea and Peru, and Central American countries and Mexico, which have non-binding provisions. Moreover, agreements like the EU-Japan and EU-Mexico free trade agreements anticipate the potential re-evaluation of cross-border data flow provisions in the future.

While the number of agreements with binding data flow regulations equals those with non-binding rules, it is worth noting that most recent trade agreements (for example the Japan-United Kingdom Comprehensive Economic Partnership Agreement and the Regional Comprehensive Economic Partnership) predominantly incorporate binding provisions.

Significant levels of regulatory convergence have been achieved concerning certain objectives and principles, such as promoting e-commerce, minimising barriers, and addressing the requirements of SMEs. Additionally, convergence and commonalities exist on specific topics like transparency, paperless trading, and electronic authentication. However, notable disparities persist, especially concerning handling cross-border data flows, data localisation, and personal data protection.

Sources: Casalini, López González and Nemoto (2021[20]), Burri, Vasquez Callo-Müller and Kugler (2022[14]).

- **Improve monitoring and evaluation of implemented trade policies and digital trade facilitation measures.** By implementing robust monitoring systems, Serbia can closely track the effectiveness and impact of digital trade facilitation initiatives. This involves assessing how well these measures streamline processes, reduce bureaucratic hurdles, and enhance overall trade efficiency. Regular evaluations, supported by quantifiable indicators in action plans, can also help adapt policies to evolving technological landscapes and address challenges promptly, ensuring that digital trade facilitation measures continue to meet the evolving needs of businesses.

- **Improve training and capacity-building initiatives in export promotion to better position Serbian companies in global value chains.** Dedicating more personnel resources to RAS to enhance the delivery of training and capacity-building initiatives – with a specific emphasis on foreign expansion, market access, certification, and standardisation – would likely yield more substantial advantages for companies. By investing in the skill development and knowledge base of the workforce, businesses can gain a competitive edge, navigate regulatory complexities more effectively, and foster sustained growth in international markets.

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Notes

[1] The Economic Complexity Index is based on trade data and aims to measure the relative knowledge intensity of an economy. A higher score indicates higher economic complexity. Serbia scored 0.74 in 2021, up from 0.65 in 2018, positioning itself in 36th place out of 129 economies assessed and the highest of the Western Balkan economies (Observatory of Economic Complexity, 2021[21]).

[2] In April 2023, the government made amendments to the Decision on the establishment of the National Coordination Body for Trade Facilitation. The Minister of Foreign and Domestic Trade will now serve as the president, with the Assistant Minister of Finance as the deputy president.

[3] The result indicator for the harmonisation and mutual recognition of documents on top of other initiatives to facilitate trade, especially in the context of CEFTA's Additional Protocol 5 and the Open Balkan Initiative, is “trade growth in the region”. As such, regional trade growth be attributed to many factors, so explicit causality cannot be proved, making the result indicator vague and hindering further evaluation. Other indicators, while clearly defined, are not quantified, which can impede effective monitoring of target achievement.

[4] The OECD has developed indicators with the aim of transforming the relationship between trade and the environment into a foundation for practical evaluation. These indicators primarily serve to help policy makers track progress in harmonising trade and environmental policies, as well as to pinpoint potential conflicts of interest. The OECD database on carbon emissions in trade includes data on the amount of carbon emissions from fossil fuel combustion embodied in imports and exports in megatonnes of CO_2.

[5] From RSD 876 188.40 in 2021 to RSD 248 664.86 in 2022.

[6] The Eurasian Economic Union consists of Russia, Belarus, Kazakhstan, Kyrgyzstan, and Armenia. It is a project aiming to deepen regional economic integration, with a formal goal to create an EU-like common market.

[7] Central European Free Trade Agreement, Stabilisation and Association Agreement between European Communities and their Member States and the Republic of Serbia, Free Trade Agreement Between Eurasian Economic Union and its Member States and the Republic of Serbia and the Partnership, Trade and Cooperation Agreement between the United Kingdom of Great Britain and Northern Ireland and the Government of the Republic of Serbia.

[8] Stabilisation and Association Agreement between European Communities and their Member States and the Republic of Serbia and the Partnership, Trade and Cooperation Agreement between the United Kingdom of Great Britain and Northern Ireland and the Government of the Republic of Serbia.

[9] The maximum allocated per beneficiary is EUR 85 000.

[10] Belgrade, Novi Sad, Subotica, Zrenjanin, Pančevo, Ruma, Požarevac, Loznica, Kragujevac, Zaječar, Užice, Kraljevo, Kruševac, Niš, Novi Pazar, Leskovac.

4 Access to finance

Access to finance is crucial for developing the private sector in all economies. This chapter, along with three sub-dimensions, explores the necessity for businesses to be able to access financing sources to start up, grow, diversify and ultimately contribute to overall competitiveness. The first sub-dimension, the bank financing framework, assesses the regulatory framework of bank financing, including the quality of the banking industry legal framework, registration and information systems, and the policies that make bank finance inclusive. The second sub-dimension, access to alternative financing sources, focuses on the various means that businesses can get financing, encompassing access to capital markets, private equity as well as factoring and leasing. The third sub-dimension, digital finance, delves into the effects of digital solutions on payment services and the emergence of new avenues for business finance.

Key findings

Serbia's access to finance score has been stable since the *Competitiveness Outlook 2021*, at a level of 3.3 (Table 4.1), remaining the highest score in the Western Balkans. The government has taken several measures to develop the capital market and digital finance, but the economy records a low performance on bank finance inclusion – a policy area assessed for the first time.

Table 4.1. Serbia's score for access to finance

Dimension	Sub-dimension	2018 score	2021 score	2024 score	2024 WB6 average
Access to finance	3.1: Bank financing framework			3.3	3.5
	3.2: Access to alternative financing sources			3.0	2.4
	3.3: Digital finance			3.5	2.3
Serbia's overall score		**3.2**	**3.3**	**3.3**	**2.8**

The **key findings** are:

- Access to bank finance for the smallest businesses is hindered by stringent collateral requirements, limited credit guarantee schemes, and the absence of policies supporting microfinance. SMEs constitute only 31.6% of total loan recipients from commercial banks in 2022, compared to the Western Balkan average of 39%. This discrepancy underscores the need for targeted interventions to improve SME financing conditions.
- Backed by the Capital Market Development Strategy, Serbia's capital markets' legal framework has progressed since the last assessment cycle, especially with the implementation of the Law on Capital Market in January 2023. However, translating these developments into tangible implementation has been hampered by the constraints posed by limited administrative capacity within institutions responsible for its implementation.
- Serbia leads the Western Balkan economies as the first to utilise Distributed Ledger for Financing Technologies (DLT) for accessing finance. In June 2022, the first initial offering of factoring tokens has been conducted, raising around EUR 175 000. Subsequently, in December 2022, the Securities Commission approved another white paper for the same issuer to offer factoring tokens. While this financing method shows promise, it remains relatively novel and awaits broader recognition among companies and investors.
- Alternative forms of financing, including business angel networks (BAN) and crowdfunding, currently operate without specific regulations. However, the National Bank of Serbia (NBS) drafted a law governing crowdfunding activities and is in the process of reviewing it to ensure alignment with Serbian Law and the respective EU *acquis* on European business crowdfunding service providers. Still, no specific timeline for its adoption and implementation has been communicated.
- Serbia has made good progress in strengthening its legal framework for digital payments as part of its Single Euro Payments Area (SEPA) integration efforts. Especially, Serbia is in the way of extending banks' payment services to third-party payment service providers with full alignment to the EU Second Payment Services Directive (EU PSD2) by the end of year 2024.

State of play and key developments

Serbia's financial sector relies heavily on the banking industry, which constitutes 91.1% of total financial system assets in 2022, a slight decrease from 91.6% in 2015 (National Bank of Serbia, 2022[1]). This contrasts sharply with the euro area, where the banking sector represents only 50% of total financial assets (European Central Bank, 2023[2]). In the banking sector, consolidation continued, reducing the number of commercial banks to 21 in 2022 (down from 23 in 2021 and 30 in 2013). However, the concentration level remains relatively low, signalling the persistence of competitive pressures within the Serbian banking industry.[1] The top three Serbian banks collectively managed approximately 39.4% of assets of the banking industry in 2022 – a slight uptick from 36.6% in 2013 – which remains significantly below the averages observed in the Western Balkans (68.8%) and the EU (71.5%) (World Bank, 2022[3]).

During the past decade, the overall credit provision by the Serbian financial sector has exhibited a stagnant trend. In 2022, domestic credit to the private sector was equivalent to 40.4% of GDP, while 41.0% in 2013. This figure is substantially higher in the Western Balkan region (46.4% in 2022) and the European Union (69.5%) (World Bank, 2022[3]).

Sub-dimension 3.1: Bank financing network

Serbia's legal framework for the **banking industry** is well developed, as Basel III standards have been fully implemented since June 2017.

After raising the key policy rate from 1.0% in January 2022 to 5.0% by December 2022, the National Bank of Serbia (NBS) implemented measures to mitigate the impact of increasing interest rates on debtors' solvency. Specifically, the Decision Amending the Decision on Capital Adequacy of Banks, implemented in December 2022, enables banks to restructure receivables from financially distressed debtors by extending repayment periods for consumer loans that are shorter than nine years.[2] In December 2022, the NBS also implemented the Decision Amending Temporary Measures for Banks for Natural Persons, easing credit conditions until the end of 2024. This Decision requires banks to freeze or reduce the interest rate on variable-rate housing loans until the end of year 2024 for loans approved before 13 September 2023. The maximum interest rate is set to 4.08%, which will also be applied to new loans until the end of 2024. Moreover, this Decision allows banks to extend the repayment periods for housing loans without any fee for five additional years for loans contracted in 2023.[3]

Serbia has relatively stringent lending requirements. While both tangible and intangible assets (except trademarks) can be used to secure loans, small and medium-sized enterprises (SMEs) do not benefit from lighter requirements. However, NBS regulations lighten provisioning requirements regarding SME lending through decreased risk-weight coefficients specific to these loans, which could support SME corporate lending.

Serbia established a functional cadastre and **information and registration system** for moveable assets, which is actively utilised by the local banking sector. The real estate cadastre, covering the entire territory, is accessible on line with weekly updates. The Register of Pledges, an integrated electronic database, provides comprehensive coverage of registered pledge rights and is accessible on line to the public. Regarding credit information systems, the Association of Serbian Banks oversees data collection, ensuring confidentiality and compliance with the Law on Personal Data Protection and the Law on Information Security. Financial institutions can request online data with written borrower consent. However, a weakness lies in the system's non-comprehensive coverage of non-regulated entities like non-bank financial institutions, retailers, and utilities, limiting its effectiveness.

Although a vast majority of the Serbian population and businesses have access to **bank finance**, such finance is less **inclusive** for small businesses. Serbia's bank finance penetration is advanced, with 89.4%

of the population holding a bank account in 2021, a level comparable to the EU (95.1%) and substantially more than in the Western Balkan region, where the average stands at 71.2% (International Monetary Fund, 2023[4]). However, regarding the accessibility of bank finance for all businesses, outstanding SME loans from commercial banks stand for only 31.6% of total bank loans in 2022 (35.4% in 2018) (International Monetary Fund, 2023[4]), a lower level than in the Western Balkans (39.0%); meanwhile that figure is higher than 60% in comparable economies from the EU, such as Slovak Republic (60.5%) or Latvia (76.0%) (OECD, 2022[5]).

The accessibility of bank finance for businesses is likely to worsen due to the conclusion of the COVID-19 credit line amid rising interest rates.[4] Following the end of the last EU multiannual financial framework, the EUR 500 million COSME programme, loans for working capital and refinancing of working capital and investment loans, which commenced in April 2021, ceased operations in August 2022. Although there are still ongoing programmes supporting SMEs' access to bank finance, their combined financial capacity is lower. The largest programme is the United States International Development Finance Corporation's (DFC) around EUR 252 million loan portfolio guarantee launched in December 2022.[5] It will be operated by the local banks ProCredit, Addiko, Banka Intesa and Raiffeisen banks, in partnership with the Serbian Ministry of Finance and USAID Serbia, to fund SMEs' investment activities (United States Agency International Development, 2022[6]). The EBRD SME Competitiveness Support Programme, initiated in December 2019 and concluding in April 2025, also backs investments while targeting greening purposes, with a total credit line of EUR 30 million (European Bank for Reconstruction and Development, 2021[7]).[6] Another active initiative, the Equipment for SMEs programme, has been implemented annually since 2015 by the Ministry of Economy in co-operation with the Development Agency of Serbia and commercial banks and leasing companies, and supports SMEs in acquiring new equipment. For years 2022 and 2023, EUR 15 million have been provided by the Serbian Government, and EUR 11 million by the EU (European Union, 2024[8]).[7]

The smallest Serbian businesses cannot rely on **microfinance**, as there is no specific regulation on its provision and no policy aimed at fostering its development. In this context, the Serbian Development Fund is the only non-bank financial intermediary in Serbia that provides microcredit directly to legal entities, entrepreneurs, and farmers. As such, it is the only legal entity apart from banks allowed to disburse loans. It can only disburse business loans (i.e. to legal entities and registered entrepreneurs, including start-up loans), which range between EUR 2 400 and EUR 56 000 with a 3% interest cap.[8]

Sub-dimension 3.2: Access to alternative financing sources

Despite recent legal progress since the last assessment cycle, alternative financing sources remain limited in Serbia, which maintains a dependency on traditional banking.

Capital markets in Serbia remain relatively underdeveloped. The Serbian stock market's total market capitalisation stands for only 8.5% of GDP in 2021, far from the EU (75.4%) average (World Bank, 2022[3]).[9] The Serbian Government endorsed the Capital Market Development Strategy for 2021-26 to develop capital markets. Key objectives include optimising the regulatory system to attain Markets in Financial Instruments Directive II (MiFID II) market status, improving the quality and accessibility of investment products, expanding the issuer base, attracting a more significant number of domestic and international investors, establishing an adequate institutional framework, bolstering technological and human resources capacities, and promoting financial education among market participants and the general population.[10]

The first noticeable outcome of the Capital Market Development Strategy has been the adoption of the Law on Capital Market in December 2021, followed by its implementation in January 2023. Serbia incorporated significant European directives and regulations within this legislative framework, such as the alignment to MiFID II.[11] However, alignment with the Markets in Financial Instruments Regulation (MiFIR) framework remains low, and the overall administrative capacity of the Serbian Securities Commission and

Ministry of Finance in implementing the Law on Capital Market is limited.[12] To foster the administrative capacity of these institutions, the World Bank will work with the Serbian Government on the Catalysing Long Term Finance through Capital Markets Project" (Box 4.1).

Box 4.1. Catalysing Long-Term Finance through Capital Markets Project

Approved in March 2023, the Catalysing Long Term Finance through Capital Markets Project aims to i) improve the enabling environment for capital markets development and ii) deepen the corporate bond market, including through green and other thematic issuances. The programme will operate until April 2028 for a total cost of EUR 46.4 million.

The project comprises two components. The first component, institutional, legal, and regulatory reforms, will focus on supporting the government in strengthening the institutional, legal, and regulatory framework for capital markets development. It consists of the following sub-components: i) Ministry of Finance – capital markets policy and regulatory unit; ii) strengthening the Serbian Securities Commission and the central securities depository; iii) strengthening the Belgrade stock exchange; iv) taxation reform; v) other technical assistance for implementing the capital markets development strategy. The second component, the corporate bond issuer programme, will focus on expanding the corporate bond issuer base.

Source: World Bank (2023[9]).

While capital markets are still developing in Serbia, the Belgrade stock exchange requires substantially proportional regulatory requirements for smaller firms, such as SMEs, facilitating their access to stock and bond markets. For the issuance of shares or depository receipts, non-listed companies must possess a minimum capital of EUR 300 000 or maintain a 15% free float of shares. In the case of debt securities, the sole requirement is a minimum emission value of EUR 200 000. However, prime listing requires substantially more requirements. First, an issuer must demonstrate at least three years of business operations with associated annual financial reports.[13] For share issuance, specific criteria include the payment of dividends per preference shares, a minimum capital of EUR 3 million, and the issuer must maintain a corporate website with versions in both Serbian and English. For the issuance of bonds, the emission value must be at least EUR 1 million, and the issuer's account should not have been blocked in the past 180 days. Despite flexible regulatory requirements fostering the accessibility of capital markets, no financial incentives are in place to promote the use of shares and bonds. Moreover, start-ups and early-stage companies, especially, continue to face high-risk perceptions from investors due to the lack of an extensive track record of financial performance. This results in higher liquidity issues in the secondary market, where there may be fewer buyers and sellers for SME securities. Currently, no entity provides a credit score in the corporate bond market, which could enhance investor confidence and facilitate efficient capital allocation by providing a standardised credit risk assessment for bond issuers.

The legal framework for **private equity** investment funds and venture capital is relatively developed. Governed by the Law on Alternative Investment Funds and bylaws enacted by the Securities Commission, Serbia is closely aligned with the Directive on Alternative Investment Fund Managers (AIFMD). However, on open-ended investment funds, the Law on Open-Ended Investment Funds with Public Offering is only partially aligned with the Directive relating to undertakings for collective investment in transferable securities (UCITS). Serbia still has no legal framework governing BANs.

Factoring and leasing are available and backed by well-developed legal frameworks but have experienced mixed developments. Leasing volumes have consistently increased over the past decade, as they account for 1.91% of the GDP in 2022, a significant increase from 1.49% in 2013; this allows Serbia to catch up with the EU as leasing volumes reached 2% of GDP in the region in 2022 (Leaseeurope, 2023[10]). On the other hand, factoring volumes receded, representing only 0.25% of GDP in 2022 (0.6% in 2013), while factoring turnover was equivalent to 12.6% of GDP in the EU in 2022 (EU Federation of Factoring & Commercial Finance, 2023[11]).

Factoring and leasing activities operate within a comprehensive legal framework in Serbia, and only leasing regulation experienced legislative changes since the last assessment cycle. While the legal frameworks are highly aligned with EU standards, the development of these forms of finance might be hindered by the lack of active policies, such as tax incentives and assistance and training for SMEs.

During the assessment period, the NBS has undertaken updates to existing regulations and introduced new ones to address the evolving challenges posed by the COVID-19 pandemic. Notably, in March 2021, the NBS adopted amendments to the Decision on Temporary Measures for Financial Lessors to provide lessees additional time and facilities to meet their obligations, specifically in response to the economic impacts of the pandemic. Additionally, the NBS facilitated restructuring obligations for lessees with existing financial leasing agreements related to agricultural assets. Support was provided to the farming sector with the implementation of the Decision on Temporary Measures for Lessors in October 2022, targeting the effective management of credit risk within the portfolio of leases for agricultural machinery and equipment.

Sub-dimension 3.3: Digital finance

Following the National Retail Payments Strategy (2019-24), Serbia has made progress in strengthening its legal framework for **digital payments** as part of its SEPA integration efforts. After achieving alignment with the EU's Second Electronic Money Directive (EMD2) licensing for **e-money institutions** during the last assessment cycle, thereby facilitating electronic money issuance, the NBS is updating its legal framework to align with the EU Second Payment Services Directive (EU PSD2) for expected implementation by the end of the second quarter 2024. Aligning with EU PSD2 will expand banks' payment services to third-party payment service providers (TPPs), subject to suitable security requirements, to stimulate competition by introducing new players to provide payment services.[14] In tandem with the ongoing improvement of the legal framework, the digital payment and e-money services sector has expanded in Serbia, with the number of e-money institutions reaching six in 2023 compared to only two in 2019 (National Bank of Serbia, 2024[12]). Despite not having yet implemented a comprehensive legal framework for digital payments, Serbian citizens are familiar with this technology as 87.5% of the adult population has reported having made or received a digital payment (World Bank, 2022[3]), a figure very close to the EU average (93.0%).

Serbia has two local **crowdfunding** platforms, but they do not operate with a dedicated legal framework. The leading platform, Ventu, was launched at the end of 2020 with financial support from the United States Agency for International Development (USAID). Its activity remains very marginal, as it has supported only five companies at the time of writing. Overall, crowdfunding in Serbia suffers from significant administrative burdens for companies seeking funds and is currently limited to local investors due to complex and costly regulations for foreign investors. To develop this activity, the NBS drafted a law governing crowdfunding activities and is in the process of reviewing it to ensure alignment with Serbian Law and the respective EU *acquis* on European business crowdfunding service providers (European Union, 2020[13]). Still, no specific timeline for its adoption and implementation has been communicated.

There is a robust legal structure for **Distributed Ledger Technology (DLT) for financing** backed by the Law on Digital Assets implemented in June 2021, which offers alternative ways to access finance. In particular, the legislation on Security Token Offerings (STOs) and Initial Coin Offerings (ICOs) includes partial exemptions from capital market regulations for public offer values below EUR 3 million for STOs and ICOs.[15] [16] These digital finance tools may offer smaller businesses an alternative means to access finance, allowing them to circumvent traditional banking requirements and regulatory requirements associated with capital markets (OECD, 2019[14]). It should be noted that the Serbian Law on Digital Assets is in line with the security requirements of the fifth Anti-Money Laundering Directive (AMLD5), which aims to detect and prevent money laundering using virtual currency exchanges and wallets.[17] Regarding developing ICOs and STOs in Serbia, only one company, Finspot, has an approved White Paper for token issuance. Approved in June 2022, Finspot's initial offering of factoring tokens saw moderate success, with a subscription rate of 58%, raising about EUR 175 000 out of a total offering of EUR 300 000. However, the subsequent ICO approved in December 2022 achieved a substantially lower subscription rate of only 5.6%, raising EUR 89 000 out of a total offering of EUR 1 852 500. Overall, this financing method remains new and has yet to be recognised by most companies and investors.

Overview of implementation of Competitiveness Outlook 2021 recommendations

Serbia has made progress in aligning the legal framework of capital markets with EU standards. However, more policies are needed to facilitate businesses' access to long-term debt financing and develop alternative funding sources such as private equity and crowdfunding. The critical developments based on the previous CO recommendations are elaborated below.

Table 4.2. Serbia’s progress on past recommendations for access to finance

Competitiveness Outlook 2021 recommendations	Progress status	Level of progress
Continue efforts to implement crowdfunding legislation in line with EU norms	The National Bank of Serbia (NBS) has formulated a preliminary version of a regulation tailored to govern crowdfunding activities. Simultaneously, the Law on Digital Assets provides a framework enabling crowdfunding by utilising digital assets.	Moderate
Consider a business angel network review	The business angel network and associated legal framework have not been assessed. The legal framework governing BANs is not yet in line with EU standards, and no strategic approach or legislation has been adopted since the last assessment cycle to address this matter.	None
Promote access to equity capital through the stock market	The Serbian Government endorsed the Capital Market Development Strategy for 2021-26 to develop capital markets. The first noticeable outcome has been the implementation of the Law on Capital Market in January 2023. However, no financial incentives scheme is aimed at developing stock markets. One opportunity to build capital markets could lie in the potential privatisation programme of state-owned enterprises (SOEs), while explicit privatisations have not been communicated.	Moderate
Facilitate market-based long-term debt financing for businesses	Presently, policies are scarce in Serbia to facilitate businesses' access to long-term debt financing. Although the bond market accommodates a segment for non-listed firms, its growth is impeded by the lack of credit rating services. This deficiency in information for assessing solvency risk deters investors, resulting in restricted liquidity within the bond market. Furthermore, the development of the bond market is hampered by the absence of financial incentives that would otherwise encourage the utilisation of bonds.	Limited

The way forward for access to finance

To make bank finance accessible, support alternatives to bank finance and develop digital finance, policy makers should:

- **Make bank finance accessible for all businesses.** Permanent credit guarantee scheme programmes, such as those implemented during the COVID-19 pandemic, could broaden financing opportunities for SMEs. Additionally, policies to develop the activity of existing microfinance facilities, such as interest rate caps and active platforms for SMEs, can also help remove barriers to finance for the smallest businesses (see the Ireland example in Box 4.2).
- **Continue efforts to harmonise further capital markets' legal framework with EU standards.** Adopting EU *acquis* regulations on stock and debt markets can increase investor confidence, strengthening cross-border co-operation. That can create opportunities for local businesses to attract investment and raise capital from a larger pool of investors.
- **Make capital markets accessible for all businesses**. Serbia could establish credit rating services to assess SMEs' financial risk and implement a specific corporate bond market segment. Ensuring an adequate legal framework might not be sufficient; SMEs may not afford the regulatory requirements for accessing capital markets, as the costs associated with compliance and reporting can be prohibitive. To mitigate these regulatory costs, Serbia could also implement policies providing fiscal incentives to raise funds in the capital markets.
- **Continue efforts to diversify financing sources, with a focus on business angels.** While Serbia has established legal frameworks for various alternative funding mechanisms, such as private equity and digital assets, BANs still lack regulation. This form of funding can provide early (e.g. seed or venture) capital financing, offering growth opportunities for promising SMEs.

Box 4.2. Access to Finance Hub in Ireland

The Access to Finance Hub was established as a single access point for SME funding in Ireland. It provides access to a Credit Review function, which helps SMEs that have been refused credit from the major lending institutions. The Hub includes four key funding schemes catering for event-specific funding, such as COVID-19 and Brexit, as well as continuous funding schemes called the Growth and Sustainability Loan Scheme and the Microenterprise Loan Fund.

Succeeding the Future Growth Loan Scheme that stopped operating in March 2023, the Growth and Sustainability Loan Scheme makes up to EUR 500 million in loans available (0.1% of the Irish GDP in 2022). Loans between EUR 25 000 and EUR 3 million, with terms of up to ten years and attractive conditions, will be available to eligible SMEs through the scheme. The scheme targets a minimum of 30% of the lending volume towards environmental sustainability purposes to encourage SMEs to take positive actions in support of the climate change agenda. 70% of available funds support strategic long-term investment, such as investments in tangible or intangible assets, machinery or equipment, research and development, business expansion and premises improvement.

Operating since 2012, the Microenterprise Loan Fund Scheme provides support in the form of loans for up to EUR 25 000. The scheme is available to start-up, newly established, or growing micro-enterprises employing fewer than ten people and a turnover below EUR 2 million, with viable business propositions that do not meet the conventional risk criteria applied by banks. In 2022, 401 loans were drawn to EUR 6.9 million. 88% of approvals are granted to businesses employing three people or fewer, and 45% are granted to start-ups (in business for less than 18 months).

Source: Eurofound (2022[15]).

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Notes

[1] A bank can only operate in Serbia if it is registered as a domestic legal entity, regardless of whether the bank's owner is from a foreign economy.

[2] Loans for the purchase of motor vehicles can be extended if their initial duration is shorter than 11 years. It should also be noted that these repayment period extensions do not require any modification of banks' capital requirements. During the extended periods, borrowers can also get repayment assistance, regardless of their debt-to-income ratio at the time of restructuring.

[3] The NBS implemented similar decisions to support the agricultural sector with the Decision on Temporary Measures for Banks Aimed at Adequate Management of Credit Risk in Agricultural Loans Portfolio in Conditions of Aggravated Agricultural Production implemented in October 2022, and the Decision Amending the Decision on Temporary Measures for Banks Aimed at Adequate Management of Credit Risk in Agricultural Loans Portfolio in Conditions of Aggravated Agricultural Production implemented in January 2023.

[4] The key policy interest rate of the NBS rose from 1.0% in January 2022 to 5.0% in December 2022 and reached 6.5% in December 2023.

[5] The lending conditions include meeting 2 of the following 3 criteria: up to 300 employees, annual revenues of a maximum of USD 15 million, and total assets of a maximum of USD 15 million. The minimum and maximum loan amounts, as well as the term, depend on the bank but generally, the minimum is USD 10 000, while the maximum ranges from 4 million to 10 million, with a term of 4 to 10 years.

[6] The EBRD provides a EUR 20 million loan to Unicredit Leasing Serbia, and the EU provides an additional EUR 10 million in Instrument for Pre-Accession Assistance (IPA) funding. The programme is implemented in co-operation with the Ministry of Economy of Serbia. Beneficiary SMEs can also obtain technical

assistance, including EBRD advisory support. They will be eligible for a cashback grant of 15% of the total loan amount once their investment project is completed, which will be funded by the EU.

[7] It should be mentioned that a few other policy initiatives are in place to promote SMEs' access to finance. In 2021, the programmes delivered by the Innovation Fund were equivalent to EUR 11.4 million. Moreover, while not in the form of credit guarantees, the SME Hub initiative that was launched in July 2022 by the Swiss Agency for Development and Cooperation (SDC) and the Serbian company ICT HUB provides services to help SMEs access finance. Additionally, the Equipment for SMEs, Entrepreneurship Development Projects, Financial Support for New Businesses and Youth, and Financial Support for Women Entrepreneurs programmes offer a mix of grants and loans from various sources like commercial banks, leasing companies, and the Development Fund. Since 2016, these programmes have been running regularly, supporting over 1 000 SMEs annually with a total budget of around RSD 2 billion (approximately EUR 17 million). They are crucial in assisting groups often overlooked by banks, such as new businesses, women, and young entrepreneurs.

[8] The Serbian Development Fund does not disburse personal loans.

[9] This statement only considers Western Balkan economies with functioning stock markets, i.e. Bosnia and Herzegovina, Montenegro, North Macedonia, and Serbia. It should also be mentioned that high capitalisation in Montenegro results from the major privatisation programme of state-owned enterprises (SOEs).

[10] MiFID II is a comprehensive set of regulations enhancing investor protection, increasing transparency, and standardising regulatory disclosures across financial markets (https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0065).

[11] Other EU regulations involve the regulation of markets in financial instruments (EU No. 600/2014), investor-compensation schemes (Directive 97/9/EC), prospectus requirements (Regulation [EU] 2017/1129), transparency requirements for issuers (Directive 2004/109/EC), amendments to transparency requirements and prospectus regulations (Directive 2013/50/EU), criminal sanctions for market abuse (Directive 2014/57/EU), market abuse regulation (Regulation [EU] No. 596/2014), and settlement finality in payment and securities settlement systems (Directive 98/26/EC, with a focus on settlement finality in securities settlement systems).

[12] MiFIR is a set of regulations that complements MiFID II within the European Union. It directly addresses issues such as transaction reporting, pre- and post-trade transparency, access to clearing and trading venues, and regulating commodity derivatives (https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0600).

[13] The reports should include a positive auditor's opinion in the business year before the listing application and indicate a net profit for that period.

[14] EMD2 directive: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009L0110; PSD2 directive: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32015L2366.

[15] See Article 7 of the Law on Digital Assets. The issuance of digital assets under this law circumvents the need to register these financial instruments with the Central Securities Depository. Consequently, the usual regulations outlined in the Law on Capital Market do not apply to these specific financial assets.

[16] Overall, the ten decisions from the “Law on Digital Assets” resulted in the comprehensive regulation governing the STOs and ICOs dealing with the provision of digital asset services, pledge and fiduciary rights on digital assets, and the Securities Commission and NBS competencies. The supervisory bodies applying the law are the NBS for the scope of the law related to cryptocurrencies as a type of digital asset, and the Securities Commission for a digital asset with the characteristics of financial instruments.

[17] Alignment to this directive has been achieved in December 2020 with the implementation of the Law on Financial Markets based on Distributed Ledger Technology.

5 Tax policy

A well-planned tax policy provides the necessary incentives to promote economic growth. This chapter, along with two sub-dimensions, explores the effectiveness of tax policy and tax administration. The first sub-dimension, tax policy framework, assesses the soundness and efficaciousness of the legal framework, the tax system, and the incentives for investment in promoting steady economic growth. The second sub-dimension, tax administration, focuses on the efficiency and transparency of the tax administration organisation while also reflecting upon the tax filing and payment procedures and taxpayer services.

Key findings

Serbia's overall score has marginally increased since the *Competitiveness Outlook 2021*, from 3.1 to 3.2 (Table 5.1). Regarding the tax policy framework, Serbia performs below the region's average, particularly due to its weaker performance in reporting tax expenditure and indirect tax policy. On the other hand, Serbia is the regional leader in tax administration, further improving its performance due to the launch of the new Transformation Programme of the Tax Administration.

Table 5.1. Serbia's scores for tax policy

Dimension	Sub-dimension	2018 score	2021 score	2024 score	2024 WB6 average
Tax policy	4.1: Tax policy framework			2.1	2.4
	4.2: Tax administration			4.2	3.8
Serbia's overall score		**2.6**	**3.1**	**3.2**	**3.1**

The **key findings** are:

- Serbia offers a range of tax incentives that help foster an investment-friendly environment. Moreover, in line with OECD good practices, it primarily offers cost-based, as opposed to profit-based, incentives to attract investment.
- Serbia's high social security contribution (SSC) rates place a large tax burden on labour, particularly for lower-income workers. Such high rates can disincentivise work in the formal economy and strain the SSC system as Serbia's population changes due to ageing and emigration.
- The Serbian Tax Administration still does not report regularly on tax expenditures, and there are no plans to publish such a report in the future. Inaugurating regular reporting would allow the government better to assess the efficacy of tax incentives and expenditures.
- Serbia remains a regional leader in tax administration due to its well-organised tax body, advanced compliance assessment and risk management procedures, and extensive taxpayer services. Performance in this area will likely continue to be strengthened through implementing the Transformation Programme of the Tax Administration (2021-25), which aims to improve business administrative processes and the quality of services for taxpayers.
- While Serbia has remained engaged in the international tax community, it has yet to implement Automatic Exchange of Information (AEOI) standards, which would foster augmented tax transparency and compliance. Additionally, Serbia has not yet assessed the impacts of Global Anti-Base Erosion (GloBE) Rules on subsidiaries of multinational enterprises (MNEs) operating within its jurisdiction.

State of play and key developments

Sub-dimension 4.1: Tax policy framework

Serbia's ratio of **tax revenue** to GDP is above the WB6 average. In 2021, social security contributions (SSCs) accounted for 35.6% of total tax revenues, and taxes on goods and services accounted for 40.8%. Together, these taxes make up 76.4% of total tax revenue. For comparison, SSCs in OECD member countries accounted for 26.7% of total tax revenues (OECD, 2024[1]). This difference is partly explained by the fact that Serbia collects more SSCs relative to its GDP (Table 5.2). The other part, however, is that Serbia collects less revenue from corporate and personal income taxes (CIT and PIT). In 2021, revenue from PIT made up 10.6% of total tax revenues and 4.1% of GDP, significantly below the OECD averages of 24% and 8.3%, respectively (OECD, 2024[1]).

Table 5.2. Serbia's tax revenues composition in 2021

Tax revenues are expressed as a percentage of GDP

	Corporate income tax revenues	Personal income tax revenues	Social Security contributions revenues	Taxes on goods and services revenues	Total tax revenues
Serbia	2.5	4.1	13.7	15.8	38.6
WB6	2.1	1.9	9.9	14.9	30.4
OECD	2.8	8.3	9.2	10.6	33.6

Note: Information on Serbia is from 2021 and information from the OECD is from 2020.
Sources: Serbia's Ministry of Finance information provided for the *Competitiveness Outlook* assessment and OECD (2024[1]).

The statutory 15% **corporate income tax** rate is above the regional WB6 average but significantly lower than the OECD average. Like all WB6 economies, Serbia operates a worldwide tax system, in which both the domestic and foreign-sourced income of registered companies is taxed. Unless stipulated otherwise in a tax treaty, **dividends** distributed to non-resident corporations are subject to a 20% withholding tax. Furthermore, **capital gains** earned by businesses are included in the CIT base. If the capital gains are generated by a non-resident corporation within the Serbian tax jurisdiction, a 20% withholding tax is levied.

In line with OECD good practices, the CIT system relies on cost-based **tax investment incentives** rather than profit-based tax incentives to attract direct investment. These cost-based incentives include an enhanced CIT deduction of twice the value of qualifying investments into research and development (R&D), as well as a 30% tax credit on investments into new companies that perform qualifying innovative activities. Profit-based tax incentives include a ten-year tax holiday for investors who hire over 100 workers and invest over RSD 1 billion (EUR 8 500 000). This tax holiday is proportional to the investment made, and the number of employees must be retained throughout the tax period. Additionally, corporate income from royalties that meet certain conditions can benefit from an 80% tax deduction. Empirical evidence on the benefits of tax incentives is limited but generally supports the view that cost-based tax incentives (tax allowances and credits) support investment with greater efficacy compared to profit-based tax incentives (tax exemptions and reduced rates) (OECD, 2022[2]).

There may also be a role for a **presumptive (or simplified) tax regime** targeting small businesses or vulnerable self-employed individuals**.** By reducing tax compliance costs and levying lower tax rates compared to the standard tax system, this regime aims to encourage business formalisation and compliance. To qualify for the flat rate taxation regime, the self-employed individual's turnover may not exceed RSD 6 000 000 (EUR 51 000); they cannot be a registered VAT taxpayer; and they cannot engage in retail trade, hotels and restaurants, financial mediation, advertising and market research, or activities related to real estate. Common and best practices for presumptive tax regimes are outlined in Mas-Montserrat et al. (2023[3]). The self-employed with turnover above RSD 6 000 000 lose the right to flat-rate taxation and will be taxed at a 10% rate on the realised profit.

Recent international tax developments may have implications for Serbia. The **Global Anti-Base Erosion (GloBE) Rules** ensure large multinational enterprises pay a minimum level of tax on the income arising in each of the jurisdictions where they operate. While countries are not required to adopt the GloBE Rules, jurisdictions that adopt them will apply an effective tax rate test. Using a common tax base and a common definition of covered taxes, the test will determine whether an MNE is subject to an effective tax rate of at least the agreed minimum rate of 15% in any jurisdiction where it operates (OECD, 2022[4]). For Serbia, that means that in-scope Ultimate Parent Entities of MNE Groups – that have their headquarters in a jurisdiction that has implemented the GloBE Rules and that operates a subsidiary (or Constituent Entity) in Serbia – may be subject to a top-up tax in the residence jurisdiction, if the profits earned in the subsidiary are taxed at an effective rate below 15%. Although Serbia has a 15% CIT rate, investment tax incentives may lower the effective tax rate of some businesses.

Serbia has continued to make strides in terms of its engagement in the **international tax frameworks,** as it is a member of the Inclusive Framework on BEPS (base erosion and profit shifting) and has been implementing Country-by-Country Reporting requirements. Additionally, in 2018 it joined the OECD Global Forum, and in 2019 it signed the Multilateral Convention on Mutual Administrative Assistance in Tax Matters. However, Serbia does not yet participate in the **exchange of tax information** under the OECD Automatic Exchange of Information (AEOI) standard. Doing so would allow the economy to increase compliance and more efficiently tax capital income at the individual level (OECD, 2017[5]).

Although the personal income tax (PIT) in Serbia has a progressive rate for a higher tax bracket, the vast majority of wage earners fall within the same bracket. Serbia levies a rate of 10% on wage income up to six times the average annual salary and then 15% for income above that threshold. The top PIT rate is low by international standards and furthermore is applied only to a very narrow base. For comparison, the average top PIT rate in OECD member countries in 2021 was 42.5%. The standard annual allowance is RSD 260 544 in 2024 (EUR 2 225) and has been increased regularly over the past three years. Dividend income and capital gains are taxed at 15%, and all other types of capital income, such as rental or royalty income, are taxed at 20%. Income from self-employment is taxed at a rate of 10%, regardless of the amount of income. In addition to the PIT, Serbia imposes an annual tax on individuals whose yearly income exceeds three times the average annual wage per employee in the economy, with a non-taxable threshold set at RSD 4 269 564 (EUR 36 463). Decreased for certain deductions, this annual tax follows a progressive tax rate structure: 10% is applied to income up to six times the average annual wage, while income exceeding this threshold is taxed at a rate of 15%.

Serbia has one of the highest **social security contribution** (SSC) rates in the Western Balkans region. The total rate is 35.05%, which is split into 15.15% for the employer and 19.9% for the employee. The self-employed are required to pay the combined rate of 35.05% of their income. It is worth mentioning that Serbia has been pursuing a strategy of decreasing SSC, with the contribution rate for mandatory pension and disability insurance being reduced from 25.5% in 2021 to 24% in 2023. These remaining high SSC rates may result in a significant tax burden on low-paid and low-skilled workers, reducing incentives to work and contributing to the informal sector's size. This is worsened by the fact that there is a minimum contribution of 35% of the average wage. That said, informal employment has regularly declined since 2018, reaching 13% in 2022 and 6.9% when excluding the agricultural sector (Statistics Office of the Republic of Serbia, 2023[6]).

This reliance on SSCs is a particularly salient issue due to population ageing and emigration trends. Between 2012 and 2022, the share of the population 65 years or over grew by four percentage points (compared to the EU average of 3.1 percentage points) (Eurostat, 2023[7]). With this recent growth, Serbia has one of the highest proportions of older people in the region. Given the likely impacts of these structural changes on the economy, Serbia has already begun preparing an analysis of the effect of population ageing on the sustainability of its pension system in the mid- and long term. The Tax Administration intends to regularise the analysis through a 3- or 5-year time frame.

Modelling and forecasting are a cornerstone of strong tax policy analysis. The Ministry of Finance uses macroeconomic modelling to project future revenues for all major types of taxes. This model is regularly assessed to ensure its forecasts' reliability, and it has been adjusted accordingly. However, Serbia has not yet implemented any micro-simulation models to analyse the revenue impact of alternative tax regimes. Consequently, the economy might consider developing micro-simulation models that utilise tax data to gauge the costs and distributional impacts of potential policies.

Regarding the **design and functioning of the value added tax (VAT) system**, Serbia's standard VAT rate is 20%, which is similar to the WB6 and OECD average. The VAT base, however, is fairly narrow due to a relatively high VAT threshold (RSD 8 000 000, or EUR 68 000) and a reduced rate of 10% that applies to a wide range of goods and services. Moreover, to strengthen VAT compliance, Serbia has implemented several measures, such as regularly calling or visiting new companies to explain the regulations or offering online presentations via the Tax Administration. However, the biggest change has been the implementation of electronic invoicing, which has had a significant impact on VAT collection in Serbia (Box 5.1).

Box 5.1. Serbia's Sistem e-Faktura electronic invoicing system

In Serbia, a transformative shift in the VAT system occurred at the start of 2023, when the Serbian Government passed a new regulation mandating the use of electronic invoices (e-invoices) in business-to-business transactions for both domestic and foreign companies operating within the economy. This regulation was the last piece in a comprehensive approach that encompassed various transaction types (including business-to-government and government-to-business in addition to business-to-business).

Further reinforcing this commitment to modernising VAT collection processes, the Law on Electronic Invoicing underwent significant amendments in November 2023. These changes, effective 1 January 2024, introduced a crucial alteration to the VAT law. Notably, taxpayers are now obligated to electronically record the VAT calculated in the preceding supply phase. Additionally, the deadline for this electronic recording was shortened from 15 to 10 days.

The implementation of these regulatory changes was supported by the launch of a new e-invoicing system called Sistem e-Faktura (SeF) by the Ministry of Finance. SeF was designed to facilitate the sending, receipt, processing and storage of electronic invoices, improving the efficiency and transparency of these processes. Entities can either create and submit e-invoices manually through the portal or connect their Enterprise Resource Planning (ERP) systems to the national system.

Source: Ministry of Finance (2024[8]).

In terms of **digital taxation,** Serbia levies a VAT on cross-border digital services, and its VAT rules make reference to the place of residence of the consumer, largely following the destination principle outlined in the International VAT/GST (goods and services tax) Guidelines. However, Serbia has yet to formally implement the Guidelines, while its Law on Value Added Tax remains only partially harmonised with EU regulations.

With respect to **health taxes**, Serbia levies a specific excise tax on alcohol products and both an *ad valorem* and a specific excise tax on tobacco products, which is a common approach among OECD countries. Combining specific and *ad valorem* taxes for tobacco products is an effective strategy for discouraging consumption of, or maximising revenue from, both high- and low-value products (OECD, 2020[9]). Aligned with the EU Directive on Tobacco Taxation, there is also a minimum specific excise tax per kilogramme of tobacco (World Bank Group, 2018[10]). The total tax burden on cigarettes in Serbia is 76.4% of the retail price, which is in line with the 75% minimum recommended by the World Health Organisation (WHO).

In contrast to the relatively well-developed health taxes, **environmentally related taxes** in Serbia are much more limited. The only instance of these taxes is the excise duty levied on gasoline and diesel fuel. As such, there is substantial scope to further increase and broaden environmentally related taxes, such as by introducing a carbon tax. Such efforts could help Serbia align itself with the objectives outlined in its national emission reduction plan.[1] Moreover, the Serbian Government has yet to assess the impact of the EU Carbon Border Adjustment Mechanism (CBAM).[2] Not only is alignment with EU climate goals important for Serbia's accession ambitions, but CBAM's introduction may also impact several of Serbia's emission-intensive sectors.

Unlike other WB6 economies, Serbia still does not conduct **tax expenditure reporting** on a regular basis. Doing so would allow it to monitor the use and effectiveness of tax incentives and tax expenditures along with the tax revenue forgone. A regular tax expenditure report should identify, measure, and report on the cost of tax expenditures in a way that enables their cost to be compared with direct spending programmes. Policy makers can then conduct cost-benefit analysis to evaluate whether specific tax incentives are meeting their stated objectives and, if not, whether they should be abolished or replaced.

Sub-dimension 4.2: Tax administration

Following the OECD's good practices on tax administrations' **functions and organisation**, the Serbian Tax Administration is a unified body that oversees all taxes and core administrative functions. It is responsible for collecting all taxes except those on real estate, which fall under the jurisdiction of local governments. Additionally, the State Audit Institution and an independent body that reports to the Serbian National Assembly regularly assess the Tax Administration's functioning. This body has also worked on improving the auditing and tax collecting skills of its employees through annual training programmes.

The Serbian administration employs a risk-based method for **compliance assessment.** The Tax Administration uses a comprehensive set of risk criteria to identify taxpayers for audits each month. Research from the OECD indicates that this risk-based selection is critical for the efficiency of compliance programmes, as they enable administrations to allocate resources effectively (OECD, 2020[11]).

To further bolster the **independence and transparency** of the Tax Administration, the government accepted the Transformation Programme of the Tax Administration for the period 2021-25. The new programme aims to improve the administrative process for businesses and citizens and the quality of taxpayer services. While the Tax Administration has a distinct legal status and its own operating budget, it has yet to establish an independent management board.

In terms of **tax filing and payment procedures**, Serbia requires that tax returns be filed electronically for all entrepreneurs and companies. Moreover, the PIT return also must be filed on line. Tax returns for CIT and income taxes levied on self-employment business income are submitted once a year. Serbia's Tax Administration has developed a system that validates the data reported in tax returns and can correct these returns as needed.

Taxpayer services include online information access, e-filing and online tax payments, and virtual and in-person services. Information requests are answered within three working days when posed via phone and within seven days when posed via letter. Several mechanisms are used to measure taxpayers' satisfaction, including surveys available in the Tax Administration's portal, using the contact centre voice machine's recordings and an independent survey conducted by the marketing agency IPSOS.

Overview of implementation of Competitiveness Outlook 2021 recommendations

Serbia's progress in implementing past OECD Recommendations has been mixed. In some areas, such as strengthening the tax administration's functioning, the economy has made strong advances since Competitiveness Outlook 2021. Conversely, its progress has stalled or been limited in most domains, including developing micro-simulation models, or expanding the VAT base. Table 5.3 shows the economy's progress in implementing past recommendations for tax policy.

Table 5.3. Serbia's progress on past recommendations for tax policy

Competitiveness Outlook 2021 recommendations	Progress status	Level of progress
Strengthen support to the economy and facilitate the economic recovery	Most tax support measures have been phased out, and some have been made permanent.	Strong
Diversify the tax mix by strengthening the role of corporate and personal income taxes	There have been few to no developments in this area, as the VAT base is still narrow with a high registration threshold.	Limited
Instigate a regular report on tax expenditures	No policy actions have been taken.	None
Weigh the advantages and disadvantages of the differentiated taxation of capital and labour income	There is no indication that such an assessment was conducted.	None
Broaden the VAT base by reducing the list of goods and services taxed at the reduced rate and, possibly, by lowering the VAT registration threshold	There have been few to no developments in this area.	None
Strengthen the design and progressivity of the PIT	PIT is progressive, but no significant developments have been implemented since the Competitiveness Outlook 2021.	None
Rebalance the taxation of labour income away from high employer and employee SSCs	No policy actions have been taken.	None
Develop an action plan in case consensus is found on a possible global minimum tax among members of the OECD/G20 Inclusive Framework on BEPS	There is no indication that such an assessment is taking place and/or has resulted in policy actions.	None
Implement micro-simulation models to analyse the impact of tax system changes	Serbia has limited tax revenue forecasting models but has made limited progress in developing and using micro-simulation models.	Limited
Continue to strengthen the functioning of the tax administration	In 2021, the government accepted the Transformation Programme of the Tax Administration for the period 2021-25. The new programme aims to improve the administrative process for businesses and citizens, and the quality of taxpayer services.	Moderate
Continue to engage with the international tax community and implement international best practice	Serbia continues to engage in the international tax community. Serbia is a member of the Inclusive Framework on BEPS and has made continued progress in implementing country-by-country (CbC) requirements.	Moderate
Carry out a cost-benefit analysis on the merits of the worldwide taxation system for resident corporations	There is no indication that such an assessment has taken place and/or resulted in policy changes.	None
Foster regional co-operation and co-ordination on common tax issues	There is regional co-operation through bilateral agreements, but few developments have occurred in recent years.	Limited

The way forward for tax policy

Considering the implementation level of the previous recommendations, there are still areas in which Serbia could enhance the tax policy framework and further improve the functioning of the tax administration. As such, policy makers may wish to:

- **Assess the impact of GloBE Rules on subsidiaries of multinational enterprises within Serbia**. Depending on the outcome of this assessment, Serbia may want to revise some of its tax incentives and corporate income tax rates. In particular, profit-based tax incentives, such as rate cuts and exemptions, are more likely to be impacted by the GloBE Rules and evidence of their effectiveness is limited. Additionally, to avoid forgoing revenue in the short term, Serbia may also wish to consider introducing a qualified domestic minimum top-up tax (QDMTT) that would increase the effective tax rate of relevant subsidiaries to 15%.
- **Consider reducing SSC rates and shifting the tax burden onto a more progressive PIT system, including personal capital income taxes, health taxes, and environmentally related taxes**. Shifting the tax burden from SSCs onto a more progressive PIT system could improve both the equity and efficiency of the tax system. On equity, increasing the number of PIT brackets and introducing a

higher top PIT rate would make the tax system more redistributive and raise revenues. Meanwhile, reduced SSC rates and low-bottom PIT rates decrease barriers to formal employment.

- **Assess the potential impact of demographic changes on revenue and the functioning of the SSC system**. Developing a plan to make the system's public finances more resilient to population ageing and emigration trends is crucial.
- **Consider reforming the presumptive tax regime targeting small businesses or vulnerable self-employed individuals**. The current regime only applies to self-employed individuals. Policy makers may wish to analyse whether there is scope for other presumptive tax regimes aimed at small businesses to induce formalisation (Box 5.2).

Box 5.2. Presumptive tax regimes

Presumptive tax regimes target taxpayers that are "hard-to-tax" businesses (i.e. the self-employed, unincorporated businesses, micro and small enterprises, farmers). Hard-to-tax taxpayers usually have low incomes, do not register voluntarily with the tax administration, do not keep complete books, do not file tax returns and use cash payments, all of which make it difficult for the Tax Administration to monitor them and ensure compliance (Thuronyi, 2004[12]; Rajaraman, 1995[13]). Given the high levels of informality associated with many low- and middle-income countries, presumptive tax regimes could form an important component of countries' tax systems if well designed and enforced.

A presumptive tax regime levies tax on a presumed tax base that is intended to approximate net taxable income by indirect means (Iordachi and Tirlea, 2016[14]; Thuronyi, 2004[12]). These regimes can be particularly relevant where actual taxable income is difficult to assess accurately (Logue and Vettori, 2011[15]). This is the case, for instance, where businesses do not keep complete books or where cash payments are prevalent.

Presumptive tax regimes aim at encouraging tax compliance by reducing tax compliance costs and by levying lower tax rates compared to the standard tax system (Loeprick, 2009[16]; Balestrino and Galmarini, 2005[17]). Tax compliance costs are associated with recording transactions, maintaining accounting records and financial statements, calculating tax liabilities, and following tax payment procedures (OECD, 2009). Small taxpayers with generally lower profits than larger ones tend to be disproportionately impacted by fixed compliance costs (OECD, 2009[18]; 2015[19]; ILO, 2021[20]). By reducing the administrative burden (e.g. with simplified bookkeeping rules), presumptive tax regimes contribute to reducing informality and broadening the tax base (Engelschalk, 2004[21]).

For the Tax Administration, presumptive tax regimes reduce the administrative costs of monitoring hard-to-tax businesses and ensuring their compliance. Regular assessment of their books can be difficult, especially where non-compliance is extensive and administrative resources are limited (Bucci, 2020[22]). While these regimes allow the tax administration to easily determine the tax liabilities of many small taxpayers (Engelschalk, 2007[23]), they do not prevent the administration from conducting regular and thorough controls of at-risk businesses (Bulutoglu, 1995[24]).

Presumptive tax regimes are present in many tax systems and differ widely in their design dimensions (e.g. the target group, the eligibility criteria, the presumption of the tax base and the tax liability, etc.) (Bucci, 2020[22]). These multi-dimensional differences complicate cross-country comparability and, thus, the extraction of solid conclusions for an optimal design.

In a working paper, the OECD discusses an analytical framework that allows for the systematic characterisation of country-specific presumptive tax regimes and the identification of their differences and commonalities. This benchmarking exercise would allow for an examination of each regime's strengths and weaknesses so that countries can identify opportunities to improve their presumptive regimes. The analytical framework can also help identify some of the key design questions worthy of receiving closer analytical attention in the future.

By discussing design features of presumptive regimes and identifying their issues, the working paper also lists a series of best practices for their design and administration. These best practices are accompanied by potential challenges the tax administration might face in their management, and desirable conditions for their implementation.

Source: Mas Montserrat et al. (2023[3]).

- **Analyse the potential benefits of broadening the VAT base**. By lowering the VAT registration threshold and reducing the range of goods and services to which a reduced VAT rate applies, broadening the VAT base improves the neutrality of the tax, lowers distortions, and may raise revenues.
- **Start regularly reporting tax expenditures to monitor their use and increase transparency.** Such analysis will also allow policy makers to conduct cost-benefit analyses to review their effectiveness.

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Notes

[1] National Plan to reduce emissions of major pollutants originating from large old combustion plants, *Official Gazette of RS*, no. 10, 6 February 2020.

[2] The EU CBAM is the policy instrument designed to reduce the likelihood of carbon leakage by instituting a carbon price on imported goods. This tool reflects EU commitments to reducing its greenhouse gas emissions under the "Fit for 55" package while still ensuring a level playing field between EU and non-EU businesses. The CBAM's transitional period, which started on 1 October 2023 and continues until the end of 2025, exclusively involves reporting obligations; however, from 1 January 2025, carbon pricing will also be implemented.

6 State-owned enterprises

State-owned enterprises (SOEs) are important economic actors and can enhance economic activity and competitiveness if a level playing field with private companies is ensured. This chapter, along three sub-dimensions, explores the importance of implementing policy, institutional and legal frameworks that contribute to competitive neutrality between private firms and state-owned enterprises. The first sub-dimension, efficiency and performance through improved governance, assesses clarity of the ownership policy and the board nomination framework, including independent and professional boards, and privatisation practices. The second sub-dimension, transparency and accountability, focuses on the financial and non-financial reporting and audit practices, including anti-corruption integrity measures and protection of minority shareholders. The third sub-dimension, ensuring a level playing field, explores the discrepancies in the legal and regulatory treatment of SOEs compared to private businesses, and the financing conditions of SOEs.

Key findings

Serbia performs better than the Western Balkans' regional average on the overall state-owned enterprise (SOE) policy dimension (Table 6.1) – although its score remained broadly unchanged. A new law, adopted in September 2023, successfully enshrines in law many of Serbia's SOE strategy's planned improvements to SOE ownership and governance arrangement. Yet many of these improvements envisaged in the new law have not yet resulted in higher scores, as the new law's implementation only commences in September 2024.

Table 6.1. Serbia's scores for state-owned enterprises

Dimension	Sub-dimension	2018 score	2021 score	2024 score	2024 WB6 average
State-owned enterprises	5.1: Efficiency and performance through improved governance			2.9	2.3
	5.2: Transparency and accountability			3.0	2.7
	5.3: Ensuring a level playing field			3.3	2.8
Serbia's overall score		**3.1**	**3.1**	**3.0**	**2.5**

The **key findings** are:

- Serbia's new state ownership strategy for 2021-27 effectively constitutes a policy that has introduced greater clarity regarding what the state expects of its 225 centrally owned SOEs.[1] The majority of these SOEs, with exceptions for those operating in electricity and gas production and transmission, will henceforth be subject to centralised ownership and monitoring under the Ministry of Economy, in line with good practice. The new Law on the Management of Business Companies Owned by the Republic of Serbia (henceforth the Law on SOE Governance)[2] adopted in September 2023 enshrines many elements of the state ownership policy in law.
- Although the Law on SOE Governance establishes new basic qualifications criteria for SOE board members, the authorities have yet to put in place a more detailed SOE board nomination framework that manifestly ensures that SOE board nominations are fully transparent, competitive and
  merit-based. Current legislation and regulations do not clearly specify the full process related to SOE board nominations and do not require their public disclosure.
- The new Law on SOE Governance foresees several measures that can be expected to help mitigate risks of corruption in the SOE sector. These include requirements for all SOEs to develop codes of ethics and integrity plans, together with several provisions that aim to curtail the use of SOE resources for political party financing or support.
- SOEs are generally subject to high standards of financial reporting and auditing, including requirements to report in accordance with international financial reporting standards (IFRS), but requirements do differ according, among other things, to the SOEs' size and classification as "public-interest entities".
- Concerning the level playing field with private companies, the majority of SOEs are incorporated as joint-stock or limited liability companies in line with good practice. The remaining 20 SOEs currently incorporated under the special legal form of "public enterprise" are scheduled for transformation into joint-stock or limited liability companies, as per the Law on SOE Governance. Many SOEs in Serbia either do not achieve significant rates of return or are outright loss-making, pointing to structural issues that hamper efficient resource allocation.

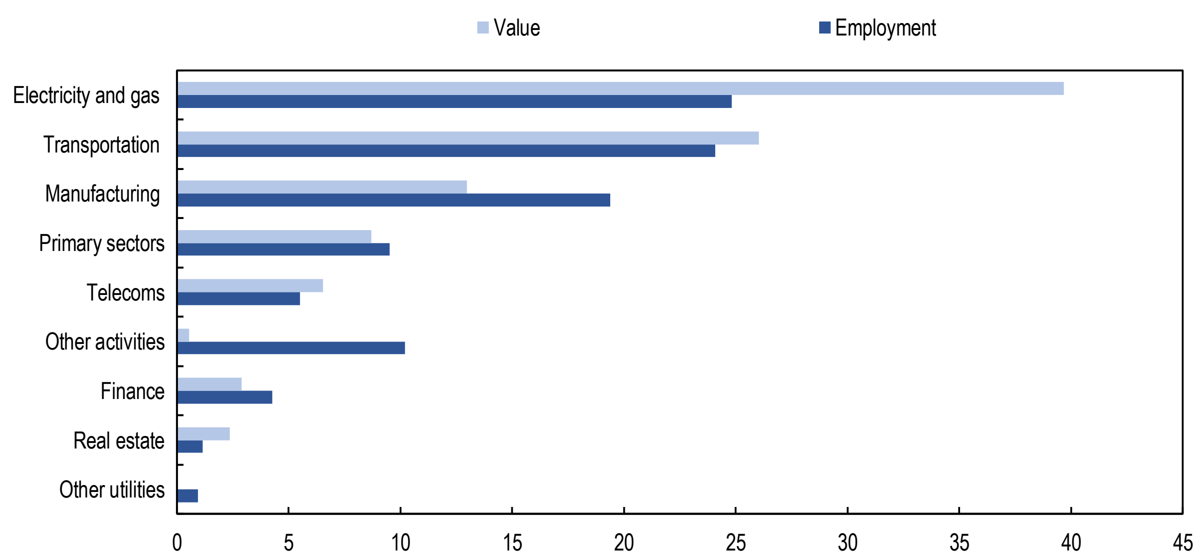
State of play and key developments

The central government oversees a portfolio of 225 SOEs employing 137 000 people and valued at EUR 22.4 billion.[3] An additional portfolio of approximately 60 companies held by the central government is scheduled for privatisation and is not included in these figures, although those enterprises would be considered SOEs by OECD definitions.[4] Of the 225 SOEs that are expected to remain in the state's ownership portfolio, 205 are incorporated as limited liability or joint-stock companies and operate primarily subject to the Law on Companies, while 20 have the special legal form of "public enterprise" and operate primarily under Serbia's Law on Public Enterprises. 27 of the 225 SOEs that are incorporated as companies are also subject to the Law on Public Enterprises, by virtue of their involvement in performing public-interest activities.[5]

SOEs are an important part of Serbia's economic landscape. They account for 5% of national employment and 6% of national non-agricultural employment, and are present in many structurally important sectors, such as electricity and gas, transportation (railways and roads), postal services, water management, telecoms and finance. As measured by value, the majority of SOEs are concentrated in the electricity and gas sector (40% of all SOEs by value), followed by transportation (26%), manufacturing (13%) and the primary sectors, which include a number of forestry and mining enterprises (9%). As measured by their employment share, the largest SOE sectors are electricity and gas (25% of all SOEs by employment), transportation (24%) and manufacturing (19%) (Figure 6.1).

Figure 6.1. Distribution of employment and value of centrally owned SOEs by economic sector in Serbia (2021)

Sectoral shares in value and employment are expressed in percentages



Note: The SOE value denotes the book value of shareholders' equity. The healthcare and social services sectors are not represented since these SOEs account for less than 1% of total employment and total value in the entire SOE portfolio.
Source: OECD calculations based on information provided by the authorities of Serbia for the *Competitiveness Outlook*.

StatLink https://stat.link/6kp0ef

Concerning their performance, the SOE portfolio as a whole posted an average 1% return on assets in 2021, with negative average returns recorded in the electricity and gas, transportation and healthcare and social services sectors. The highest performing sectors, as measured by their return on assets in 2021, were the primary sectors (7.8%), manufacturing (3.4%) and telecoms (3.2%). To some extent, the negative returns in the energy, transportation and healthcare and social services sectors may be at least partly explained by the expectation that some of these SOEs pursue non-commercial objectives, such as the provision of affordable rail transport services, electricity and healthcare for citizens. In cases where such non-commercial objectives are not directly financed by the state budget, they may be cross-subsidised by SOEs' commercial revenues, jeopardising commercial performance. However, the authorities have not undertaken to systematically identify the structural sources of SOEs' underperformance, which likely also include corporate inefficiencies that are not related to public policy activities. A recent report by the Fiscal Council of Serbia noted significant financial issues faced in particular by the energy sector SOEs Srbijagas and Elektroprivreda Srbije (EPS), for which government support to cover losses contributed to nearly half of the state's budget deficit in 2022 (a deficit totalling nearly 4% of GDP). Although the report notes that external market circumstances – as a result of the energy shock caused by the Russian war of aggression against Ukraine – led to losses for both companies, it also identifies corporate mismanagement as a significant contributing factor (Republic of Serbia Fiscal Council, 2022[1]).

Sub-dimension 5.1: Efficiency and performance through improved governance

Concerning the **clarification of ownership policy and rationales**, Serbia has made important progress through the April 2021 adoption – and the ongoing implementation (with full implementation planned for 2027) – of a state ownership strategy document that essentially constitutes a state ownership policy. In line with good practice, the document defines the rationales for state ownership, the state's role in the governance of SOEs, and the roles and responsibilities of the primary implementing institution (and new primary shareholding institution), the Ministry of Economy. The stated objective of the strategy is to achieve sustainable and efficient management of SOEs, reflecting the state's commitment to reform SOEs and increase their benefits to citizens (Ministry of Economy of the Republic of Serbia, 2021[2]). The strategy sets forth that the purpose of state ownership is to create value for citizens through an efficient allocation of resources. Additionally, it details that SOEs should remain in state ownership only if they achieve one of the following objectives (otherwise they are to be liquidated or privatised):

- to resolve situations in which markets for certain products or services do not exist or do not function properly
- to contribute to the achievement of social and environmental goals
- to contribute to the achievement of economic and industrial goals
- to ensure the fulfilment of national strategic interests.

The strategy sets out two subsidiary special objectives: 1) to create a unified framework of state ownership for all SOEs, including a centralisation of the state ownership function, and 2) to improve SOEs' corporate governance arrangements, including through the establishment of independent and professional boards and adequate risk management and internal controls.

Serbia's new state ownership strategy outlines clear plans to further **professionalise state ownership**, notably through a stronger centralisation of the economy's state ownership function under the Ministry of Economy, albeit with some exceptions for SOEs operating in the energy sector. This foreseen centralisation, along with many other related improvements to Serbia's SOE performance-monitoring and transparency arrangements, were enshrined in legislation through the aforementioned September 2023 adoption of the Law on SOE Governance.[6] As per the state ownership strategy, the Ministry of Economy is newly mandated to undertake several key ownership functions, sometimes in co-ordination with other ministries. These include: approving SOEs' strategic plans and monitoring their implementation; setting dividend expectations; appointing SOE board members; and reporting on the performance of SOEs, as well as on its own performance as state shareholding entity, to the government and the National Assembly (Ministry of Economy of the Republic of Serbia, 2021[2]). Provisions of both the state ownership strategy and the Law on SOE Governance also strengthen procedures for setting and monitoring the achievement of SOEs' commercial and non-commercial objectives. The Law notably requires the elaboration of yearly Guidelines documents – developed by dedicated government commissions involving representatives of the Ministry of Economy, the Ministry of Finance and relevant sectoral ministries – that outline overarching enterprise goals and key performance indicators, all of which are to be subject to regular monitoring and reporting by the Ministry of Economy. That ministry's foreseen role in SOE board appointments has not yet been enshrined in law or supplementary regulations. Although the provisions of the Law exclude electricity production and supply companies from the centralised monitoring activities of the Ministry of Economy, its provisions remain applicable to those companies, with implementation being the responsibility of the Ministry of Energy.[7]

Serbia currently does not have a **robust board nomination framework** applicable to all SOEs. The legislation and policies in force do not require that SOE board member recruitment processes be competitive or open to the public. Although the Law on SOE Governance establishes new basic requirements regarding SOE board member qualifications, it does not outline details on the foreseen nomination process, only stating that the development of additional conditions for board appointments is within the purview of the government. Still, the inclusion of the new basic requirements in the recently adopted Law does constitute an improvement, since previously only the board members of the 48 SOEs subject to the Law on Public Enterprises were subject to legislated qualifications criteria, while the board members of state-owned companies not performing public-interest activities were subject to no minimum qualifications criteria. The basic criteria set forth in the Law include, for example, five years of work experience requiring higher education, three years of managerial experience, knowledge of corporate management and the absence of conflicts of interest. New provisions also require that all board members (and SOE directors) undergo corporate management training to be organised by the Ministry of Economy. SOE board nomination procedures can be expected to improve with the continued implementation of the state ownership strategy, which explicitly envisages a harmonisation and improvement of SOE board nomination practices across the state's portfolio.

While the legal framework applicable to SOEs in Serbia includes some preliminary measures to promote **independent and professional boards**, there remain significant shortcomings, including notably SOE boards' limited role – and the state's comparatively strong role – in management oversight, as well as insufficient measures to ensure board members' independence. Concerning their weak role in management oversight, it is the state, and not the board of directors, that is responsible for appointing and dismissing the chief executive officers (CEOs) of SOEs undertaking public-interest activities and thus falling under the scope of the Law on Public Enterprises. This applies regardless of SOEs' legal form. (According to the Law on Public Enterprises, the supervisory board can submit a proposal to the government for CEO dismissal, but in this case, it performs more of an advisory function than a corporate supervisory function.) In such cases, boards are deprived of their crucial good-practice function of monitoring management and serving as a shield against excessive political interference in SOEs' corporate decisions. Additionally, SOEs organised as private limited liability companies are not legally required to establish boards of directors: in practice 21 such SOEs under the purview of the Ministry of Economy operate only under a general assembly and a managing director. The newly adopted Law on SOE Governance may mitigate this shortcoming somewhat, through a provision requiring that all medium and large SOEs operate under a "bicameral" governance structure, i.e. with a supervisory board, to which the Law on Companies grants the power to appoint the CEO. The authorities may need to take additional steps to ensure that, going forward, this new provision is fully implemented in the SOEs to which it applies.

Concerning board member independence, the laws in force at the time of writing contain some related requirements, but there is scope to strengthen the criteria to ensure that all SOE board members nominated as "independent" directors indeed have a degree of independence from political influence. Both the Law on Public Enterprises (applicable to 48 public-interest SOEs) and the Law on SOE Governance (applicable to SOEs incorporated as joint-stock or limited liability companies) require that supervisory boards include one independent member, but the definitions of independence vary between the two pieces of legislation, with only the Law on Public Enterprises barring members of political parties from being considered independent.[8] In practice, some SOE boards include acting politicians, which significantly jeopardises these SOE boards' ability to make decisions in the corporate interest with no political interference. As the authorities move forward with their ambitions, set forth in the state ownership strategy, to improve the SOE board recruitment process, they should take steps to ensure that SOE boards comprise a sufficient proportion of private sector professionals who can make decisions with no political influence.

Another corporate governance issue that has been the subject of some criticism is that the legislation in force (both the Law on Public Enterprises and the new Law on SOE Governance) allow for the appointment of "acting CEOs" who need not undergo the public competition foreseen by law, and can be appointed for mandates of up to one year. Critics of corporate governance practices in Serbian SOEs point to the recurrent practice of appointing these "acting CEOs" to avoid the scrutiny imposed by the public competition normally foreseen. According to research by Transparency Serbia, in 2020 more than 70% of the 34 SOEs subject to the related requirements were operating under "acting CEOs" who had not undergone a public procedure and who had, in addition, surpassed their mandated one-year term limits (Transparency Serbia, 2020[3]). The 2021-27 state ownership strategy includes an explicit objective to limit the use of such "acting directors", but the recently adopted Law on SOE Governance does not include any provisions to further curtail the practice.

Concerning **privatisation practices**, Serbia has undertaken a large number of privatisations in the past decade, completing those of 71 SOEs since 2015, 6 of which were undertaken in 2021-22. Privatisations are undertaken by the Ministry of Economy, which currently maintains a portfolio of 60 enterprises scheduled to be privatised. The Ministry of Economy maintains an up-to-date list of ongoing and planned privatisations and bankruptcies on its website (Ministry of Economy of the Republic of Serbia, 2023[4]). The Serbian authorities report that most privatisations in the past five years were equity sales through auctions. Privatisations are regulated by the Law on Privatisation, which includes provisions regarding public disclosure of forthcoming privatisations planned by the Ministry of Economy. The ministry must publish an invitation to submit a letter of interest within 30 days of initiating the privatisation procedure, and must subsequently make a public announcement of concluded sales. The required public disclosures must appear on the Ministry's website and in at least one daily newspaper widely distributed across the territory of Serbia. The foreseen institutional arrangements for privatisations do not involve the establishment of an independent oversight commission to ensure that privatisations are transparently executed in the public interest. Post-privatisation audits, as foreseen in the legislation, are mostly limited to ensuring that any contractual obligations for the buyer, which are usually limited to a two-year period post-privatisation, are met. They do not assess the impact of privatisations on the public interest or the propriety of the privatisation process. The Law on Privatisation establishes that an entity scheduled for privatisation must establish a fair market value for its assets and liabilities; usually this value is determined by an external audit firm selected by the company.

Sub-dimension 5.2: Transparency and accountability

The 2021-27 state ownership strategy has announced the development of a common disclosure policy for all SOEs, which can be expected to strengthen SOEs' **financial and non-financial reporting** practices going forward. The newly adopted Law on SOE Governance has already introduced several new unified requirements for the public disclosure of information by SOEs, allowing the Ministry of Economy to determine additional requirements going forward. The Law notably requires that SOEs publish on line their annual audited financial statements, annual business plans, and the aforementioned Guidelines documents outlining their agreed yearly goals and key performance indicators. Previously, most SOEs were simply required to submit their financial statements to the company registry, which subsequently made them publicly available. The new requirements therefore constitute a significant improvement in SOEs' required transparency to the public.

Most SOEs are separately subject to various other disclosure requirements established through multiple pieces of legislation applicable to all companies in Serbia. For example, provisions in the Law on Accounting require most SOEs, including those incorporated as "public enterprises", to report in accordance with international financial reporting standards (IFRS), and those exceeding a certain size threshold to have their financial statements audited by an external auditor. According to monitoring by the Ministry of Economy, 7 of Serbia's 48 public-interest SOEs did not prepare audited financial statements in 2022, as their small size exempted them from the requirement for an external audit.[9] The Law on Accounting requires that all companies, except for small and micro companies not engaged in public-interest activities, prepare an annual report. Large legal entities of public interest that employ over 500 people must produce non-financial reports that include information on activities related to environmental protection, social and personnel issues, respect for human rights, and anti-corruption and bribery issues. While there is no common requirement for SOEs to publish sustainability reports, the Serbian authorities communicate that 15 of the 48 SOEs under the purview of the Ministry of Economy did publish such reports, or include information on environment, social and governance (ESG) issues in their annual reports, in 2022.[10] An example of such a report, published by Serbia's largest SOE Elektroprivreda Srbije, details information related among other things to the company's environmental and employee health impacts (Electric Power Industry of Serbia, 2021[5]). Given their prominence in sectors with a high carbon footprint, such as energy production, manufacturing and mining, there is scope to strengthen SOEs' related disclosure requirements, as part of broader efforts to strengthen their role in supporting the low-carbon transition. In line with good practice, the new Law on SOE Governance recognises environmental sustainability as an overarching goal to be sought as the new centralised ownership framework for SOEs is implemented.

Concerning reporting by the state shareholder, Serbia does not currently produce an aggregate report on the performance of the SOE portfolio. However, the new state ownership strategy and related provisions of the new Law on SOE Governance mandate the Ministry of Economy to publish an annual report on the performance of all SOEs, including with respect to the key performance indicators outlined in the foreseen Guidelines documents. Furthering the strategy's objective to develop a centralised monitoring system for SOEs, the Business Registers Agency has developed a searchable database of SOEs in Serbia, which provides detailed enterprise-specific information such as financial reports (as available), as well as a list of all shareholders, board members and the CEO (Serbian Business Registers Agency, 2023[6]). The site also provides up-to-date information on recent corporate changes within SOEs, for example relating to their statutes or board composition. Some reporting on SOEs' performance, insofar as it could engender fiscal risks, is furthermore included in the government's annual "Fiscal Strategy", which is submitted to parliament.

For economically significant SOEs and those undertaking public-interest activities, the rules governing their **auditing practices** appear to be of a high standard. In particular, all SOEs undertaking public-interest activities, together with all medium-sized and large companies in Serbia (including those that are state-owned) must have their financial statements audited by an external (commercial) auditor. Audit committees are required for all medium-sized or large SOEs, as per the recently adopted Law on SOE Governance. That same law introduces the requirement that all SOEs establish an effective system of internal controls to ensure continuous monitoring of business and compliance risks. The 2021-27 state ownership strategy notes that 19% of SOEs had established an internal audit function as of 2021 and announced the target of 100% by 2027. SOEs' financial statements can also be audited by the supreme audit institution, but these are performed in addition to, and not in place of, external commercial audits.

A 2015 assessment of Serbia's national integrity system by Transparency Serbia accorded a score of 25 out of 100 to SOE oversight practices related to corruption prevention, suggesting that SOEs were "under the control of political parties" and highlighting the aforementioned problematic practice of the government appointing "acting CEOs" as exacerbating the issue (Transparency Serbia, 2015[7]). An additional weakness stems from the fact that the state, rather than boards of directors, is responsible for

CEO appointment and dismissal in those SOEs that are regulated by the Law on Public Enterprises. The practice of allowing the government to appoint CEOs creates a channel for increased political interference in corporate management, and raises the risk that SOEs are used for political or personal gain. As mentioned previously, recent legislative amendments may partly address this problem as fully corporatised medium and large SOEs will henceforth be required to establish supervisory boards, which have the authority to appoint the CEO under the Law on Companies. However, it will take some time to implement these provisions, which also will not apply to any medium or large "public enterprises" until they have been transformed into joint-stock companies.

In this context, there have been some efforts to implement targeted **anti-corruption and integrity measures** in Serbian SOEs, including notably provisions in the Law on Public Enterprises, applicable to 48 SOEs, that foresee:

- collective and individual liability, respectively, of the board and the CEO in case of negligence or unscrupulous behaviour to the detriment of the company
- penalties in case the CEO is found to have used the SOE for political purposes
- the development of integrity plans for SOEs that have more than 30 employees.

Anti-corruption measures have historically been more limited for SOEs not engaged in public-interest activities, but the new Law on SOE Governance contains several provisions that seek to better mitigate corruption risks in all SOEs. These include notably provisions calling for the dismissal of board or management representatives that undertake actions to the detriment of the company, with several explicit references to any actions involving the use of the company for political purposes, including in the context of election campaigns. The Law also requires that all SOEs develop codes of ethics and integrity plans. Other pieces of legislation affecting the framework for anti-corruption in SOEs include the Law on Companies, which establishes that companies can pursue lawsuits against directors considered not to have fulfilled their duty of care. The Law on the Prevention of Corruption further criminalises bribery of public officials, explicitly includes SOE officials (board members and CEOs) in its scope and requires that SOE managers and other employees undergo training on ethics and integrity. The Serbian authorities report that in 2023, over 34 000 SOE managers and employees (including of sub-national SOEs) completed such training[11]. The state's ongoing efforts to centralise state ownership, abolish special legal forms for SOEs and establish more competent and independent boards can be expected to contribute to a stronger framework for reducing corruption-related risks in SOEs.

Regarding the **protection of minority shareholders**, sound legislation is in place to ensure basic minority shareholders' rights in Serbia, which apply equally to the minority shareholders of SOEs. The Law on Companies establishes equal treatment of all shareholders of ordinary shares and provides that those with at least 5% of capital can convene an extraordinary general meeting and propose agenda items. Amendments to the Law on Companies enacted in November 2021 have strengthened minority shareholder rights. New measures are notably in place to prevent abuse-related party transactions in limited liability and joint-stock companies. These include the requirement to disclose to the board any transactions exceeding a certain size threshold that involve a "personal interest" of shareholders or directors, as well as new provisions allowing for shareholders to undertake legal action in case such transactions were not properly disclosed or were not concluded at fair value. Additionally, amendments were introduced to promote shareholders' long-term engagement. The Serbian authorities report that 15 SOEs include minority non-state investors. Because these companies were not previously monitored by the Ministry of Economy, there is limited information available on minority investors' role in corporate decision making such as board nominations.

Sub-dimension 5.3: Ensuring a level playing field

SOEs' **legal and regulatory treatment** differs from that of private companies, for the 20 SOEs that have the special legal form of "public enterprise" (*javno preduzece* in national nomenclature) and whose primary legislation is the Law on Public Enterprises, rather than the Law on Companies. These public enterprises are governed by a five-member supervisory board whose members are selected by the founding institution (e.g. the government), but many corporate decisions require the consent of the founding institution, greatly weakening these boards. As mentioned previously, the supervisory boards of public enterprises do not have the right to hire or dismiss the CEO; CEOs are selected by the government following a public selection process. Although this should change as provisions of the new Law on SOE Governance come into force, additional monitoring may be merited to ensure that at least all of Serbia's large SOEs operate under professional boards of directors with the authority to appoint CEOs.

The Serbian authorities have committed to phasing out the separate legal form of "public enterprise", as outlined in the 2021-27 state ownership strategy as well as the Law on SOE Governance (Ministry of Economy of the Republic of Serbia, 2021[2]). In line with this commitment, Elektroprivedra Srbije (EPS), which supplies coal-powered electricity and is Serbia's largest company by revenues, was converted from a public enterprise into a (closed) joint-stock company in April 2023.

Regarding **SOE financing conditions**, transfers from the state budget to ailing SOEs have historically been a common practice in Serbia. According to World Bank estimates, in 2019, SOEs received approximately 60% of all corporate subsidies in the economy (World Bank, 2019[8]). SOEs can benefit from an explicit loan guarantee for investment projects and, if their financing is exclusively or predominantly from the state budget, cannot enter bankruptcy proceedings. As a European Union (EU) candidate economy, Serbia is expected to phase out any forms of state aid that could distort competition with private companies. The Commission for State Aid Control was established in 2019 as part of Serbia's commitment to align its legislation and practices with the EU *acquis* in this domain. Perhaps a more fundamental issue concerning SOE financing conditions is that many SOEs in Serbia either do not achieve significant rates of return or are outright loss-making. As highlighted earlier, sectoral performance data point to net losses in 2021 in the electricity and gas, transportation, healthcare and social services, and real estate sectors. While in some cases SOEs' losses could stem from uncompensated public policy objectives, there are limited data on the extent of such objectives or their actual cost to SOEs. When SOEs achieve negative returns on equity, this effectively constitutes a cost of equity capital that is not market-consistent, signifying an inefficient allocation of resources in the market.

Overview of implementation of Competitiveness Outlook 2021 recommendations

Serbia has announced or commenced reforms in all areas subject to Recommendations on state ownership in CO 2021 (Table 6.2). Planned reforms as outlined in the 2021-27 state ownership strategy are poised to substantially enhance state ownership practices in Serbia. Although the strategy is not expected to be fully implemented until 2027, several implementing measures have already been taken. In particular, the new Law on SOE Governance enshrines in law many of the strategy's ambitions, including the further centralisation of state ownership under the Ministry of Economy and establishing a process for elaborating, and monitoring the achievement of, clearly defined goals for SOEs.

Table 6.2. Serbia's progress on past recommendations for state-owned enterprises

Competitiveness Outlook 2021 recommendations	Progress status	Level of progress
Further professionalise state ownership practices	The authorities developed a state ownership strategy (2021-27) that defines the rationales for state ownership and mandates the Ministry of Economy to undertake a number of expanded ownership functions (including with respect to SOE performance monitoring and the appointment of SOE boards of directors).	Strong
Strengthen the transparency and professionalism of the SOE board nomination process	The aforementioned state ownership strategy foresees the establishment of a new unified SOE board nomination framework, but the framework is still under development. The fact that the government can still directly appoint the CEOs of some SOEs is not in line with good practice and significantly weakens SOE boards' ability to oversee management free of political interference. This practice will end for many SOEs as the new Law on SOE Governance provisions come into force.	Moderate
Improve SOE monitoring and disclosure practices	The authorities have not yet produced an aggregate report on the activities and performance of all SOEs, but have begun centralising available data on SOEs on a dedicated webpage, and an aggregate report is foreseen as per the new state ownership strategy. Provisions in the new Law on SOE Governance outline some common disclosure requirements applicable to all SOEs.	Moderate
Streamline SOEs' legal forms	In the 2021-27 state ownership strategy, the authorities have committed to phasing out the special legal form of "public enterprise". One public enterprise, the electricity producer Elektroprivedra Srbije, has since been converted into a joint-stock company.	Limited

The way forward for ownership and governance of state-owned enterprises

The Serbian authorities have already established a sound blueprint for SOE reform in the new state ownership strategy, which includes planned measures to begin addressing the bulk of the Recommendations previously set forth in CO 2021. The authorities should maintain their commitment to implementing the targeted measures set forth in that strategy with a particular emphasis on the following:

- **Continue strengthening and centralising the state ownership function**. Given its expanded ownership functions, it will be important to ensure that the Ministry of Economy has adequate financial and human resources to effectively fulfil these new tasks. Additionally, as the ministry moves forward with implementing the new state ownership policy, including through necessary legislative reform, it should ensure that the tenets of the ownership policy are applicable to the state's entire portfolio of SOEs. Any exceptions should be clearly and publicly justified. SOEs in the energy sector should be subject to the same high standards of governance and transparency as all other SOEs. Moreover, as the Ministry of Economy expands its SOE performance-monitoring functions, it should analyse in greater detail the sources of SOEs' underperformance and quantify the impact of any public policy objectives on SOEs' finances. Good practice calls for the costs of SOEs' public service obligations to be clearly identified and compensated from the state budget.
- **Ensure that state ownership policies and practices take into account SOEs' central role in contributing to the low-carbon transition**. Given their presence in sectors with an important carbon footprint, such as energy production, manufacturing and mining, Serbian SOEs have an important role to play in supporting efforts towards the low-carbon transition.[12] As the authorities continue to elaborate sustainability-related commitments for the broader economy, they should ensure that such commitments are adequately communicated as shareholder expectations and integrated by SOE boards into SOE-related policies and practices. The inclusion of environmental sustainability as one of the goals of centralised ownership laid out in the Law on SOE Governance is in keeping with this ambition.
- **Move forward with plans to strengthen boards of directors through a unified nomination process**. The new SOE board nomination framework should ensure that board appointments are transparent, competitive and merit-based. Good practice calls for the use of independent

commissions to weigh in on board appointment processes, and suggests that ownership-co-ordinating bodies (in the case of Serbia, the Ministry of Economy) can usefully contribute to the development of qualifications requirements and help harmonise board appointment processes through the development of related guidelines (OECD, 2013[9]). Serbia's board nomination framework should ensure that SOE boards are sufficiently independent and comprise the appropriate mix of skills and experience to effectively oversee SOE management. Independent board members should be independent not only of company management but also of political influence. Efforts should also be made to strengthen the responsibilities of SOE boards of directors – including by granting all SOE boards the right to appoint and dismiss the CEOs of SOEs – so that they can fulfil their important functions of supervising management and shielding enterprises from political interference. The authorities should take steps to curtail the practice of appointing "acting directors" to SOEs so that the state's requirements for competitive recruitment procedures for CEOs are applied in practice.

- **Continue improving disclosure practices by SOEs and by the state shareholder.** Serbia's authorities should build on SOE data compiled in the database of the Business Registers Agency to produce an aggregate report on SOEs, as well as to identify gaps in disclosure of financial and non-financial information by SOEs. Box 6.1 provides an overview of the suggested content of SOE aggregate reports, as set forth in the OECD Guidelines on Corporate Governance of State-Owned Enterprises (2015[10]). Aggregate reports could also usefully include information on SOEs' contributions to broader areas of current policy relevance, such as the low-carbon transition. The state should develop a common disclosure policy applicable to all SOEs and ensure that at least all large SOEs disclose financial and non-financial information in accordance with international good practice.
- **Accelerate efforts to abolish the legal form of "public enterprise"**. The authorities' stated goal to phase out the special legal form of "public enterprise", which applies currently to 20 SOEs, is in line with good practice. The corporatisation of SOEs should be undertaken in tandem with equally important reforms to make the state's new rules on board nominations and disclosure applicable to all SOEs, regardless of their legal form or commercial orientation.

Box 6.1. Strengthening accountability of the state shareholder: Aggregate reporting provisions from the OECD SOE Guidelines

The OECD SOE Guidelines recommend that the state acting as shareholder publish annual reports on SOEs, called "aggregate" reports because they aggregate information on the state's entire portfolio of enterprises. It is recommended that these reports be made available on line so that the general public – who are considered the ultimate "shareholders" of SOEs – can access them. The SOE Guidelines recommend that the aggregate reports include information related to the following:

- the state's ownership policy and its implementation, including how the ownership function is organised within the state administration
- the total value of the SOE portfolio and its financial performance
- other key financial indicators including turnover, profit, cash flow from operating activities, gross investment, return on equity, equity/asset ratio and dividends
- performance related to non-financial indicators
- SOE boards of directors and stakeholder relations
- the operations and performance of significant individual SOEs.

Source: OECD (2015[10]).

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Note

[1] Data on total number of central SOEs in Serbia is based on reporting by the Serbian authorities (the Statistical Office of the Republic of Serbia) in the context of this assessment, drawing on data available through the Agency for Business Registers for the 2021 financial year.

[2] The text of the new Law on the Management of Business Companies Owned by the Republic of Serbia can be accessed at: https://www.paragraf.rs/propisi/zakon-o-upravljanju-privrednim-drustvima-koja-su-u-vlasnistvu-republike-srbije.html.

[3] The size of the SOE portfolio is as reported by the Serbian authorities in the context of this assessment and may exclude some enterprises that the OECD would consider SOEs. Information provided by the authorities related primarily to those SOEs that will be subject to the new centralised monitoring framework under the Law on SOE Governance, which notably excludes: banks, insurance companies and other financial institutions; companies that manufacture weapons and military equipment; and enterprises scheduled for privatisation or undergoing bankruptcy proceedings.

[4] Several categories of SOEs are exempted from the scope of application of the new law. This applies to state-owned banks, insurance companies, non-profit organisations, companies manufacturing military equipment, institutes, and SOEs that are undergoing privatisation or insolvency proceedings.

[5] The identification of enterprises subject to the Law on Public Enterprises (a portfolio of 48 companies, of which 27 are fully corporatised and 21 have the special legal form of "public enterprise") is based on a list of companies provided by the Ministry of Economy in the context of this assessment.

[6] The Law on SOE Governance is separate from, and will eventually replace, the Law on Public Enterprises. Until the entry into force of the Law on SOE Governance (scheduled for September 2024), provisions of the Law on Public Enterprises remain in force.

[7] Separately, state-owned enterprises managing the natural gas transmission system are, as per the Law on SOE Governance, under the ownership responsibility of an independent state body responsible for energy networks and subject to separate bylaws.

[8] The Law on Public Enterprises sets forth that to be considered "independent", a board member must not have been responsible for auditing the SOE's financial statements in the previous five years, be a member of a political party, or be employed within the SOE. The Law on SOE Governance references only the board members' independence from the company and application of the independence criteria set forth in the Law on Companies for public joint-stock companies.

[9] The Law on Accounting establishes that external audits of financial statements are required for all large and medium-sized entities, while the Law on Public Enterprises applies this requirement to all SOEs performing activities of public interest and thus subject to the Law (with no limitations related to their size). Based on these legislative requirements, it is not clear why small public-interest SOEs may be excluded from the scope of the Law on Public Enterprises' requirements for external audits.

[10] Information on sustainability reporting provided by the Serbian authorities is based on self-reporting by the SOEs under the purview of the Ministry of Economy.

[11] The Law on the Prevention of Corruption (in Serbian language) is available here: https://www.paragraf.rs/propisi/zakon-o-sprecavanju-korupcije.html.

[12] For general information on the role of SOEs in the low-carbon transition and international practices for setting related objectives, see OECD (2022[11]).

7 Anti-corruption policy

An effective anti-corruption policy is essential for promoting fair competition. This chapter, along with four sub-dimensions, explores the effectiveness of the prevention, investigation and prosecution of corruption cases. The first sub-dimension, anti-corruption policy and risk management, assesses the planning, co-ordination and monitoring of anti-corruption policies, including corruption risk assessments and corruption proofing of legislation. The second sub-dimension, prevention of corruption, focuses on anti-corruption public-awareness as well as the effectiveness of the legal framework regarding corruption prevention bodies, conflicts of interest, and whistleblower protection. The third sub-dimension, business integrity and corporate liability, explores the robustness of the framework for businesses integrity and regulatory mechanisms, as well as the liability of legal persons. The fourth sub-dimension, investigation and prosecution, assesses the capacities of specialised anti-corruption investigative and prosecutorial bodies in investigating and prosecuting high-level corruption cases.

Key findings

Serbia's legal and institutional anti-corruption framework has changed little since the *Competitiveness Outlook 2021* assessment (Table 7.1). The economy has robust measures in place for assessing corruption risks and has made efforts to further strengthen the verification of assets and income reports and to oversee compliance with rules for beneficial ownership declaration. However, limited resources of anti-corruption bodies are a key factor preventing stronger progress in Serbia's fight against corruption.

Table 7.1. Serbia's scores for anti-corruption policy

Dimension	Sub-dimension	2018 score	2021 score	2024 score	2024 WB6 average
Anti-corruption	6.1: Anti-corruption policy and risk assessment			3.2	2.4
	6.2: Prevention of corruption			3.3	2.9
	6.3: Business integrity and corporate liability			2.3	1.9
	6.4: Investigation and prosecution			2.3	2.4
Serbia's overall score		**2.6**	**2.9**	**2.9**	**2.5**

Notes: Scores for 2024 are not directly comparable to the 2021 scores due to changes in the scoring methodology of this indicator. Sub-dimension 6.3 as well as several indicators in the other sub-dimensions is scored for the first time in this assessment. Therefore, changes in the scores may reflect the change in methodology more than actual changes to policy.

The **key findings** are:

- Serbia previously integrated the planning of its anti-corruption policy with its accession negotiations with the European Union (EU). However, the main strategic document, the Action Plan for Negotiations of Chapter 23,[1] has been lagging behind in its implementation. 33% of anti-corruption activities were not carried out as planned in 2022, and 24% were not fully implemented at the end of 2023. Serbia has been preparing a new national anti-corruption strategy (2024-28) and accompanying action plan, both pending adoption.
- The Law on Prevention of Corruption (LPC), in force since 2020, provides a basic framework regarding conflicts of interest for public officials. However, it has several gaps, including, among others, the exclusion of chiefs of political cabinets and government advisers; a vague exemption from the obligation to disclose a conflict of interest; and the absence of post-employment restrictions for public officials directly elected by citizens.
- The law establishes the liability of legal persons for all criminal offences, but the maximum fine of approximately EUR 42 500 is exceptionally low relative to the potential scale of large corruption transactions for certain corruption offences.
- While the number of convictions for high-level corruption increased in 2022, none of these cases resulted in a final confiscation of assets between 2020 and 2022. Overall, the available statistics and information about the prosecution and adjudication of high-level corruption remain very limited.
- There are signs pointing to resource constraints in anti-corruption bodies. The Agency for Prevention of Corruption (APC) is significantly understaffed, and the Prosecutor's Office for Organised Crime (POOC) operates with limited human resources, insufficient technical equipment, and insufficient premises.

State of play and key developments

The perceived level of corruption in Serbia has increased slightly since 2018. On a scale from -2.5 (worst) to +2.5 (best), Serbia's score in the World Bank's Control of Corruption indicator has slightly deteriorated from -0.40 in 2018 to -0.46 in 2022 (Table 7.2). Transparency International's Corruption Perceptions Index reflects a similar change. On a scale from 0 (highly corrupt) to 100 (very clean), Serbia's score decreased from 39 in 2018 to 36 in 2023, falling below the Western Balkan regional average and declining in its global ranking among the 180 countries and territories ranked.

Table 7.2. Serbia's perceived anti-corruption policy performance in 2018-23

	2018	2019	2020	2021	2022	2023
Control of Corruption Indicator						
SRB (percentile rank)	40.48	37.62	37.14	35.71	35.38	
SRB (score)	-0.40	-0.45	-0.45	-0.46	-0.46	
WB6 (score)	-0.41	-0.45	-0.44	-0.41	-0.38	
Corruption Perceptions Index						
SRB (rank)	87/180	91/180	94/180	96/180	101/180	104/180
SRB (score)	39	39	38	38	36	36
WB6 (score)	38.67	37.67	37.5	38.67	38.67	39.50

Notes: Percentile rank (0-100) indicates the rank of the economy among all economies in the world. (0 corresponds to the lowest rank, and 100 corresponds to the highest rank.)
Sources: World Bank (2023[1]); Transparency International (2023[2]).

According to the Balkan Barometer, most people in Serbia agree that the government fights corruption successfully. Although the share increased significantly in 2021 when it reached 55% (RCC, 2021[3]), compared to only 28% in 2020 (RCC, 2020[4]), the evidence of changes is inconclusive, as it consists of only a single data point without any follow-up data regarding the sustainability of the trend. Therefore, it is not possible to confirm that Serbia has reached a turning point in its efforts to combat corruption.

Sub-dimension 6.1: Anti-corruption policy and risk assessment

For several years Serbia integrated planning of its **anti-corruption policy framework** with accession negotiations with the European Union, but implementation has been moving slowly. The Action Plan for Negotiations of Chapter 23 is the most recent strategic document, originally adopted in 2016, revised in July 2020 and implemented until 2023. Based on the Action Plan, the government adopted in 2021 an additional planning document titled the Operational Plan for Prevention of Corruption in Areas of Particular Risk. The Agency for Prevention of Corruption (APC) has been monitoring the implementation of both the Operational Plan and the sub-chapter "Fight against corruption" under the Action Plan. In 2022, the APC published an impact assessment of strategic anti-corruption documents, including the National Anti-Corruption Strategy 2013-18 and accompanying Action Plans as well as the Action Plan for Chapter 23 (2016-20) and its sub-chapter "Fight against corruption", and found that these policies have failed to reach the desired effectiveness. For example, the public's trust in institutions' ability to safeguard public interests did not see an increase (APC, 2022[5]), and the implementation of the sub-chapter "Fight against corruption" has been lagging with only 61% of the 87 activities assessed by the APC being implemented in 2022 (APC, 2023[6]). Similar to the slow implementation of the Action Plan's anti-corruption sub-chapter, only three of the 15 measures set out in the Operational Plan have been implemented (APC, 2023[7]). According to the latest official report, the share of fully implemented anti-corruption activities of the Action Plan for Chapter 23 reached 76% (99 of 130) at the end of 2023 (Ministry of Justice, 2024[8]).

In 2023, Serbia started preparations for a new national anti-corruption strategy and action plan for 2023-28. The working group preparing the draft strategy comprises 41 members and includes representatives of public institutions as well as non-governmental organisations (NGOs). As of mid-December 2023, the government had published preparatory materials such as an assessment of sectors (healthcare, education, taxation, customs, the police, local self-government, public sector management, infrastructure and spatial planning, financing of political parties and lobbying, privatisation, public procurement, protection of whistleblowers, and competent authorities for the suppression of corruption) that will be covered by the planned strategy (Ministry of Justice, 2023[9]). However, in the absence of a published draft strategy, Serbia faces an interruption in the continuity of its anti-corruption policy framework. Several reports also highlight the lack of effective co-operation between the advisory Anti-Corruption Council and the government (European Commission, 2023[10]).

There is a generally high level of compliance among public bodies in Serbia regarding the development and renewal of integrity plans, including the implementation of **corruption risk assessments**. The Law on Prevention of Corruption (LPC) requires all public bodies to develop integrity plans and the APC's Manual for Creation and Implementation of an Integrity Plan outlines that such a plan should be based on a corruption risk assessment, including the determination of the level of risk, and the selection of prevention measures (APC, 2021[11]). The APC provides continuous support to public bodies regarding the preparation of integrity plans and has developed a digitalised system to monitor their adoption. In 2023, 99% of public institutions complied with the legal requirement to draw up integrity plans during the third cycle of the development, implementation, monitoring and evaluation of plans, which started in 2021 (APC, 2023[12]). However, a 2020 report by the APC, formerly known as the Anti-Corruption Agency (ACA), found that integrity plans were primarily prepared to comply with formal requirements, with authorities paying limited attention to the plans' actual content and meaning (ACA, 2020[13]). Despite this finding, there have been no further conclusions published by the APC on this matter, and independent evaluations of risk assessment practices remain absent.

The **corruption proofing of legislation** has a firm legal basis in the Law on Prevention of Corruption (LPC). The LPC envisages the anti-corruption assessment of legislation by granting the APC the authority to propose the adoption or changes of regulations and provide opinions on draft laws in areas particularly at risk of corruption or that regulate issues covered by international anti-corruption treaties. This means that potentially any law or bylaw can be subject to corruption proofing. The APC hosts the Unit for Analytics and Norms responsible for corruption proofing and has developed the Methodology for Corruption Risk Assessment in Regulations (APC, 2021[14]). However, the APC, in its 2022 annual report recognised the need to increase the number of employees working on assessing regulations (APC, 2023[12]). While the agency has also provided training to a limited number of other public bodies, corruption proofing remains mainly concentrated within the APC, with other central authorities having neither the obligations nor skills for such activities. In 2023, APC's competition for grant allocation to civil society projects focused on the analysis of risks in acts of local government. Prior to the LPC's adoption in 2020, the APC had already assessed regulations on a regular basis, although that was not yet part of its explicitly prescribed duty. In 2020, its activity dropped to 2 assessments, but regained traction with 15 opinions on proposals and draft regulations in 2021 and 19 opinions in 2022, before again decreasing to 8 opinions in 2023. As noted in the CO 2021 assessment, most of the APC's recommendations from the proofing remained unimplemented and there is no overview of the implementation of the recommendations available. However, the APC reported that the government in 2023 proposed to abolish a law on the (re-)construction of line infrastructure projects following a critical assessment by the APC, suggesting that corruption proofing of legislation can have some practical impact.

Sub-dimension 6.2: Prevention of corruption

The Agency for Prevention of Corruption (APC) is the main **corruption prevention body** and has multiple preventive and oversight competencies, but it lacks adequate resources to achieve its objectives in practice. Its competencies include, among others, supervising the implementation of strategic documents, making decisions regarding conflicts of interest, performing lobbying-related tasks, submitting criminal notifications, requesting the initiation of misdemeanours or proposing the initiation of disciplinary proceedings, and verifying reports on assets and income. The APC has several safeguards of independence, including transparent procedures for appointing the director and five members of the APC's council. The National Assembly (NA) appoints the director and members of the council from candidates who have achieved at least 80 out of 100 points in a public competition conducted by the Judicial Academy. In specifically defined cases, the NA also has the authority to dismiss the director before the expiry of his or her mandate (maximum two terms of five years). The director of the APC submits the agency's proposed budget to the Ministry of Finance and the law contains general guarantees of funding and financial independence: the APC has autonomous control over its funds, and the government may not suspend, delay, or limit the allocated funds without the director's consent. In practice, however, the budget of the APC has stagnated at around EUR 2.5 million per year between 2020 and 2023, and the agency is operating with a staff shortage. As of July 2023, the APC had 84 specialists and 18 administrative or technical staff members, significantly below the target capacity of 163 employees by the end of 2022 (APC, 2023[12]). While recent reports by international organisations do not specifically emphasise challenges related to the independence of the APC, concerns from domestic organisations have been raised about the political neutrality of the previous APC director (in office until 2023) and the handling of cases involving ruling party officials (Transparency Serbia, 2023[15]). Transparency Serbia also argues that the transparency of verification processes of the APC is insufficient given that decisions in cases of reprimand, misdemeanour reports and criminal charges, transferrals to the public prosecutor and final decisions of misdemeanour and criminal courts are not published.

The Law on Corruption Prevention (LPC) provides a basic framework for **conflict of interest** for public officials. Public officials are defined as any elected, appointed or nominated person in public authority. However, the LPC, including obligations to submit asset and income declarations, does not apply to the prime minister's or deputy prime ministers' chiefs of cabinet and government or special advisers (GRECO, 2022[16]), or persons appointed by ministers such as principals of schools. Moreover, employees of state-owned enterprises who are not officials are not subject to any conflict-of-interest regulations (Transparency Serbia, 2023[15]). The definition of conflict of interest comprises actual, potential, and apparent conflicts. A public official is required to notify their immediate superior and the APC about a conflict of interest and suspend proceedings if a conflict is suspected, unless there is a risk of delay. The latter is vaguely formulated, providing room for potential abuse of this exemption. Following notification, the APC issues an opinion and proposes measures to eliminate the conflict if one is identified. In addition, the APC may also initiate a procedure *ex officio* to decide whether a conflict of interest exists. The LPC sets principles and criteria for work performance and other activities outside the public office, and empowers the APC to assess these situations and provide binding opinions on a case-by-case basis. However, the LPC provides little guidance on how conflicts of interest shall be resolved, granting the APC considerable discretion. Experts have also criticised the exemption of public officials directly elected by citizens from post-employment restrictions (GRECO, 2022[16]).

The APC is responsible for addressing violations of the LPC and may issue a reprimand, publicly announce the violation, or publicly recommend the person's dismissal from public office. The APC imposed 54 such measures in 2020, 63 in 2021, and 55 in 2022 and 19 in 2023 regarding situations of conflict of interest or nepotism. In some of the cases, the APC also submitted requests to the competent bodies for the initiation of misdemeanour proceedings. Notably, no sanctions were imposed for breaches of post-employment rules in 2018-23, and there is no practice of invalidating decisions or contracts because of violations of conflict-of-interest regulations.

The Law on Corruption Prevention (LPC) also stipulates that public officials are subject to **asset and interest disclosure** upon the commencement and termination of public office, and when significant changes of assets or income have occurred. This provision also covers public officials' spouses or common-law partners as well as minor children if living in the same household. The APC verifies the accuracy and completeness of the declared data based on an annual verification plan or if the APC suspects a false declaration. It also has direct access to datasets kept by several authorities, but exchanges data with the Tax Administration and certain other state bodies in writing. The APC may also obtain data on the accounts of public officials from banks and other financial institutions. In 2023, the APC concluded a co-operation agreement with the National Bank of Serbia aimed at electronic exchange of data from the registers kept by the Bank. The scope of declarable data was increased in 2021, including cash savings and digital assets. However, the declaration does not explicitly cover beneficial ownership of entities or assets when not based on formal ownership. Moreover, the publicly available information does not provide a comprehensive picture of an official's economic situation. Broad categories of data are exempt from public disclosure, such as sources and amounts of income from non-public sources, amounts of savings or ownership of financial instruments. The system of measures and sanctions is similar to that in cases of conflict of interest, including reprimands, public announcements of violations, public recommendations for dismissal, and fines for misdemeanours. In addition, a public official who does not report assets and income or provides false information with the intention of concealing information shall be punished by imprisonment. Since 2019, the number of referrals to the competent prosecutor's offices based on suspicions that officials have not reported assets or have provided false information has been decreasing (Table 7.3).

Table 7.3. Criminal complaints filed with public prosecutor's offices in 2019-23

	2019	2020	2021	2022	2023
Number of referrals	25	13	7	6	11

Source: Based on data provided by Serbia's authorities in the context of the Competitiveness Outlook 2024 assessment.

The APC imposes large numbers of reprimands in relation to asset declaration, totalling 365 such actions in 2022 and 178 in 2023, in a sign of active enforcement. However, the usefulness of the system for detecting signs of inexplicable wealth is unclear, given the lack of data about the substance and outcomes of the cases referred to the public prosecutor's offices.

The legal framework for the **protection of whistleblowers** is comprehensive and extends to both the private and public sectors but falls short of fully meeting international good practice. The Law on Protection of Whistleblowers, adopted in 2014, contains multiple protection provisions for whistleblowers. It states that whistleblowing can be carried out by internal or external reporting or public disclosure. However, the conditions for protection in cases of public disclosure are narrow: essentially in cases of imminent danger, but not when there is a risk of retaliation, or there is a low prospect of the breach being effectively addressed as envisaged in the EU Directive 2019/1937 on the protection of persons who report breaches of European Union law. While the Law may not explicitly address the protection of anonymous whistleblowers in cases of reprisal, such protection likely extends to anonymous whistleblowers. The Regional Anti-Corruption Initiative (RAI), which supports the fight against corruption in Southeast Europe, found that several elements in the Law should be made clearer or amended to ensure full compliance with EU Directive 2019/1937 (RAI, 2021[17]). For example, it recommends removing the requirement for whistleblowers first to demonstrate "the probability" that a detrimental act against them constituted retaliation before the burden of proof shifts to the party accused of retaliation. The RAI's analysis also advocates the possibility of whistleblowers seeking protection through an administrative procedure and the court procedure. While whistleblowers are entitled to seek protection from the court, the current protection system falls short of fully providing all the support envisaged in the EU Directive 2019/1937; which includes effective assistance from competent authorities before any relevant authority involved in the protection against retaliation, financial assistance, and other measures such as psychological support. For instance, the Law on Free Legal Aid does not recognise whistleblowers as a special group; they are entitled to free legal aid only when they fulfil general conditions.

Serbia continues to have a high level of whistleblowing activity, although it is gradually decreasing. The number of whistleblower cases received in court has been falling but remains considerable (Table 7.4). At the end of 2022, 39 whistleblower protection cases were pending in courts where the proceedings had lasted three years (European Commission, 2023[10]), suggesting unreasonably long durations.

Table 7.4. Whistleblower cases received in court in 2018-21

	2018	2019	2020	2021
Number of referrals	122	152	117	99

Source: Ministry of Justice (2023[18]).

The government has continued to foster **anti-corruption public awareness and education**. In 2021, it launched a campaign under the motto “For functions without corruption”, which aimed to raise public awareness about the importance of fighting corruption. In addition, the APC has published several manuals and guides in 2021, including the Manual for Developing and Implementing the Integrity Plan, the Conflict-of-Interest Handbook, and the Model Guide for the Implementation of the Code of Conduct for Members of Parliament, as well as other forms of promotional materials such as video clips (APC, 2021[19]). The APC is also active in terms of both online and traditional training. For example, it has developed a distance training platform for “Ethics and Integrity” available for officials and employees in public authorities, with over 40 000 participants in 2021 and over 100 000 in 2022. Moreover, between 2021 and 2023, the APC held several training sessions on the LPC and the Law on Financing of Political Activities, as well as on monitoring of anticorruption strategic documents addressing not only public officials but also representatives from civil society organisations, the media and political entities. Since its establishment, the APC has conducted 15 public competitions based on which 30 civil society projects were financed from the state budget. On the other hand, there was no targeted financing in support of awareness-raising and education activities, and the effectiveness of measures that promote anti-corruption public awareness and education is not evaluated.

Sub-dimension 6.3: Business integrity and corporate liability

Serbia’s Law on Companies does not specifically address **business integrity** or management of corruption risks in companies. However, it sets out general principles of oversight such as the duties of the board to perform internal supervision over the company's operations and establish risk management policies. The Chamber of Commerce and Industry has adopted the Code of Business Ethics (2006), the Corporate Governance Code (2012), and the Code of Business Ethics of the Professional Management Organisers (2018) to promote integrity practices among its members. In particular, the Corporate Governance Code recommends that the company board develop and implement a code of ethics and an integrity plan, which should contain measures to prevent and eliminate the possibility of corruption. However, no data on the implementation or impact of these documents is available. Apart from the APC, Serbia also lacks a designated institution, such as a business ombudsman, responsible for receiving complaints from companies about corruption-related matters.

According to the Law on the Central Records of Beneficial Owners adopted in 2018, the Agency for Business Registers (ABR) publishes information on beneficial owners of legal entities on its website free of charge and in a searchable form (Serbian Business Registers Agency, 2024[20]). The definition of a beneficial owner reflects the definition in the EU anti-money laundering directives. The ABR checks whether the entity has recorded the beneficial ownership data within the stipulated time while other competent state authorities check, among other things, whether the entity has recorded accurate data. The Law envisages criminal liability as well as fines for legal entities and their responsible persons in cases of non-compliance. In 2022, the ABR filed 2 121 requests to initiate misdemeanour proceedings, and misdemeanour courts made 1 904 decisions (ABR, 2023[21]). At least in quantitative terms, the enforcement is demonstrating a comparatively good track record.

Serbia has established the **liability of legal persons** for all criminal corruption offences in law with no major developments since the CO 2021 assessment. According to the Law on Liability of Legal Persons for Criminal Matters adopted in 2008, a legal person shall be held accountable for criminal offences that have been committed for the benefit of the legal person by a responsible individual within the scope of his/her authority. Moreover, a lack of supervision by the management can also trigger corporate liability. The liability of legal persons is autonomous, i.e. a legal person shall be liable even though criminal proceedings against the responsible individual have been suspended or the indictment has been rejected. If, due to certain reasons, it is not possible to initiate or conduct criminal proceedings against the responsible individual, the proceedings may be initiated and conducted only against the legal entity.

The law envisages both fines and the termination of the legal entity as penalties, as well as other possible legal consequences such as a ban on participation in public procurement. For legal entities, the level of fines is determined based on the maximum number of years that an individual would receive. The upper limit of fines for corruption offences such as active bribery, which carries the maximum prison sentence of up to five years (Article 368 of the Criminal Code), is approximately EUR 42 500, which is extremely low relative to the potential scale of large corruption transactions. Courts may impose a suspended sentence, taking into account, among other things, measures taken by the legal entity to prevent and detect the crime and measures taken against the responsible individual after the crime. Thus, while the law does not explicitly envisage due diligence or compliance as a defence or a mitigating circumstance, taking such preventive measures may serve as a basis for suspended sentencing. No evaluation of the legal framework for corporate liability has been carried out, leaving a gap in understanding its impact and effectiveness in combating corruption offences.

Sub-dimension 6.4: Investigation and prosecution

While there has been a rise in convictions in 2022 resulting from the **investigation and prosecution of high-level corruption**, none of these cases resulted in a final confiscation of assets between 2020 and 2022 (European Commission, 2023[10]). According to the Law on Organisation and Competences of State Bodies in the Suppression of Organised Crime, Terrorism and Corruption, which was adopted in 2016, the Prosecutor's Office for Organised Crime (POOC) and the Section for Combating High-Level Corruption (SCHLC) within the Criminal Police Directorate's Service for Combating Organised Crime (SCOC) are competent to investigate and prosecute high-level corruption offences. The law defines the anti-corruption competency of these bodies as fighting the abuse of official authority, trading in influence, and passive and active bribery involving officials performing a public function based on election, nomination or appointment by the National Assembly, the president of the Republic, the government, the general session of the Supreme Court, the High Council of the Judiciary or the High Council of Public Prosecution. Overall, statistical data on the repression of high-level corruption remains very limited. Based on indictments from the POOC, Serbian courts rendered first-instance judgements in relation to high-level corruption against 26 individuals in 2022 (Table 7.5). Final convictions were delivered regarding 11 individuals in 2020, 19 in 2021, and 21 in 2022.

Table 7.5. Serbia's first-instance judgements in relation to high-level corruption in 2017-22

	2017	2018	2019	2020	2021	2022
Number of first-instance judgements	50	41	30	22	99	26

Sources: Based on data provided by Serbia's authorities in the context of the Competitiveness Outlook 2024 assessment and European Commission (2020[22]).

Serbia has two **specialised anti-corruption investigative bodies**, but information on their resources and performance records remains scarce. According to the law, the Ministry of Interior (MoI) comprises two police units, one responsible for combating organised crime (the Service for Combating Organised Crime/SCOC) and one for combating corruption (the Department for Combating Corruption). The latter is competent for fighting corruption-related offences other than those involving high-level officials. Both units can apply special investigation measures based on court orders. The SCOC acts upon requests of the POOC's Chief Public Prosecutor. The Minister of Interior appoints and dismisses the head of the SCOC with an opinion obtained from the chief prosecutor. Otherwise, the police units generally do not have special guarantees of independence, which causes a risk of undue interference. The general procedures and conditions of the MoI apply to the selection, appointment, and dismissal of officers and the determination of the budget and salaries. The units submit regular reports to superior officials, which are not published.

There are several **specialised anti-corruption prosecutorial and judicial bodies** in Serbia. The relevant prosecutorial body is the POOC, which co-ordinates the work of special anti-corruption departments within four higher public prosecutor's offices. The law is rather general regarding criteria for the POOC's public prosecutors. Namely, when proposing or selecting prosecutors, priority is given to those who possess the necessary professional knowledge and experience in the field of fighting against organised crime and corruption. The State Prosecutorial Council (SPC) holds a competition for the post and submits a list of suitable candidates to the government, which in turn submits a proposal to the National Assembly (NA). The NA appoints the Prosecutor for Organised Crime for a term of six years. The chief public prosecutor of the respective higher public prosecutor's office appoints the head of the special anti-corruption department who has no fixed term. Thus, the law provides stronger safeguards of independence and transparency for the POOC than for the anti-corruption departments.

The capacity of the specialised prosecutorial bodies has increased slightly. In 2021, the number of public prosecutors in the POOC rose to 23 from 21 in the period 2018-20. The budget of the POOC has also been increasing, from around EUR 2.6 million in 2020 to around EUR 3.8 million in 2023. As of 2023, 48 anti-corruption prosecutors worked in the special departments, rising from 45 in 2020. Nevertheless, external assessments deem that the POOC operates with limited human resources, insufficient technical equipment to carry out special investigative measures, and insufficient premises. The co-ordinating role of the POOC *vis-à-vis* the special anti-corruption departments is arguably inadequately regulated, and it is insufficiently accountable to the public (European Commission, 2023[10]).

Serbia also has specialisation of courts for organised crime and corruption cases. Special departments for organised crime operate in the High Court and in the Court of Appeals in Belgrade, and special anti-corruption departments in High Courts in Belgrade and three other cities.

Overview of implementation of Competitiveness Outlook 2021 recommendations

Serbia's progress in implementing past *Competitiveness Outlook 2021* Recommendations has been limited (Table 7.6). Notably, there have been no significant developments in several areas, including whistleblower protection, corporate liability for corruption offences, and monitoring the effectiveness of the investigation and prosecution of high-level corruption. An amendment of the legislation and extended options to verify reports on property and income represent the area of strongest improvement.

Table 7.6. Serbia's progress on past recommendations for anti-corruption policy

Competitiveness Outlook 2021 recommendations	Progress status	Level of progress
Create a mechanism to involve civil society in the monitoring of the implementation of the Action Plan for Chapter 23 negotiations	No mechanism was established to systematically involve civil society in monitoring activities. However, the negotiating group for Chapter 23 organises annual meetings with civil society in the context of the National Convention on EU in Serbia. The Agency for Prevention of Corruption (APC) also held a funding competition to support monitoring by the media and NGOs.	Limited
Ensure that reports on property and income of public officials and the data subject to public disclosure are comprehensive, reflecting their full economic position	The scope of declarable data has been increased, and the APC's access to information has improved. Nevertheless, the data available for public disclosure are still subject to excessive exemptions.	Moderate
Monitor the protection of whistleblowers to identify and mitigate practical obstacles that they face	The Law on Protection of Whistleblowers has not been amended. No efforts were reported to identify and mitigate practical obstacles for whistleblowers.	None
Strengthen corporate liability for corruption offences by significantly increasing the maximum applicable fines	Relevant legal amendments have not been made.	None
Monitor the effectiveness of the investigation and prosecution of high-level corruption by collecting, analysing, and publishing data on, among other things, official position at the time of offence, indictments, final convictions, sentences, and recovered proceeds of corruption	The statistical data collected and provided in the context of this assessment do not reflect the effectiveness of the investigation and prosecution of high-level corruption.	None

The way forward for anti-corruption policy

Considering the limited implementation of the previous recommendations, Serbia should further strengthen its anti-corruption framework and practice by continuing efforts to follow the policy advice of the CO 2021. These policy recommendations, adapted as appropriate in the context of recent developments, are as follows:

- **Incentivise public bodies to improve the overall level of implementation of national anti-corruption policy documents**. Serbia should try to improve the implementation levels of the forthcoming national anti-corruption strategy and action plan. The effective suppression of corruption requires more than the successful functioning of strategic laws and institutions; it requires comprehensive efforts throughout the whole public sector. Additional incentives for public bodies could include publishing data on the implementation progress of each entity in an easily accessible and visualised manner; integrating the progress of anti-corruption actions into the key performance indicators and performance evaluations of managers within public bodies; and introducing a legal guarantee that all planned anti-corruption actions are secured with adequate state funding.
- **Eliminate remaining legal gaps and ambiguities of the Law on Prevention of Corruption (LPC).** In particular, the LPC's application should be extended to include chiefs of cabinets of the top executive leadership and government advisers. The vague exemption ("when a risk of delay exists") from the obligation to provide a notification about a conflict of interest should be re-evaluated, and methods for resolving conflicts of interest should be clarified in the law. Post-employment restrictions should apply to public officials who are directly elected by citizens, and finally, a practice should be introduced to invalidate decisions or contracts made in situations of conflict of interest whenever possible. In eliminating these ambiguities, Serbia's authorities can consult the *OECD Guidelines for Managing Conflict of Interest in the Public Service,* which provides advice on regulating conflicts of

interest by, for example, outlining strategies for the resolution or management of a conflict of interest (OECD, 2022[23]).

- **Monitor the protection of whistleblowers to identify and mitigate any practical obstacles to whistleblowing**. So far, monitoring of the implementation of the Law on Protection of Whistleblowers has primarily focused on quantitative aspects. However, conducting a more in-depth assessment of the challenges faced by whistleblowers would help develop measures to create a supportive environment for whistleblowing. The relevant EU Directive 2019/1937 sets out mandatory as well as optional support measures for whistleblowers, such as providing legal aid and counselling on procedures and available remedies, including on protection against retaliation, and on whistleblowers' rights. As already noted in CO 2021, Serbia has taken some actions in these areas, but its efforts need to be maintained and strengthened. Elements of France's guide for whistleblowers could offer some useful inspiration for establishing a more conducive environment for whistleblowing in Serbia (Box 7.1). Serbia should also widen recognised grounds for public disclosure by whistleblowers.

Box 7.1. Guide for Whistleblowers in France

The Defender of Rights, an independent institution to protect citizens' rights in France, published a guide for whistleblowers in 2023. The guide explains in detail different legal and practical modalities associated with whistleblowing in France, for example regarding:

- the possibility to approach an external authority regardless of the whistleblower's situation
- the list of authorities that can accept referrals from whistleblowers
- the requirement for external authorities to provide whistleblowers with online access to the relevant rules of procedure and guidelines for reporting (including, for instance, the authority's jurisdiction, details on whom to submit reports to, what information needs to be provided, precautions to consider, the process for handling reports, and a list of guarantees such as sharing written updates with whistleblowers regarding the assessment of their allegations and response times)
- steps to take after submitting the report, for example, the possibility to consider publicly disclosing the report if whistleblowers have not received a response within the specified timeframe or if they are dissatisfied with the response provided
- the definition of an act of retaliation and the process of establishing relevant facts before a judge
- exemptions from civil liability, such as for harm caused to individuals implicated by the whistleblower report, and limitations on criminal liability, such as when disclosing a secret protected by law
- the option to request financial support from the judge during the procedure (such as funding for trial-related expenses) or, in cases where the whistleblower's financial situation has significantly deteriorated, seeking payment from the judge to cover their needs
- the option for external authorities to offer temporary psychological and financial support to the whistleblower.

Source: Defenseur des Droits (2023[24]).

- **Strengthen corporate liability for corruption offences by significantly increasing the maximum applicable fines**. Monetary sanctions should be sufficiently severe to affect large corporations that may engage in corrupt acts, which would yield millions of euros in profits if accomplished undetected. In certain economies, the OECD Working Group on Bribery in International Business Transactions found statutory ceilings of sanctions even up to a few million euros to be insufficient. While such high levels of fines may not appear relevant for an average company, the law should provide the option of applying adequate sanctions in the event of a large business player engaging in corruption. The Working Group has encouraged setting maximum fines as a share of a company's turnover (OECD, 2022[25]). Serbia should also compile and publish statistics that would allow for assessing the effectiveness of the corporate liability framework.

- **Monitor the effectiveness of the investigation and prosecution of high-level corruption by collecting, analysing, and publishing data on, among other things, official positions at the time of the offence, indictments, final convictions, sentences, and recovered proceeds of corruption**. Comprehensive and detailed record keeping of investigations, prosecutions and convictions – along with the collection and analysis of relevant statistical indicators and the systematic review of case law – are essential for a fair assessment of obstacles to combat high-level corruption effectively. This also includes addressing challenges related to undue influences on investigative and prosecutorial processes.
- **Strengthen the financial and human capacity of anti-corruption bodies**, **particularly the Agency for Prevention of Corruption (APC) and Prosecutor's Office for Organised Crimes (POOC)**. The lack of human resources at the APC is evident, and international evaluations also highlight the insufficient capacity of the POOC (European Commission, 2023[10]). Providing the necessary material resources and specialised staff to anti-corruption agencies is a key requirement in international standards, such as the United Nations Convention against Corruption (Articles 6 and 36).[2]

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Notes

[1] The chapter of the European Union *acquis* on judiciary and fundamental rights.

[2] Articles 6 and 36 of the United Nations Convention against Corruption can be accessed here: https://www.unodc.org/documents/brussels/UN_Convention_Against_Corruption.pdf.

8 Education policy

A robust education policy framework is essential for developing human capital and meeting the labour market's need for a skilled and productive labour force. This chapter, composed of four sub-dimensions, assesses the presence and efficacy of education strategies, legislation, programmes and institutions. The first sub-dimension, equitable education for an inclusive society, examines system governance and the quality of pre-university education starting from preschool. The second, teachers, looks at the selection, initial training and ongoing professional development and management of the teaching workforce. The third sub-dimension, school-to-work transition, focuses on VET governance and the labour market relevance and outcomes of higher education. The fourth sub-dimension, skills for green-digital transition, explores the frameworks and initiatives for fostering green and digital skills in education curricula.

Key findings

Serbia's overall score for education policy is slightly higher than the WB6 average (Table 8.1). While there was a small decline in the education policy score since 2021, this is primarily attributed to low performance in the developing area of skills for the green-digital transition, which was evaluated for the first time in this assessment cycle. In other areas, Serbia has witnessed some progress in strengthening system governance, supporting teachers, and improving the labour market relevance and outcomes of education.

Table 8.1. Serbia's scores for education policy

Dimension	Sub-dimension	2018 score	2021 score	2024 score	2024 WB6 average
Education	7.1: Equitable education for an inclusive society			3.7	3.3
	7.2: Teachers			3.5	3.1
	7.3: School-to-work transition			3.3	3.4
	7.4: Skills for the green-digital transition			1.8	2.0
Serbia's overall score		**2.5**	**3.2**	**3.1**	**3.0**

The **key findings** are:

- Serbia's performance in Programme for International Student Assessment (PISA) 2022 was the highest in the region, and it was the only economy in the WB6 to experience an increase in performance.
- The economy has made significant strides in developing a comprehensive education strategy, aligning with international standards and fostering public participation. Moreover, in the past year, statistical and analytical reports have improved the monitoring of the teaching process and the adoption of education policies. However, challenges persist in strengthening the Education Management Information System (EMIS) and implementing a national assessment framework to monitor student learning outcomes effectively.
- Serbia has taken positive steps in standardising competency standards and professional development programmes for teachers. However, challenges remain in formalising accreditation systems and implementing comprehensive evaluation mechanisms.
- School-to-work transition in Serbia has improved. Employment rates of recent graduates have increased to 72.2% in 2022, one of the highest in the region. In addition, Serbia's NEET rate (not in education, employment or training, age 15-24 years) is the lowest in the region (13% in 2022).
- Strong legislative and strategic frameworks have been established to improve vocational education and align with labour market needs. However, efforts are needed to streamline accreditation procedures and enhance data collection mechanisms.
- Digital skills development in Serbia benefits from robust monitoring (through domestic research studies and through participation in the International Computer and Information Literacy Study) and extensive efforts to improve digital infrastructure, such as through the "Connected Schools" initiative. However, while the policy framework guiding digital skills has advanced, the integration of skills for the green transition into education policies requires further attention to adequately prepare for this twin transition.

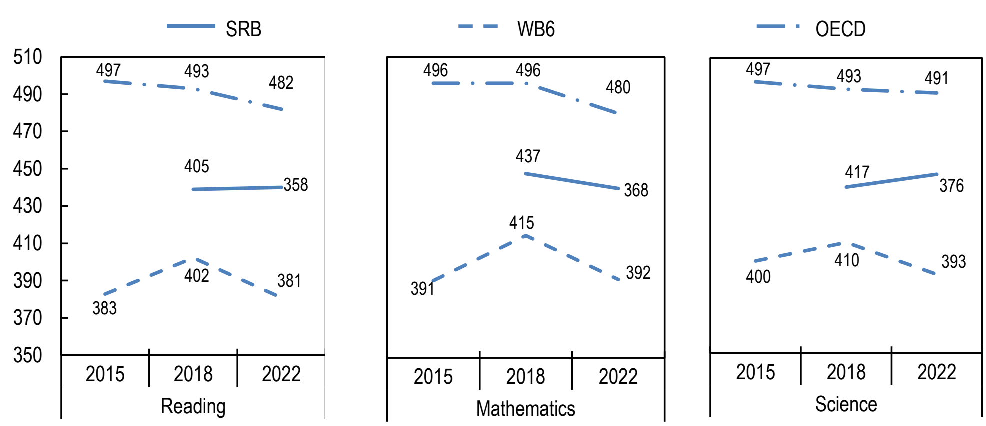
State of play and key developments

Serbia's net enrolment rates across all levels of education have been experiencing a downward trend over the past few years. For instance, in primary education, the net enrolment rate has dramatically fallen, from 98.2% in 2019 to 88.6% in 2022 – with the biggest year-to-year change observed between 2021 and 2022 (a 7.7 percentage point decrease). The decline in net enrolment rates in both lower and upper secondary education has been less significant. Lower secondary education enrolment rates fell by 3.3 percentage points (from 98.7% to 95.4%), while upper secondary education enrolment rates decreased by 3.4 percentage points (from 87.2% to 83.8%) between 2019 and 2022. With respect to the latter, this is much lower than the EU and OECD averages, both of which were 93% (UIS, 2023[1]).

In the 2022 PISA, Serbia scored the highest of all the WB6 economies, although its average scores remain slightly behind the EU and OECD averages (Figure 8.1). Compared to 2018, its performance improved in reading and science by one and seven points, respectively. As such, Serbia stands out as the only economy in the Western Balkans to experience an increase in performance, an accomplishment that is also contrary to the general trend of decline among most OECD countries. However, the average math score dropped by eight points, leading the average PISA score to be about the same as the 2018 assessment results. Moreover, the percentage of low performers (for all three subjects) was 43%, which was the lowest in the region – but notably higher than the OECD average of 25% (Schleicher, 2023[2]). However, 60% of low performers are part of the bottom quarter of ESCS (PISA index of economic, social and cultural status), highlighting the challenges that socio-economically disadvantaged students continue to face in Serbia.

Figure 8.1. Trends in PISA performance in reading, mathematics and science in Serbia (2015-22)

Scores are expressed in points



Note: WB6 average excludes Bosnia and Herzegovina for PISA 2015 and PISA 2022 and excludes Serbia for PISA 2015.
Source:
Source: OECD (2023[3]).

Sub-dimension 7.1: Equitable education for an inclusive society

Serbia has improved its **system governance**, whose features partially align with EU and OECD education systems. The National Qualifications Frameworks of Serbia (NQFS) – which outlines learning outcomes achieved through formal education programmes as well as non-formal and informal learning – has been referenced to the European Qualifications Framework (EQF) since early 2020.[1] In 2021, Serbia adopted a new long-term strategy, the Strategy for Education Development 2030 (SED 2030). The strategy has a clear vision, budget (mostly government funded) and timeline, and was developed in public consultations with a range of stakeholders. SED 2030 is supported by clear Action Plans, the most recent covering the 2023-26 period. Following the national indicator framework, Serbia produces annual progress reports on the Action Plan. By the end of the previous education strategy, Serbia also conducted an ex post evaluation.

While there is an Education Management Information System (EMIS), which gathers in one open data portal all information on institutions, school staff and students within Serbia's education system, its functionality is limited. The system is not yet interoperable with other national databases to allow monitoring of different aspects of the student population, including underprivileged students (ETF, 2022[4]).[2] However, there are ongoing efforts to integrate the EMIS with other systems, such as e-Vrtić or the Fund for Young Talents. The latest Action Plan has laid out measures to improve the EMIS. The scope of data that are systematised and publicly available is constantly increasing on the open data portal. Serbia monitors a range of indicators defined in the education strategy, including information on student learning outcomes available from international assessments and national exams. However, there is no national assessment to help monitor student learning outcomes in line with national curriculum goals, and no comprehensive report on the education system.

Strong legislative and strategic frameworks are in place to help improve the **early childhood education and care** (ECEC) sector. Namely, it is addressed in the SED 2030, the Law on Pre-School Upbringing and Education and Law on the Foundations of Education System. However, Serbia's education strategy does not always explicitly address equity or the quality of ECEC, but rather pre-university education more generally. Serbia's Pre-school Curriculum Framework promotes continuity in education and developing key competencies for lifelong learning. There are clear minimum education requirements for ECEC staff set out in the Law on Pre-School Upbringing and Education and rulebooks that set out professional competencies for staff and professional development. There is an obligation to regularly attend trainings (at least one seminar per year), monitored by the Institute for Education Improvement and the Ministry of Education (MoE). A comprehensive project financed by the World Bank intends to support improvement of quality, equity and access in ECEC in Serbia until March 2024. One of the priorities of the project is to enhance the quality of the preschool system through a holistic approach in supporting the learning, development and well-being of children. While these types of projects are beneficial, they highlight the issue that funding for the ECEC sector remains largely project-based and donor-funded.

The quality evaluation framework and assessment procedures of the work of preschool institutions define 4 areas in which the quality of work is assessed, in 15 standards and 64 indicators. The MoE prepares regular annual reports on monitoring and evaluation of activities in the Action Plan for the Implementation of the SED 2030, and information about the sector is collected through external evaluators of the ministry (pedagogical advisors) and ad hoc ECEC projects. However, there is a lack of data on staff qualification levels and child-staff ratios, which makes it difficult to inform ECEC staff policies.

In its education strategy, Serbia outlines ambitious objectives to enhance the **quality of instruction for all** while reinforcing the institutional capacities of schools and universities. Serbia has a competence-based curriculum and grade-specific learning standards in place, further aligning education with international best practices. These standards not only facilitate teacher understanding of student learning levels but also inform assessment and lesson-planning processes. The Institute for Education Quality and Evaluation (IEQE), serving as Serbia's Exam Centre, administers central examinations at the culmination of lower secondary education (Grade 8); these national examinations, contingent on satisfactory performance, grant entrance to upper secondary school. In addition, Serbia plans to replace the graduation exam – which is currently taken by all students at the end of upper secondary education (both general and vocational) – with a State Matura. However, the introduction has been postponed for the 2025/26 school year (European

Commission, 2023[5]). Serbia's active participation in international assessments such as PISA, TIMSS (Trends in International Mathematics and Science Study), PIRLS (Progress in International Reading Literacy Study), and ICILS (International Computer and Information Literacy Study) generates invaluable insights into student learning outcomes and informs policy decisions. Meanwhile, Serbia's progress in improving education quality is reflected in its comprehensive school quality framework, robust school evaluation systems and ongoing support provided by the IEQE.

Serbia has strong systems and targeted policies in place to help reduce early school leaving and has among the lowest rates of early school leaving in the region (5.0% versus 9.6% among the EU-27 in 2022) (Eurostat, 2023[6]). Prevention of dropping out of education is recognised as one of the priority areas of the education system of Serbia. Schools apply an early identification and response system to prevent dropout. This system is defined by a protocol designed at the local level that connects the school with the Centre for Social Work, interdepartmental commissions, health centres, misdemeanour judges, local governments and other relevant mechanisms and partners at the local level (Roma co-ordinators, pedagogical assistants, health mediators). However, challenges remain in terms of local self-government resources, especially in rural areas where there is insufficient capacity to answer to different needs of children and parents.

Sub-dimension 7.2: Teachers

Serbia has some elements of an effective system for **initial teacher education (ITE),** but implementing changes to programme-specific accreditation criteria and ITE entry requirements are areas for further improvement. ITE programmes undergo an accreditation process every seven years, like other tertiary programmes. Hence, there are no specific quality standards for ITE. The National Entity for Accreditation and Quality Assurance in Higher Education (NEAQA) evaluates accreditation applications based on self-evaluation and external quality reports. Nevertheless, these ITE programmes lack comprehensive evaluation, and data to monitor ITE and evaluate the quality of programmes are insufficient.

The SED 2030 includes key objectives and targets for improving teacher selection and ITE. As part of the Action Plan 2023-26, the MoE has introduced a scholarship scheme aiming to attract students to teaching, particularly in fields facing shortages such as mathematics and physics. There are no uniform minimum requirements for entering ITE; it is up to the institutions to specify them. Most commonly, students are ranked following an obligatory and exclusive entrance exam, and their school grade point average (GPA) is considered. Prospective teachers must obtain a master's degree and pass a certification exam after a one-year probation period. Mentorship is mandatory, and professional development programmes are available.

Since 2021, Serbia has made several advances to bolster the continuous **professional development of teachers**. These recent changes include the creation and publication of competency standards for the professional (expert) associates in preschool institutions and their professional development; the publication of the new Catalogue of Programmes of Continuous Professional Development of Teachers, Preschool Teachers and Professional Associates; and the creation of competency standards for the secretaries in schools and preschool institutions.

Serbia has a clear career structure for teachers. There are four titles of teachers and professional associates: pedagogical advisor, independent pedagogical advisor, senior pedagogical advisor, and higher pedagogical advisor. Professional teacher standards are used to guide professional development, self-evaluations and design of ITE programmes, and for promotion requests. Despite longstanding plans to develop a new pay grade system to align financial incentives with career advancement, it has not been implemented yet. Salary increases are based only on years of experience. Funding for professional development is decentralised, with municipalities distributing resources based on school plans. Serbia does not mandate recertification for teachers. While there is no formal accreditation system for professional development, the Institute for the Improvement of Education evaluates programmes. Donors support large national training activities, although the government has available resources for the provision of professional development. A range of data is collected to monitor the effectiveness of professional development programmes.

Sub-dimension 7.3: School-to-work transition

Serbia is doing better than most WB6 economies regarding school-to-work transition. Employment rates of recent graduates have increased by almost 8 percentage points in the past five years to 72.2% in 2022, one of the highest in the region. In addition, Serbia's NEET rate (age 15-24 years) is the lowest in the region (13% in 2022), showing a decrease of 3.5 percentage points from 2018 (Vienna Institute for International Economic Studies, 2023[7]). While the gap with the EU averages has been narrowing, the rates continue to remain slightly behind the 82.4% employment rate of recent graduates, and 9.6% NEET rate (Eurostat, 2023[8]).

VET (vocational education and training) governance has shown significant improvements, but there is still room for further progress in reducing disparities in learning outcomes between VET and general education students. The participation rate in technical and vocational programmes in Serbia has remained relatively stable at 24% of 15–24-year-olds from 2018 to 2022 (UIS, 2023[1]). However, data from PISA 2022 find that students enrolled in VET programmes in Serbia have lower mean performance in mathematics than those in general programmes by 75 points. This difference is the highest of the WB6 economies, and higher than the OECD average score difference of 59 (OECD, 2023[9]).

The MoE plays a pivotal role in ensuring policy coherence across the education system, collaborating closely with the Office for Dual Education and the National Qualifications Framework (ODENQF), established in November 2022. The ODENQF deals with dual education, the National Qualifications Framework and career guidance and counselling at all levels of education. Serbia maintains clear quality standards and regulations for VET programmes, with the new Action Plan 2023-26 emphasising improvements in dual education. Stakeholder engagement through Sector Councils facilitates dialogue and co-operation between the labour and education sectors, informing qualification demand. There are some semi-regular surveys by statistical and employment agencies which provide data on education and skills, although issues such as problematic question formulations and unweighted results have limited their efficacy. The Law on Dual Education outlines the work-based learning (WBL) framework, with all dual VET programmes incorporating WBL components. In 2023, amendments to the law were adopted, streamlining employer accreditation procedures, and strengthening support for apprenticeships and other WBL opportunities.

While the new education strategy aims to comprehensively address **quality assurance in higher education (HE)**, challenges remain in aligning accreditation standards with the National Qualifications Framework (NQF). There are growing efforts to engage social partners, promote internationalisation, and co-ordinate government actions to enhance the relevance and quality of Serbia's higher education sector. The new education strategy places greater emphasis on quality assurance in HE, targeting improved supply, human resources, outcomes, enhanced relevance at the national and international levels, and increased coverage and equity. As a full member of the EU Erasmus+ programme, Serbia actively promotes internationalisation in its higher education sector. Quality assurance and accreditation processes, aligned with the NQF, are overseen by the National Entity for Accreditation and Quality Assurance in Higher Education (NEAQA). While efforts are under way to align accreditation standards with NQFS descriptors and include National Qualifications Framework of Serbia (NQFS) and European Qualifications Framework (EQF) levels in diplomas, these initiatives are in the planning stage. Co-ordinating across government bodies and stakeholders, including the MoE, the National Council for Higher Education and NEAQA, ensures comprehensive oversight of the HE sector. Amendments to the Serbian Law on Higher Education in 2021 have incorporated labour market representatives into NEAQA's organs, fostering alignment with employment needs.

Data collected from various sources, including the Ministry of Labour, Employment, Veteran and Social Affairs (MoLEVSA), the Chamber of Commerce and Industry of Serbia, and the Statistical Office, informs employer surveys and labour market outcomes. However, data on skills mismatches are not reliable and irregular. While publicly available data on employment trends are accessible, detailed labour market outcome data for HE institutions and programmes are pending release on the open data portal.

Sub-dimension 7.4: Skills for the green-digital transition

There is a policy framework in place for the development of basic **digital skills** in the primary and secondary education system and legislation has been adopted and aligned to international standards. The education strategy aims to establish the foundations for the development of digital education at the pre-university level (Box 8.1). The implementation of this framework is guided by the Action Plan 2023-26 for the Strategy for Education Development until 2030, with progress measured through monitoring outputs and assessing them against target benchmarks and indicators.

Box 8.1. Digital skills development in Serbia

Digital World

Digital World has been a mandatory school subject in Grades 1 to 3 since the 2021/21 school year, targeting pupils aged 7-10. As stated in the curriculum, the overall goal of this subject is to develop students' digital competencies that enable them to use digital devices safely and correctly for learning, communication, co-operation, and the development of algorithmic thinking. The subject has 36 school hours per year and is structured around three teaching areas: digital society, safe use of digital devices, and computational thinking. Digital World curricula for Grade 4 are being developed. A working group consisting of various experts in computer science, education psychology, curricula development and pedagogy has been established to discuss, design, and propose the new curricula.

Computer science

Computer Science has been a mandatory school subject, with 1 teaching hour per week, from Grades 5 to 8 since the 2017/18 school year. As stated in the curriculum, the overall aim of the subject is to enable students to manage information, safely communicate in the digital environment, and be able to create digital content and effectively use computer programmes.

In all four grades, the subject is structured around three teaching areas: (basic) information, communication and technology (ICT) skills, information literacy, and computational thinking. Within the field of computer science, an important innovation is the development of programming skills. In Grade 5 students learn visual programming languages, while from Grade 6 students learn textual programming languages (e.g., Python).

Serbia developed its educational standards fifteen years ago for 10 subjects in compulsory education,[1] and digital literacy was not among them. Hence, work is currently under way to adopt and promote recently defined digital literacy general subject competence and quality standards for the end of compulsory education.

Computer Science is also a mandatory subject in secondary education for students aged 15-19, to continue deepening the knowledge developed in previous years. The number of years (1-4) and teaching hours per week (1-3) vary based on whether it is taught in general or vocational secondary education.

1. It is important to note that Serbian compulsory education has a single structure that includes both primary and lower secondary education levels, which corresponds to levels 1 and 2 of the International Standard Classification of Education (ISCED).
Source: Information provided by the MoE as part of the Competitiveness Outlook 2024 assessment framework.

Several initiatives aiming to improve schools' connectivity have been implemented in the past few years. One example was the "Bridging the Digital Divide in Serbia for the Most Vulnerable Children" project, which was jointly implemented by the MoE and UNICEF from November 2020 to September 2023. By the conclusion of this programme, 30 primary schools benefited from the provision of new tablets and laptops, while more than 900 teachers received training to strengthen their digital and pedagogical competencies (UNICEF, 2023[10]). Another prominent programme has been the European Investment Bank's "Connected Schools" project, which aimed to provide equal opportunities and empower young people with digital skills through installing high-speed Internet connections at 3 800 schools, providing modern computer equipment, and training both students and teachers on digital skills (Kovacevic, 2024[11]). Yet, most of these programmes have not been matched with any regular or consistent monitoring of key indicators related to digital skills.

Stakeholders from the private sector and academia regularly contribute to curricula development. The ICT sector industry is represented in meetings for digital skills development. The development of digital skills among teachers in Serbia is addressed as a transversal key competence. Empowering teachers to become confident and skilled in using digital technology to support learning in an online environment is supported through an official Digital Competence Framework for Teachers – Teacher in Digital Age (revised in 2023), an Instrument for Self-Reflection (available on line), various in-service teacher training programmes, and open educational resources.

There is no separate framework within the MoE for the agenda of the development of **skills for the green transition**, yet a number of initiatives aim to increase students' awareness of preparing for the green transition. The Law on Foundations of the Education System generally formulates the formal expectations regarding the promotion of knowledge, skills and attitudes needed for a greener and more sustainable economy. One of the defined educational outcomes is to "effectively and critically use scientific and technological knowledge, while showing responsibility towards one's life, the life of others and the environment". Cross-curriculum competences include a responsible attitude towards the environment. There are elective programmes related to this theme that are part of the teaching and learning plan, such as Life skills, My environment, Let's save our planet, Nature keepers in primary school, and Education for sustainable development in high school. While the existing framework serves as a basis for integrating skills for the green transition into education, further efforts will be needed to adequately prepare for the challenges associated with the green transition.

Overview of implementation of Competitiveness Outlook 2021 recommendations

Serbia's progress on *Competitiveness Outlook 2021* Recommendations for education policy is generally moderate (Table 8.2). Despite the adoption of a long-term education strategy and the development of action plans, Serbia has yet to strengthen its monitoring framework as recommended. Additionally, progress in providing teachers with stronger incentives for professional development and in implementing plans to enhance data collection and management is still lacking.

Table 8.2. Serbia's progress on past recommendations for education policy

Competitiveness Outlook 2021 recommendations	Progress status	Level of progress
Ensure the new education strategy has a clear set of priorities and a strong monitoring framework	Serbia has adopted a long-term strategy for the education system: the Strategy for Education Development has a clear set of priorities. As part of the strategy, three-year action plans are developed. The content of the action plans will be entered into the Unified Information System, to improve monitoring.	Moderate
Provide teachers with stronger incentives to develop their practice	There is no evidence of progress.	None
Implement plans to strengthen the collection and management of data	One of the objectives of the new Strategy for Education Development is to improve the EMIS. The process of data entry by institutions of all levels of education is already under way. The following were completed: register of institutions, employees, children, pupils, adults and students; register of curricula, register of study programmes and register of NQF; functional operations and creation of statistical, analytical and summary reports within the system. The data will be published on the open data portal on a monthly basis.	Moderate

The way forward for education policy

Given the mixed level of progress in implementing previous recommendations, there are still areas in which Serbia could enhance its education policy framework and programmatic support. As such, policy makers may wish to:

- **Implement plans to continue enhancing the functionality of the Education Management Information System (EMIS) and establish a robust national assessment framework aligned with curriculum goals.** While most ongoing efforts to integrate the EMIS with other information systems have concluded, there is still scope to further draw from the platform to improve education policies and outcomes. Namely, additional reforms could ensure comprehensive data collection and effective monitoring of educational progress, promoting equity and inclusivity in the education system as well as enhanced capacities for evidence-based policy making. This data could then be used to provide feedback on student performance and progress as well as allow for comparisons at the individual, class or school level.
- **Encourage teachers to progress professionally through stronger incentives**. As reward mechanisms for teachers are lacking, the link between teachers' performance and both monetary and non-monetary rewards should be established to provide teachers with additional incentives to update their skills, knowledge, and practice. Regarding monetary incentives, Serbia should prioritise the swift implementation of the planned pay grade system. Conversely, the establishment of a formal accreditation system for teacher professional development programmes can serve as a non-monetary reward that encourages continuous improvement in teacher quality and supports ongoing professional growth.
- **Improve the relevance of higher education by analysing the skills mismatches and subsequently limiting publicly funded study places in lower-demand fields.** While Serbia plans to conduct an analysis of the skills that are lacking in the labour market, it could also conduct analyses of the oversupply of skills, particularly in higher education. Adjusting the number of study places for students in publicly funded HEIs, particularly by reducing them in fields where the supply is too large, could help reduce the surplus of certain profiles (Box 8.2).
- **Continue to invest in enhancing digital skills among students and teachers**. Although mechanisms such as the ICILS (which tracks digital skills levels of students) and monitoring by the MoE (for measuring digital skills among teachers) are in place, there is room to expand efforts to further strengthen these skillsets. Building these digital competencies will not only prepare students for the future job market but also equip Serbia with the skills needed to thrive.

Box 8.2. Limiting publicly funded study places in Scotland

In Scotland, the government has introduced several policies that aim to reduce the number of study places at universities that are supported by public funding. For students who are Scottish residents and are pursuing their first university degree, their tuition fees are entirely covered, although universities receive variable subsidies per student that depend on each student's field of study. However, students who wish to receive another undergraduate degree must pay an annual rate of EUR 2 130 (GBP 1 820). The exception is for individuals seeking to receive this second degree in high-demand fields, such as healthcare (including paramedic, nursing, or midwifery studies) or teaching, as these are eligible for full funding.

Source: OECD (2023[12]).

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Notes

[1] Investments are being made in improving the information and communication technologies infrastructure and school connectivity, but the EMIS is still not fully operational. The EMIS should be designed to be interoperable with other national databases to maximise monitoring potentials and to enable the monitoring of different aspects of the student population, including underprivileged students. The EMIS is also expected to enable better co-ordination of stakeholders by new methodologies for data collection, as well as ensuring the validity and reliability of data and their regular updating (ETF, 2022[4]).

[2] The open data portal (in Serbian) can be accessed at: https://opendata.mpn.gov.rs. The portal contains data for all levels of education, including dual and adult education, average job search duration for different educational profiles, and similar information.

9 Employment policy

Effective employment policies are crucial for forging a strong economy and fostering economic development and social inclusion. This chapter aims to assess the regulatory framework and policies governing employment, as well as the institutional capacity for implementation. The first sub-dimension focuses on inclusive labour market governance, specifically looking at the employment regulatory and policy framework, labour inspectorates, social dialogue and inclusive employment policies. The second sub-dimension, social protection and activation policies, analyses public employment services, the framework of mutual obligations, and active labour market programmes. The third sub-dimension, skills for adaptable labour markets, assesses the skills mismatches in the labour market and initiatives for developing digital and green skills. The fourth sub-dimension, expanding the skills pool, focuses on attracting highly skilled migrants and diaspora.

Key findings

Serbia has significantly improved its performance in employment policy since the previous assessment (Table 9.1). Progress was made in the areas of inclusive labour market governance, social protection and activation policies, and expanding the skills pool. However, further efforts are needed to bolster the development of skills for the twin green and digital transition, particularly through support for the greening of jobs and skills. Additionally, there is scope to expand the economy's domestic skills supply through better benefiting from highly skilled migrants.

Table 9.1. Serbia's scores for employment policy

Dimension	Sub-dimension	2018 score	2021 score	2024 score	2024 WB6 average
Employment	8.1: Inclusive labour market governance			3.6	3.2
	8.2: Social protection and activation policies			3.7	3.1
	8.3: Skills for adaptable labour markets			2.7	2.6
	8.4: Expanding the skills pool			2.8	2.4
Serbia's overall score		**2.5**	**2.8**	**3.3**	**2.9**

The **key findings** are:

- Limited financial resources allocated to active labour market programmes (ALMPs) hinder the effectiveness and impact of these measures. The average level of spending on ALMPs (0.1% of GDP in 2022) by the WB6 economies is approximately four times less than both EU and OECD levels (0.39% and 0.46%, respectively).
- Serbia's gender employment gap stood at 13.9% in 2022, which, while being the second lowest in the Western Balkans, is still several percentage points higher than the EU average (10.6%). Efforts to narrow this gap involve the implementation of the Strategy for Gender Equality 2021-30, which includes the development of ALMPs for women and initiatives to foster female entrepreneurship. However, one persistent barrier to increasing female employment is the insufficient provision of affordable and high-quality childcare.
- Serbia opened the Office for Dual Education and the National Qualifications Framework in 2022. By engaging with employers, this institution has made efforts to better align curricula and education and training opportunities with the needs of the labour market.
- Additional efforts are needed to ensure the adaptability of the labour market to the needs of the digital transition, particularly when it comes to adult learning. According to recent surveys, only 41.3% of individuals reported having a basic or above level of digital skills, compared to 53.92% on average in the EU.
- There is a need to strengthen the capacity of the National Employment Service (NES) by reducing staff caseloads and enhancing co-ordination with local employment councils to improve outcomes for jobseekers. With more than 250 registered unemployed per counsellor as of 2022, the caseload is twice the ratio recommended by the International Labour Organization (ILO).
- With the aim of drawing from diaspora talents, Serbia has implemented various initiatives under its Economic Migration Strategy 2021-27, including the Tačka Povratka, the Serbian Science and Diaspora Collaboration Programme, and Link Up! Serbia II. However, the current policy framework would benefit from enhanced emphasis on the socio-economic integration of migrants and returnees to facilitate their contributions to the labour market.

State of play and key developments

Serbia's working-age population declined by 1.6% between 2019 and 2021, due to a mixture of emigration and the long-term trend of declining birth rates. This has also contributed to the recent increase in the activity rates, which reached 71.4% in 2022, surpassing the pre-COVID-19 level of 68.1% (yet still below the EU-27 average of 74.5%) (Eurostat, 2023[1]). Activity rates increased mainly among young and older workers. The employment rate increased to 69.3%[1] in 2022 but remains well below the EU-27 average of 74.7%.

In 2023, the unemployment rate in Serbia reached 7.8%, the lowest in the Western Balkans, and below the pre-pandemic level of 11.3%, but still slightly above the EU-27 average (6.0%) (World Bank, 2024[2]; Eurostat, 2024[3]). The long-term unemployment rate was at 3.8% in 2022, below the pre-pandemic level (5.5%) but still above the EU-27 average of 2.4% (Eurostat, 2023[4]). The youth unemployment rate (ages 15-24) stood at 24.4% in 2022, and although the falling trend continued (the pre-pandemic level was 28.6% in 2019), tackling youth unemployment continues to be an urgent matter (Eurostat, 2023[5]).

Sub-dimension 8.1: Inclusive labour market governance

Whereas Serbia's Labour Law has remained unchanged since 2017, several important updates to the **legal framework for employment** took place during the assessment period through changes to other laws. Namely, the Law on Professional Rehabilitation and Employment of Persons with Disabilities was updated in 2022, aiming to reinforce employment provisions for persons with disabilities and facilitate their integration into the labour market. Serbia also adopted a new law on health and safety at work in April 2023, advancing alignment of regulations in this area with the EU *acquis* (European Commission, 2023[6]). The Law on the Social Card, which entered into force in 2022, reformed the social protection system through the creation of a centralised register determining the right of individuals to benefit from social support through the use of an algorithm. However, its implementation has been criticised by civil society organisations for reasons relating to the fairness of the algorithm, as well as concerns regarding personal data protection and preservation of privacy rights (A11 Initiative, 2023[7]).

Together, the Employment Strategy of the Republic of Serbia 2021-26 and its newest accompanying Action Plan 2024-26 serve as the primary **policy framework for employment** in Serbia. The strategy refers to promoting the development of high-quality jobs, improving the position of unemployed persons in the labour market, and improving the institutional capacities of the public employment service (PES) (see Sub-dimension 8.2: Social protection and activation policies). The new strategy continues to focus employment policy on hard-to-employ persons. Namely, special measures are foreseen to improve the position of women, young people, persons with disabilities, beneficiaries of financial social assistance, and Roma. A special priority for inclusion in active labour market policy measures is given to persons who face multiple employment barriers. The government reports progress in implementation and has identified weaknesses in the implementation of the first action plan, aiming to correct them.

When it comes to combating informality, a Programme for Combating the Shadow Economy 2023-25 has been adopted. Official estimates on informal employment, calculated from the LFS and including self-employed persons in unregistered businesses, wage workers without a written contract, and unpaid family workers show that informal employment has continued to fall (Vienna Institute for International Economic Studies, 2021[8]).

In 2021, changes to the Law on Simplified Work Engagement for Seasonal Jobs in Certain Industries (2018) were planned with the aim of further addressing informality. These changes would have extended the provisions of the law to other sectors, such as construction, allowing simplified declaration procedures and access to social rights such as guaranteed minimum wage, health and safety standards and insurance. However, the established social provisions under this law were criticised by labour unions and civil society groups for being too low and for not including collective labour rights, leading to the abandonment of the changes. The situation of gig workers remains unresolved, as they currently have the option to register as entrepreneurs, to self-tax, or to establish a limited liability company (LLC) – just like any other activity. These options are often either unprofitable or administratively demanding, leading to challenges in the formalisation of gig workers.

The **Labour Inspectorate** is relatively well developed and boasts sufficient capacity to carry out its mandate. Its work is supported by the Occupational Safety and Health Directorate, which prepares regulations, provides professional assistance and informs the public about various matters concerning safety and health at work. Of note, in 2023, as part of the EU-financed Platform for Employment and Social 2 (ESAP2) project, the Labour Inspectorate developed a brochure to inform employees about informal work, including how to recognise it and how to report instances. More generally, this entity organises and attends meetings and workshops with representative employee and employer associations to protect workers' rights more effectively. Additional information on labour regulations and their proper implementation was provided during advisory visits and inspections. A rotating system for the territorial assignment of labour inspections has been implemented and is considered to be effective.

The number of staff at the Labour Inspectorate steadily fell from 265 in 2017 to 210 in 2021[2] but has recently begun increasing, rising to 230 in 2023 (European Commission, 2023[6]). Plans to further increase the number of inspectors to 360, initially foreseen for 2020, were further delayed until the end of 2025. However, even with this reduced number of personnel, the Labour Inspectorates' operations have continued to expand, with the number of annual inspections rising from 63 670 in 2021 to 66 896 in 2023. This was complemented by simultaneous increases to the planned budget, which grew from RSD 396 766 000 (EUR 3.39 million) in 2021 to RSD 556 202 000 (EUR 4.75 million) in 2024, marking a 40% increase. According to the Labour Inspectorate, these augmented financial and staff capacities have contributed to a notable reduction in fatal workplace injuries, decreasing by 20% between 2021 and 2022. Such recent efforts reveal the Labour Inspectorates' commitment to improving regulatory compliance and preventing infractions throughout the economy. However, there is still room to ensure that the results of monitoring and auditing inform the design and implementation of the Labour Inspectorate's activities.

A **collective bargaining** framework exists, including for workplace representation. There is evidence of the implementation of collective bargaining, mainly in the public sector, but information on that implementation at the sector, company, and workplace levels in the private sector is not available.[3] Collective agreements mainly regulate wage levels, working time, and issues concerning trade unions' rights; other issues, such as working conditions, training and job security, are more rarely covered. The Labour Law stipulates that employees of an employer with more than 50 employees may form an employees' council as a platform for defending their economic and social rights. However, there have been frequent cases where this right has been denied, especially for companies established through foreign direct investment.

The government's involvement through tripartite social dialogue is more developed, with minimum wages being regularly fixed in tripartite negotiations. As of early 2024, the Social and Economic Council, as the main platform for tripartite dialogue, was running four permanent working bodies on legal issues, economic affairs, occupational safety and health, and collective bargaining and peaceful settlement of labour disputes. However, research and analysis of wages among companies with collective agreements and those without collective agreements, as well as an analysis of the low-wage sector, have not been carried out. Such analysis would help understand the benefits and impacts of collective agreements on the labour market.

Efforts have been made to develop **inclusive labour market policies** for vulnerable or disadvantaged groups in Serbia. The Employment Strategy 2021-26 identifies several target populations facing significant employment barriers, including women, Roma individuals, people with disabilities, recipients of social assistance, and youth not in education, employment or training (NEET). For instance, under this strategy, one area of planned progress is vocational rehabilitation measures for people with disabilities.[4] Additionally, the Law on Social Entrepreneurship, adopted in January 2022, aims to improve these groups' labour market integration. To complement these policy frameworks, there are several concrete initiatives, although most existing programmes are ALMPs (which are further explored in Sub-dimension 8.2: Social protection and activation policies).

However, of the aforementioned target groups, the strongest policy and programmatic emphasis has been placed on increasing the participation rates of women. Serbia has adopted the Strategy for Gender Equality 2021-30. A co-ordination body for gender equality is in place, and a system for gender-responsive budgeting was introduced to support labour market policies. Regulations on flexible working time allowing reconciliation of work and family life are in place, allowing for switching from full-time to part-time, flexible working hours, remote work and telework to care for children. Nevertheless, securing quality and affordable childcare facilities may still be challenging for women wanting to work, although an ongoing project with the World Bank seeks to improve these services' accessibility (for more on this project, see Chapter 8). Additionally, in 2023, the government of Serbia established a new programme that seeks to provide financial assistance to female entrepreneurs, augmenting women's empowerment and inclusion in the economy.

Serbia has also advanced in conducting labour market studies on women's employment and impact assessments. The Law on Gender Equality, which came into force in 2021, ensures the gender disaggregation of statistical data (RCC, 2023[9]). The Gender Equality Index is calculated following the methodology of the European Institute of Gender Equality (EIGE). During 2023, with the support of UN Women, an analysis of the prerequisites for harmonising work and family life of young women not engaged in education, employment or training was prepared. Studies have been conducted on female entrepreneurship in two municipalities. Monitoring and evaluation of the dual vocational system are being improved by including gender-based statistics.

As a result, the economy has made some progress in reducing gender inequalities in the labour market in recent years. The gender employment gap shrank by 0.7 percentage points from 2021 to 2022, reaching 13.9%, the second-lowest gender employment gap in the Western Balkans. However, this gap remains above the EU average of 10.6% (RCC, 2023[9]). Between 2019 and 2021, the activity rate (ages 15-64) of women increased by 1.7 percentage points, while it increased by 2.6 percentage points for men (Vienna Institute for International Economic Studies, 2021[8]), showing an uneven dynamic in the improvement of the employment situation.

Sub-dimension 8.2: Social protection and activation policies

Although it has been declining in recent years, primarily due to declining unemployment, the caseload of counsellors at Serbia's **public employment service** (PES), the National Employment Service (NES), is still high. There are more than 250 registered unemployed per counsellor as of 2022, which notably exceeds the International Labour Organization's (ILO) recommended ratio of 100:1 (Kuddo, 2012[10]). Due to this high caseload, offering in-depth counselling and follow-up services to all jobseekers is challenging, meaning that only a fraction may be effectively assisted. The NES profiles registered jobseekers to categorise them into three groups, differentiated by the level of employment barriers the individual faces. For those jobseekers considered to be "hard-to-place", they are provided with more intensive and targeted support services. The PES is aware that it needs to improve the individual approach to jobseekers, including improving instruments for and techniques of counselling work and implementing preventive action for those at risk of becoming long-term unemployed.

On the positive side, there is advanced co-operation with social services and local actors to bring hard-to-place jobseekers into jobs, formalised through numerous agreements, and signed Protocols on Co-operation, and frequent meetings (581 in 2023). Discussions centre around how to strengthen general cooperation in areas, including the referral to ALMPs of low-skilled individuals, job matching, and supporting the transition from the informal economy to formal employment. Moreover, to address the complexity of employment barriers, an initiative was launched to provide support within the framework of intersectoral co-operation (school administrations, regional chambers of commerce, and civil society organisations) at the local level.

As part of the preparation of the new Employment Strategy 2021-26, the ILO carried out a functional analysis of the NES and certain organisational units of the Department for Labour and Employment.[5] The emphasis of this assessment was on the need to reorganise the service and provide additional focus on core functions. Progress has also been made in organising services for employers, as the NES established a Department for the Development of Relations with Employers in October 2021. In 2022, the number of registered vacancies more than doubled compared to both the previous year and the pre-COVID-19 years. However, there are still 4.5 times more registered unemployed individuals than registered vacancies. Despite this significant disparity between labour supply and demand, Serbia has not conducted a detailed analysis of the structure of vacancies and the unemployed, which might include examining occupations, skills, and geographical areas.

Digitalisation of PES services and processes has advanced in some areas. The "Path to a Successful Entrepreneur" programme (job search training) and one labour market training course have been digitalised. During the COVID-19 pandemic, the NES enabled unemployed individuals to register with the agency electronically (i.e., by sending a request for registration to the e-mail address of the competent branch). In addition, the unemployed could fulfil their obligation to report to the NES regularly via e-mail or telephone. In practice, the use of digital services is restricted, as some groups of jobseekers do not have access to the Internet or have insufficient digital skills. Employment mediation is not yet digitalised, but there are ongoing efforts to implement digital solutions on a project-by-project basis. While there is still scope to strengthen these digitalisation efforts, such advances expand the accessibility of efficient, user-friendly digital services, which in turn could potentially reduce the workload of the PES counsellors.

The **unemployment benefit system** provides low to moderate levels of unemployment benefits ("cash benefits"). It is estimated that the net replacement rate is 60% for an average wage earner and, less than 50% related to gross wages, and lower for people with higher earnings.[6] Receiving unemployment benefits depends on previous work history and varies between 3 and 12 months. As of 31 December 2022, the majority of registered jobseekers do not receive an unemployment benefit (4.6%) or social assistance (11.1%). All unemployment benefits and social assistance recipients[7] are obliged to actively look for work. This search is monitored and must be reported to the competent branch of the NES. Each individual's employment plan serves as the basic instrument for monitoring, and all planned measures and activities are recorded in the Integrated Information System of the NES. Jobseekers' activity diary is an auxiliary instrument used in exceptional cases when the employment counsellor assesses that a person needs additional motivation to actively seek a job. Beneficiaries of cash social assistance who can work are one of the priority categories for activation in the new Employment Strategy 2021-26.

The Serbian PES has made a significant effort to improve the design and implementation of **active labour market programmes**. However, the impact is likely to be limited due to the low level of the budget allocated to measures. The budget[8] for ALMPs at 0.1% of GDP (in 2022) has increased in recent years and in 2022 surpassed the pre-COVID-19 level (of 0.08% of GDP), yet still remains low to effectively serve disadvantaged groups. To compare, in 2019, on the EU average, about 0.39% of GDP was spent on ALMPs (including training, employment incentives and start-up incentives) and another 0.19% of GDP on labour market services (including also administration). Similarly, in 2021, OECD countries spent an average of 0.46% of their GDP on ALMPs (OECD, 2023[11]). Roughly half of the budget allocated to ALMPs in Serbia is spent on training measures. The second largest ALMP category is employment incentives (representing 0.03% of GDP), and 0.01% of GDP is spent on direct job creation measures (public works). In addition, some financial support for start-up incentives and vocational rehabilitation is available (RCC, 2023[11]). A very small budget (only around EUR 8 800) was spent on active jobseeking services.

Several ALMPs are specifically designed to benefit vulnerable groups. For example, in 2022, two training opportunities – the "Training for Active Job Search" and the "Path to a Successful Entrepreneur" programmes – were offered in the Romani language to engage this population better. However, the most notable efforts have targeted the economy's youth NEET. Indeed, although Serbia boasts the lowest levels of youth NEET in the Western Balkans (15.1% in 2022), this figure remains slightly above the EU average of 11.7% (RCC, 2023[9]). One prominent initiative to address youth unemployment was the "My First Salary" programme, designed to benefit young jobseekers without work experience. These individuals work in selected public and private sector entities for nine months to gain knowledge, skills and competencies to enhance their employability. Additionally, Serbia has made recent progress on establishing its Youth Guarantee, adopting its implementation plan in December 2023. The piloting of the plan, at the level of three NES branches, is scheduled to take place from 2024 to 2026, with professional and financial support from the IPA 2020 programming cycle. However, a significant gap is the lack of programmes targeting older workers (55-64). Although their activity rate is relatively high compared to other regional economies, it is well below the EU-27 average (58.5% versus 65.4%, respectively, in 2021).

Considering the widespread implementation of ALMPs for vulnerable groups, Serbia's recent efforts to evaluate the impact of employment incentives for hard-to-employ individuals are essential to determining these measures' effectiveness (Janackovic and Aksentijevic, 2023[12]). This assessment was part of the "Knowledge to Work – Education to Employment (E2E)" programme and stands as one of the few efforts to assess NES programmes' outcomes. The incentives took the form of a one-time subsidy provided to employers who hired workers falling into specific categories: those below 30 or above 50 years old, Roma individuals, people with disabilities, recipients of social assistance, and long-term unemployed individuals. The subsidy amounts ranged from RSD 240 000 (EUR 2 050) to RSD 300 000 (EUR 2 560). The study revealed that implementing this subsidy increased the likelihood of employment by nearly 34 percentage points. However, the impact intensity varied: it was high for the age group between 30-49 years; medium for youth, Roma individuals, and the long-term unemployed; and lower for older individuals. An assessment was crucial for understanding the efficacy of these ALMPs, particularly considering their relatively limited funding levels. Consequently, the findings will inform improvements in the measures outlined in the Action Plan 2024-26 for the National Employment Strategy 2021-26.

Sub-dimension 8.3: Skills for adaptable labour markets

People with a low level of education (lower secondary or below) experienced the biggest fall in employment rates during the pandemic (Vienna Institute for International Economic Studies, 2023[13]). Moreover, individuals with lower levels of education showed a weaker recovery of employment rates between 2019 and 2021 when compared to people with higher levels of education and training. Participation in training activities to learn new job-related skills is 30 percentage points below the EU average and lower than in other Western Balkan economies for which information is available. The share of those participating in an education or training activity was only half of the EU average (ETF, 2023[14]).

A major development in efforts to reduce the **skills mismatch** in Serbia was the opening of the Office for Dual Education and the National Qualifications Framework in 2022. The Office is the primary platform for developing laws and bylaws governing the dual education system. It actively engages with employers to better align curricula and education and training opportunities with the needs of the labour market.

Strategies and action plans for addressing the adult learning framework are in place, and progress is under way to improve the system. When introducing new curricula or modifying existing ones, sector associations, including sector skills councils, are consulted, while social partners such as employer organisations and trade unions are not involved. A system for the recognition and validation of prior learning is being developed. The policy framework and implemented measures are promoting workplace-based learning in VET and in ALMPs. Progress has also been made to monitor participation in continuing education and training and to assess the skills needs of employers. However, there is limited evidence that other tools, such as tracer studies and web analysis, are regularly used to identify skills mismatches.

Yet, despite ongoing initiatives, both under- and over-education reflect the persistence of the challenge posed by skills imbalances. Indeed, in 2023, more than one-quarter of businesses in Serbia indicated that education did not adequately prepare workers for the needs of the labour market, indicating a significant gap in the skills acquired during education and those demanded by the market (ACIT Centre, 2023[15]). Conversely, 24% of workers reported that they have an education level that is higher than what the job requires (compared to 17% among OECD countries (OECD, 2023[17])), which highlights the prevalence of vertical skills mismatches.

Career guidance and counselling are carried out by career planning counsellors and, career information counsellors and psychologists at the NES and are primarily available to unemployed individuals. Activities include information and counselling on career development opportunities, self-efficacy training, and a workshop for overcoming stress due to job loss. As of 2023, a new workshop called "Psychological challenges of entrepreneurship" will be held. Additionally, career guidance and counselling services in the NES – including employment mediation services, employment counselling, active job search training, and job search clubs – are provided for persons with disabilities.

A specific challenge is to develop **skills for the digital transition**. A lower share of the Serbian population has basic or above-basic overall digital skills compared to the EU average, although this proportion exceeds the WB average by 6.5 percentage points (Table 9.2). Learning new digital skills at the workplace and participation in related continuous training are happening, but Serbia is lagging behind the EU average in this regard. One explanation is that both the use of computer devices and computerised machinery at the workplace is markedly less developed, behind the EU-27 average (ETF, 2023[14]). Serbia is implementing its Strategy for the Development of Digital Skills 2020-24, for which an Action Plan for the period 2023-24 was adopted in February 2023. The strategy focuses on the development of society's digital skills in a broad sense, including vulnerable groups such as older citizens, the unemployed, NEETs, women, and youth. Significant initiatives are being implemented to support the digital upskilling of business owners and the development of Serbia's ICT sector. Upskilling initiatives have also been implemented, primarily focusing on the unemployed (see Chapter 11). Conversely, the limited availability of programmes targeting workers means that a significant portion of the population – who also need to cultivate digital competencies – remains excluded.

Table 9.2. Individuals with basic or above-basic overall digital skills in Serbia, the WB6 economies and the EU in 2021

Percentage of all individuals

	SRB	WB6	EU
Individuals with basic or above-basic overall digital skills	41.3	34.8	53.9

Note: Kosovo data (used to calculate the WB6 average) was from the latest available year (2019).
Sources: Eurostat (2020[16]; 2023[17]).

Regarding developing **skills for the green transition**, no progress can be noted, which is concerning considering that Serbia is one of the two Western Balkan economies with the highest numbers of employed in coal mining. Phasing out coal and fossil fuel subsidies will likely result in direct and indirect job losses and social challenges that must be managed. Employment has already been declining in certain coal-rich regions (such as the Kostolac, Kolubara and Pomoravlje regions) (OECD, 2022[18]). At the same time, the green transition has the potential to generate new employment opportunities in other energy sectors, inducing job transitions across sectors and necessitating skill adaptation in existing roles (European

Commission, 2021[19]). While preliminary studies seeking to measure the impacts of the green transition and reduce the negative impact on vulnerable groups are taking place, there is no information on the elaboration of a strategy, action plans or any specific measure to prepare the workforce for the green transition in Serbia, and political commitment towards this goal cannot be confirmed. Additionally, there is no evidence of co-ordination or consultation with key stakeholders on skills needs for the green transition. Studies that seek to identify green jobs and skills and/or evaluate the magnitude of their impact (on both the economy and society) have not been conducted.

Sub-dimension 8.4: Expanding the skills pool

Serbia is implementing a comprehensive and multi-year **migration** strategy, the Economic Migration Strategy (2021-27), aiming to promote circular and return migration, reduce emigration factors, and harness the potential of the diaspora for economic development. Migration management responsibilities in Serbia are distributed among various ministries[9] and are co-ordinated by a government working group on mixed migration, with the Commissariat for Refugees and Migration acting as the secretariat. The Coordination Body for Monitoring Flows in the Area of Economic Migration plays a pivotal role in assessing the economic migration landscape and guiding public administration decisions in this realm, reflecting Serbia's commitment to effective migration management. International migration data are published by the Ministry of Security and the Commissariat for Refugees and Migration, not the National Statistical Office of Serbia. Annually published Migration Profiles draw on available data from various institutions, offering extensive information on immigrants but limited details on emigrants.

In terms of labour market access, there is a recognised need for further simplification of procedures governing work permit issuance for EU citizens, who currently navigate regulations designed for third-country nationals (European Commission, 2023[6]). In 2022, 35 173 work permits were issued, with 2 101 allocated to EU citizens. Amendments of July 2023 to the Law on foreigners and the Law on the employment of foreigners, aiming at greater alignment with the EU *acquis*, unify procedures for obtaining a temporary residence permit and a work permit by introducing a single permit (European Commission, 2023[6]).

As part of its preparations to join the European Network of Employment Services (EURES), Serbia has taken significant steps, including the initiation of preparations to align the work processes of the National Employment Service (NES) with EURES requirements. Additionally, Serbia opened two new migration service centres in Subotica and Vranje, supplementing the existing seven centres. The NES conducted training sessions related to EURES for its migration services centre staff and completed the re-engineering of its information system. Notably, there have been no developments regarding the European Health Insurance Card. Serbia has not yet initiated preparations for joining the European Labour Authority.

Under the Berlin Process, Serbia is actively engaged in co-ordinating recognition of qualifications and education with other Western Balkan economies, as well as social security systems, through bilateral agreements and ongoing negotiations. Serbia has so far signed regional agreements recognising qualifications for certain highly qualified professions, such as doctors of medicine, dentists, and architects (Berlin Process, 2023[20]). However, further alignment is still needed on the relevant sectoral legislation. A preliminary list of 50 regulated professions, drafted with EU support, is still pending adoption. In March 2024, Albania, North Macedonia and Serbia fully opened their labour markets to each other as part of the Open Balkan initiative (Government of Serbia, 2024[21]).

Recently, in Serbia, there has been a notable shift from prioritising refugees to concentrating on diaspora and returning migrants at the local level. This shift is attributed to both a new policy framework and a recognised need for more active engagement in diaspora and return migration.

Although official data on the total number of the Serbian diaspora and Serbs in the region are unavailable, earlier estimates suggest a figure exceeding 5 million (United Nations Networks on Migration, 2021[22]). To enhance co-operation with its diaspora and effectively manage economic migration, Serbia has established key institutions such as the Assembly of the Diaspora and Serbs as the representative body for diaspora affairs, which facilitates the collaboration with state institutions, and the Office for Cooperation with Diaspora and Serbs in the Region, a dedicated institution within the Ministry of Foreign Affairs for diaspora engagement. The legal framework, including the Law on the Diaspora and Serbs in the Region, forms the basis for engaging with the diaspora (International Centre for Migration Policy Development, 2023[23]).

Serbia has implemented significant legal initiatives **to attract diaspora skills**, such as the Regulation on Customs Benefits, enabling customs-free import of personal property for returnees residing abroad for over ten years. Additionally, amendments to the Law on Personal Income Tax and the Law on Contributions for Compulsory Social Insurance provide tax breaks for highly skilled returnees. Alongside these legal measures, Serbia has launched successful initiatives, including Link Up! Serbia II, co-funded by the Austrian Development Agency, supports transnational entrepreneurial activities with the Serbian diaspora in Austria, Germany and Switzerland. Furthermore, the Serbian Science and Diaspora Collaboration Programme, facilitated by the Science Fund, provides financial incentives for local research and development institutes to collaborate with the diaspora, resulting in the implementation of 92 joint scientific projects between Serbian institutions and their diaspora counterparts in 22 countries, focusing on science, technology, and engineering. Another noteworthy programme is Tačka povratka (Returning Point), which assists diaspora members interested in returning to Serbia through a dedicated digital platform, offering support in various aspects of the return and reintegration processes.

Overview of implementation of Competitiveness Outlook 2021 recommendations

Serbia has made moderate progress in most Recommendations made in *Competitiveness Outlook 2021*. There was strong progress toward strengthening the link between universities and employers to improve the school-to-work transition (Table 9.3). Serbia made only limited progress in promoting continuous training at the company level, particularly among workers with intermediate qualifications, to help adapt to technological change and to ensure the continuous improvement of employees' knowledge and skills following changes in the labour market.

Table 9.3. Serbia's progress on past recommendations for employment policy

Competitiveness Outlook 2021 recommendations	Progress status	Level of progress
Increase the capacity of the labour inspectorate to detect informal employment	There was a decrease in fatal work injuries, and labour inspectorates continued to detect informal employment successfully. The Programme for Combating Grey Economy 2023-25 was established. An intra-agency working group for combating informal employment is in place. Labour inspectorates have made no progress in providing information and warnings, nor do they provide education and information on the legislation's requirements. The labour inspectorates have not made progress in collecting data on infringements and informal employment.	Moderate
Strengthen collective bargaining capacity at sector and company levels, and strengthen worker representation in companies	Sessions and meetings of the Social and Economic Council are taking place (although the number of sessions has recently declined). The government has no information on employee councils being set up at the company level or on social bargaining coverage. The government and the social partners run initiatives (sometimes supported by international organisations) to strengthen social dialogue, including at the local and company levels.	Moderate
Foster links between universities and employers to ease the transition from university to work	Progress has been made through implementing the programme, "My First Salary". The Youth Guarantee Implementation Plan 2023-26 was adopted in December 2023, and will primarily focus on young people from the NEET category. Moreover, the pilot programme is expected to last from 2024 to 2026. The Office for Dual Education and National Qualifications Framework was created in 2022 and actively involves employers in reforms to reduce skills mismatches.	Strong
Promote adult education, especially for low-skilled adults	No progress has been made toward promoting remedial education. A system for the recognition and validation of prior learning is being developed. Several training measures, which promoted the acquisition of practical knowledge and training, were implemented through the PES. A representative of the Ministry of Labour, Employment, Veteran and Social Affairs is a member of the Working Group to prepare the Annual Plan of Adult Education. Progress has been made in monitoring participation in continuing education and training and in assessing employers' skills needs. However, other tools to identify skills mismatch, such as tracer studies, web analysis, etc., are not used.	Moderate
Encourage employers to promote continuing training at the company level, particularly among middle-skilled employees, to adapt to technological change	There is no evidence of progress in support of employers.	None
Assess and expand the availability of affordable and quality childcare to enhance female employment	A project launched in 2022 between the Serbian Ministry of Education and the World Bank seeks to improve the accessibility and inclusivity of childcare. However, apart from this initiative, there is limited information on other efforts to provide affordable, high-quality childcare, particularly in rural areas.	Moderate
Continue to strengthen the capacities of the NES	There is no progress in reducing caseload and no increase in staffing capacity. There has been some progress in co-ordinating with local actors and strengthening employer relations. The PES has started to implement elements of a statistical profiling system for jobseekers, with services offered varying by employability level, and preparations are underway for further integrating statistical profiling into the work process.	Moderate

The way forward for employment policy

To continue the progress made in the employment dimension and address key challenges for employment policies, the following recommendations are made:

- **Intensify efforts to develop and implement ALMPs, particularly programmes targeting those most distanced from the labour market.** Measures should also include life skills training and basic skills training. Efforts to deliver employment services in a comprehensive way by integrating employment and social services should be continued. The role of the PES in addressing skills mismatch at all skill levels should be expanded. This implies implementing training measures to adapt skills, upskill, and retrain based on employers' skills needs, which should be assessed. While the share of training in ALMPs is considerable, the low financial resources allocated to ALMPs as a share of GDP limits these measures' overall effectiveness and impact. Consideration could be given to increasing the overall financial resources allocated to ALMPs, especially those focused on more vulnerable categories of unemployed and those seeking to address skills mismatch.

- **Continue to promote adult learning and ensure the workforce can adapt to changing labour markets.** It is necessary to better prepare Serbia's workforce for the twin green and digital transitions. It is advisable to start by identifying green jobs and related skills needed to manage the employment effects and skills requirements of the green transition. Appropriate measures should be developed in co-ordination with key stakeholders (like social partners, employers, chambers, training institutions, local economic development actors) to anticipate and manage the labour market effects of the green transition. When developing skills for the digital transition, policies to encourage upskilling employees in digital skills should be developed (Box 9.1).

Box 9.1. Supporting continuous training of the employed and jobseekers in Germany

In Germany, the Qualification Opportunities Act, which came into force on 1 January 2019, and the Work of Tomorrow Act of 2020 have expanded PES funding for continuous training for all employees whose professional activities are at risk of being replaced by digital technologies and who are otherwise threatened by structural change or who seek further training in a bottleneck occupation.

Financial support can be granted for certified training lasting more than 120 hours. Support under this programme is larger for SMEs, who generally have fewer resources to invest in upskilling their workforce. These changes are important steps towards addressing barriers to lifelong learning in the workforce as a whole and promoting skill adaptability in a preventive way. The main challenge of this approach is raising awareness among companies about these possibilities.

Sources: OECD (2021[24]); Duell (2023[25]).

- **Continue efforts to reduce gender inequalities.** Significant progress has been made, but gender inequalities in the labour market are still prevalent. Thus, efforts to promote female entrepreneurship, formal employment in rural areas, and access to full-time childcare should continue, and the new Strategy for Gender Equality should continue to be implemented.
- **Draw policy conclusions from the assessment of the unemployment insurance law**. Specifically, the government of Serbia should monitor progress and assess the outcomes of the newly planned vocational rehabilitation measures and social enterprises.
- **Strengthen the capacities of social partners to conduct collective bargaining at sector and company levels and strengthen worker representation at the company level.** The Social and Economic Council should be equipped with the necessary resources to conduct labour market and sector analysis, as in several other European countries. The Council should be encouraged to evaluate the impact of the minimum wage on poverty reduction and formal employment. This would reinforce its role as the primary consultative platform for tripartite dialogue.
- **Refine the existing migration strategic framework by placing more emphasis on labour migration, through concrete strategic goals and action plans.** While the existing Economic Migration Strategy primarily focuses on diaspora and returning migrants, it needs to broaden its scope by prioritising implementing policies that facilitate the optimal utilisation of foreign talent and improve the integration of migrants into the labour market and society.

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Notes

[1] Note that Serbia has started publishing labour force survey (LFS) data according to a new methodology in 2021. The changes were implemented in accordance with the new Regulation (EU) 2019/1700 of the European Parliament and the Council and followed new guidelines from the International Labour Organization (ILO). The biggest change refers to the treatment of persons who produce agricultural goods and services for their own consumption, without bringing them to market. Serbia has revised the data gathered prior to 2021 according to the new methodology, but only for the main aggregate indicators (RCC, 2023).

[2] These data come from the CO 2024 quantitative questionnaire.

[3] 22 collective agreements have been concluded in the public sector. In addition, 6 special collective agreements have been concluded at the local level for the activities of utility companies. In the private sector collective agreements exist for specific professions and sectors: artists and performers in the hospitality industry, and in the road building and maintenance industry.

[4] The share of people with disability among registered jobseekers is 2.7% (as of 31 December 2022) (administrative data provided by NES).

[5] The Department of Labour and Employment is a department within the Ministry of Labour, Employment, Veteran and Social Affairs. One of its divisions, the Division for active labour market policy, plays a central role in the design and implementation of public employment services and ALMPs.

[6] Data provided by Serbia, and https://www.stat.gov.rs/en-US/oblasti/trziste-rada/zarade for comparing with net and gross average wages.

[7] Recipients of social assistance must register with the NES.

[8] The funds shown for active labour market policy measures are the funds provided by the National Employment Service, which were secured from different sources (unemployment insurance contribution and the RS budget, including the Budget Fund for professional rehabilitation and incentives for employment of persons with disabilities, as well as the budgets of provincial and local self-governments which have local employment action plans).

[9] The Ministry of the Interior, the Commissariat for Refugees and Migration, and others such as Labour, Employment, Veteran and Social Affairs; Foreign Affairs; Justice; Defence; Health; and Education, Science, and Technological Development.

10 Science, technology and innovation

An effective institutional and policy context for science, technology and innovation (STI) is essential to boost the knowledge economy. This chapter, along with three sub-dimensions, analyses the overall STI trends and performance in the region, the development of sustainable and impactful STI policies and processes. The first sub-dimension, the STI system, assesses the STI regulatory framework and strategies, including smart specialisation strategies and the institutional framework for STI policy. The second sub-dimension, public research systems, analyses the governance of the public scientific research sector, funding approaches and human resource capacity to foster academic research excellence. The third sub-dimension, knowledge exchange and co-creation, assesses policies that support integration between scientific research and the private sector, which is critical for technology transfer, as well as policies and initiatives to promote European and regional collaboration in STI.

Key findings

Since the previous assessment, Serbia has further developed its science, technology and innovation (STI) policies (Table 10.1). With an average score of 3.6, Serbia outperforms all the other economies in the Western Balkans. The overall STI system is increasingly maturing, and Serbia's biggest strength in STI policy remains its institutional framework. By contrast, targeted investments require further strengthening of scientific research outputs and outcomes.

Table 10.1. Serbia's scores for science, technology, and innovation

Dimension	Sub-dimension	2018 score	2021 score	2024 score	2024 WB6 average
Science, technology and innovation	9.1: STI system			4.2	2.9
	9.2: Public research system			3.3	2.5
	9.3: Knowledge exchange and co-creation			3.2	2.0
Serbia's overall score		**2.1**	**3.1**	**3.6**	**2.5**

The **key findings** are:

- Serbia has a well-developed STI policy framework, comprising a national STI strategy (2021-25), a Smart Specialisation Strategy (2020-27) and a strategy for the development of a start-up ecosystem (2021-25), along with a strong institutional and regulatory framework. Serbia was also one of the first economies worldwide to pioneer STI policy for a Sustainable Development Goals (SDG) Roadmap.
- The institutional setup for STI policy was streamlined in 2022 with the creation of a new Ministry that exclusively focuses on Science, Technological Development, and Innovation. This consolidates responsibilities and reduces the risk of overlapping mandates and conflicting priorities. Nevertheless, horizontal coordination across Serbia's institutional framework remains complex.
- Overall investment into research and development (R&D), particularly from the private sector, remains low at 0.97% of GDP in 2022. However, public sector investments have grown considerably in recent years – most notably, the Science Fund has significantly expanded its operations, providing over EUR 75 million in financial support for scientific research through eight programmes. In 2023, the government has further pledged to increase funding by 50% within five years as part of its commitment to the European Research Area (ERA).
- Linkages between academia and the business community are slowly increasing, but more efforts are needed to maintain and expand momentum. Both the Innovation and Science Fund operate dedicated programmes to stimulate business-academia collaboration, while additional large-scale financial support schemes targeting innovation and start-ups are expected to create spillover effects in the medium term.
- An institutional support structure for business-academia collaboration is in place and operating well. Serbia has secured large-scale investments to expand its network of Science and Technology Parks (STP) further and construct a state-of-the-art biotechnology park. Additionally, it has established a dedicated Research and Development Institute for Artificial Intelligence (AI).

State of play and key developments

Against the background of a strong policy and institutional framework and increased financial support for STI-related activities, Serbia's performance in the European Innovation Scoreboard has improved to 63.2% of the EU average in 2023, significantly outperforming all other WB6 economies (European Commission, 2023[1]). In terms of categorisation, however, the economy remains an *emerging* innovator amid continuous shortcomings in intellectual property assets and environmental sustainability.

Gross domestic expenditure on research and development (GERD) is increasing but remains low at less than 1% of GDP in 2022, with less than half of the share stemming from the private sector (Statistical Office of the Republic of Serbia, 2022[2]). Patent applications to the European Patent Office have doubled in recent years, with 20 applications and 12 applications submitted in 2021 and 2022, respectively; however, only four have been granted (EPO, 2022[3]). The number of active researchers, at around 2 200 per million inhabitants, is double the regional average and has also shown a slow increase in recent years (just over 2 000 in 2019). However, it remains only around half of the EU average (UNECE, 2021[4]).

Sub-dimension 9.1: STI system

Serbia has a well-established **STI policy framework**. Since the previous *Competitiveness Outlook*, a new Strategy of Scientific and Technological Development (2021-25) called "Power of Knowledge" has entered into force, and its implementation is progressing swiftly. Its key objectives include strengthening research institutions and infrastructure and improving Serbia's integration into the European Research Area (ERA). In addition, the economy adopted a dedicated strategy for developing a start-up ecosystem (2021-25) and a complementing Law on Innovation Activities in 2021, aimed at creating a national strategic framework to boost start-up activity across the economy. A strategy on artificial intelligence has been in place since 2019, reflecting Serbia's commitment to focus STI policy making on targeting emerging technologies.

The implementation of Serbia's **Smart Specialisation Strategy** (S3), adopted in 2020 in line with the European Commission's Joint Research Centre methodology and practices, is progressing well. The 2021-22 Action Plan has been successfully implemented and was scheduled for external evaluation by the end of 2023, to align its evaluation cycle with that of EU Member States. This evaluation, however, has not yet taken place, and the 2023-25 Action Plan was adopted in December 2023, without taking into account the shortcomings of the previous action plan. As part of its S3 framework, Serbia notably joined a Global Pilot Programme on STI for Sustainable Development Goals (SDGs) Roadmaps,[1] and was among the first economies in 2022 to successfully adopt such a Roadmap; it thus became a pioneer for embedding sustainability in its national STI framework. Serbia's S3 strategy focuses on a number of priority areas, including, among others, information and communication technology (ICT), agrifood, machines and manufacturing systems, creative industries, and eco-smart energy sources and solutions. Across these areas, the Roadmap identifies ten areas of direct impact on the SDGs.

Serbia has taken steps to streamline its **institutional framework** in support of STI since the previous assessment. In 2022, the Ministry of Education, Science and Technological Development (MoESTD), formerly overseeing STI policy design, was reshuffled into a new Ministry of Science, Technological Development and Innovation (MoSTDI). The reorganisation aimed to strengthen the focus on science and innovation and their interlinkages and streamline STI policy measures. However, the Ministry of Economy remains in charge of some elements of innovation policy, including for industries. The National Council for Science and Technological Development supports horizontal policy development, particularly regarding scientific research, while the Council for Encouraging the Development of the Digital Economy, Innovation, High-Tech Entrepreneurship and Digitalisation, established under the auspices of the Prime Minister in 2021, is mandated to steer STI policy related to innovation and digital transformation. The multifaceted setup of Serbia's institutional STI framework underlines the government's commitment to the innovation agenda but, at the same time, continues to add complexity to effective and co-ordinated policy making.

The Serbian Innovation Fund remains the economy's flagship institution for implementing innovation-stimulating activities and providing financing for innovative projects. Since its launch in 2011, it has provided over EUR 80 million in financing. Since 2019, its activities have been complemented by the Science Fund, which is now fully operational and adequately resourced and focuses on fostering research excellence. In combination, Serbia's holistic approach to addressing both the demand and supply side of innovation and R&D provides a powerful tool to support innovation activities in the medium term. Moreover, Serbia has established solid internal monitoring and evaluation mechanisms to oversee STI policy implementation. Serbia's national statistical office conducts biannual innovation surveys, while a dedicated team within MoSTDI regularly monitors the implementation of the Smart Specialisation Strategy. However, there is no evidence of an independent ex post impact evaluation of Serbia's previous innovation framework (2016-20), which could have informed the new "Power of Knowledge" strategy, and an external evaluation of the previous S3 action plan (2021-22) is pending. In contrast, an external evaluation was conducted on the Innovation Fund's programmes throughout 2020, which is an important step towards international good monitoring and evaluation practice.

Sub-dimension 9.2: Public research systems

Public research excellence, a cornerstone of Serbia's STI strategy, has been a key objective of improving the quality and efficiency of scientific research. Among others, it envisages targeted support for high-performing researchers and scientists and support for the publication of high-impact potential research. The promotion of research excellence is also the focus of a World Bank-supported programme called "Serbia Accelerating Innovation and Growth Entrepreneurship" (SAIGE),[2] which has been implemented since 2020 and supports Serbia's efforts to improve research excellence to contribute to the economy's growth and competitiveness.

Although the National Council for Science and Technological Development oversees the overall implementation of R&D policy measures, Serbia's higher education institutions (HEIs) operate with a relatively high degree of independence, setting their own research priorities; only limited co-ordination via MoSTDI is required of them. However, the 2019 Law on Science and Research has introduced a stronger focus on performance-based institutional funding in combination with competitive project-based financing through the Science Fund, thereby incentivising HEIs to prioritise strategically relevant research with commercialisation potential.

Overall investments into R&D remain low at 0.97% in 2022 (up from 0.91% in 2020), with around 44% stemming from private sector activity. In 2023, Serbia committed to increasing public investments into R&D by 50% over the next five years, and public sector spending has already begun to increase, primarily through the Science Fund. These efforts can have a positive impact on gross domestic R&D expenditure (GERD) figures, although more recent information on R&D budget allocations remains limited. Up to the end of 2023, the Science Fund launched ten programmes and approved nearly EUR 75 million in funding for 415 projects; these were awarded based on transparent evaluation criteria and in line with international good practice. In total, over 2 700 researchers have benefited from this support.

A number of efforts are under way to strengthen Serbia's overall low capacity for **human resources for research and innovation**. Since 2019, the number of scientific researchers is rising again after several years of stagnation. Against this background, the Science Fund's PROMIS programme, first launched in 2020, continues to provide young researchers with financial support to launch research projects. As of end-2023, more than 300 young professionals have received over EUR 9 million in support. Based on this success, a new phase of PROMIS was launched at the end of 2023 with a budget of EUR 4 million for the following two years (Science Fund, 2023[5]). In related efforts, MoSTDI offers scholarships to doctoral research and co-finances researchers to participate in conferences or professional training. Meanwhile, under the umbrella of the SAIGE programme, training in grant proposal writing, applications, and project management is provided. In addition, 161 Serbian researchers have successfully participated in the Marie

Skłodowska-Curie Actions (MSCA).[3] Serbia also encourages linkages with its diaspora for research and development projects. Its Programme of Cooperation with the Serbian Scientific Diaspora, launched in 2020 to foster research mobility and provide vouchers for short-term study visits, reached 88 Serbian researchers abroad. The programme's success led to a second phase of the initiative, launched in 2023 (Science Fund, 2023[6]).

In addition, Serbia actively participates in research-related **international and regional collaboration** initiatives. Its "Power of Knowledge" strategy is aligned with the priorities of the European Research Area (ERA), and the economy successfully participates in Eureka[4] and the European Cooperation in Science and Technology (COST).[5] Moreover, Serbia remains the largest WB6 beneficiary under EU framework programmes. Over 600 participants, one-third of whom come from the private sector, received over EUR 135 million under the Horizon 2020 framework, while 318 projects have already benefited under Horizon Europe since 2021 (Horizon 2020, 2023[7]). Serbia also actively participates in the European Strategy Forum on Research Infrastructures (ESFRI)[6] and adopted a National European Research Infrastructure roadmap in 2018. However, it has yet to introduce the European Research Infrastructure Consortium (ERIC) Regulation into national law, which would enable the establishment of pan-European research infrastructures.

Sub-dimension 9.3: Knowledge exchange and co-creation

Serbia has made progress in strengthening linkages between public scientific research and the private sector, with the Innovation Fund remaining the economy's most important vehicle to provide **incentives for business-academia collaboration**. Since 2016, the Fund has offered both competitive and collaborative grants to engage with scientific researchers and businesses on joint technological projects with a realistic commercialisation strategy. To date, it has supported 63 projects with over EUR 16 million in financial backing, several of which have been closely aligned with Serbia's strategic STI framework and the economy's SDG ambitions. Examples of such projects include, for instance, one aimed at developing an AI-based energy management platform that automates the search for optimal patterns in energy consumption and production. Another initiative focuses on developing an innovative biocontrol product for plant disease and pest control in an eco-friendly food supply chain.

In addition, the Innovation Fund continues to operate an innovation voucher scheme that has benefited over 1 000 SMEs with more than EUR 5 million. Under the umbrella of the Proof-of-Concept programme, implemented in 2020, the Fund also offers financial and mentoring support to test research projects' commercialisation and technological readiness. The Proof-of-Concept programme has supported 93 projects thus far, while the Technology Transfer Facility (TTF) programme has provided over EUR 1.7 million to 72 beneficiaries to date. In 2020, an independent evaluation of the Innovation Fund's portfolio found its ongoing programmes performed well. Since the last assessment, the Innovation Fund has launched a set of additional programmes, including the Serbia Venture Programme, Katapult and Smart Start. Although these programmes target start-ups with high growth potential rather than industry collaboration with R&D institutes specifically, it can be expected these large-scale measures will create spillover effects in the medium term as the innovation ecosystem expands.

Serbia has also taken steps to strengthen intellectual property (IP) protection. The Intellectual Property Office offers some assistance for patenting and commercialisation, and further notable revisions have been introduced to the Patent Law in 2021. The revisions brought the economy's IP legislation broadly in line with the EU *acquis*, covering research in R&D institutes, universities and private companies and ensuring that proceeds from commercialised intellectual property are equally split between the creator and the organisation holding the patent. The latter revision offers a non-financial incentive for scientists to collaborate with private firms. However, enforcement capacity remains weak despite efforts to improve performance and co-ordination across enforcement bodies and align IP enforcement with relevant EU directives.

Serbia continues to operate a strong **research and innovation (R&I) infrastructure for business-academia collaboration**. Its four Science and Technology Parks (STP) in Belgrade, Čačak, Niš and Novi Sad have outgrown capacity, and Serbia has secured a EUR 70 million loan from the European Bank for Reconstruction and Development (EBRD) in 2023 to expand its existing STP network. Parts of this investment will also contribute to constructing a new state-of-the-art biotechnology park and centre of excellence (Box 10.1). In addition, a dedicated Research and Development Institute for Artificial Intelligence in support of the AI strategy was established in 2021, with the aim to research and apply the latest artificial intelligence technologies and become a global centre of excellence for scientific research and technology transfer related to AI and machine learning. While technology transfer services are available at all major universities in Serbia but remain underutilised, the Innovation Fund continues to run the TTF programme successfully. This programme is designed to build transactional capabilities in technology transfer by adopting an integrated approach that engages researchers and local and international technology transfer practitioners in Serbia.

Box 10.1. Expansion of R&D brick and mortar infrastructure in Serbia and construction of the region's new bioeconomic centre Bio4 campus

In 2023, the European Bank for Reconstruction and Development (EBRD) provided a loan of EUR 70 million to the government of Serbia to be used to finance the construction and purchase of new equipment for the expansion of existing STP facilities in the cities of Niš and Čačak – which have currently reached almost full capacity – and the development of a new STP facility in Kruševac. An additional EUR 10 million is available to be used for the expansion of existing STPs in Belgrade and Novi Sad and the development of new STP facilities within the new biotechnology park Bio4 in Belgrade. EBRD's financing is complemented by a technical assistance project to strengthen the innovation ecosystem in Serbia and reinforce the STPs' practices in their alignment with international best practices for their establishment, management and operation. The project will focus on the following four elements: i) performance management, ii) strategic orientation and financial sustainability, iii) linkages between STPs and the wider Serbian innovation ecosystem, and iv) skills development and linkages with universities.

The Bio4 campus construction commenced in late 2023 near the Torlak Institute in Belgrade and is expected to be completed by 2026. The estimated value of the new bioeconomic hub is around EUR 450 million, with EUR 200 million secured from a loan by the Development Bank of the Council of Europe. This represents Serbia's most significant individual investment in science. The construction is divided into several phases, with the first phase involving 110 000 square metres of laboratory space, business areas accommodating seven faculties, and nine scientific institutes. More than 300 laboratories will be built, where experts from Serbia, initially including over 1 000 Ph.D. students, will work on advancing innovations and improving the quality of life in Serbia. The future occupants of the Bio4 campus include biological, pharmaceutical, chemical, medical, agricultural, technical-metallurgical, and sport and physical education faculties, the STP Belgrade, and nine institutes specialising, among others, in genetic engineering, nuclear energy applications, medical research, and artificial intelligence.

This ambitious expansion of the institutional support network will assist regional development and the retention of talent and entrepreneurship in Serbia, by providing critical research and business infrastructure for the incubation and growth of innovative start-ups and businesses in the economy.

Source: Pyrkalo (2023[8]).

Serbia shows a strong commitment to **open science** policy, the principles of which are included in the Law on Science and Research. Serbia adopted the National Platform for Open Access in 2018, which mandates that all publicly funded research, including via the Science Fund, be open access. Subsequently, more than 80 institutions have registered publications in 2023, up from just 10 in 2018. Furthermore, in 2020, a dedicated team for Open Science in Serbia was established within the (formerly called) MoESTD, to outline all necessary improvements, measures and regulations related to open science based on the principles of the European Open Science Cloud project.

Overview of implementation of Competitiveness Outlook 2021 recommendations

Serbia has fully or partially implemented all Recommendations of *Competitiveness Outlook 2021* (Table 10.2). Most notably, efforts have been made to fully operationalise the Science Fund, which now works with the Innovation Fund as the economy's two key implementation vehicles for STI policy. Public sector investments in research and development have increased significantly, underlining the government's commitment to science and innovation. However, R&D investments remain low, particularly from the private sector.

Table 10.2. Serbia's progress on past recommendations for science, technology, and innovation

Competitiveness Outlook 2021 recommendations	Progress status	Level of progress
Further strengthen the Science Fund	The Science Fund has become fully operational, with adequate human and financial resources.	Strong
Implement the Action Plan of the Smart Specialisation Strategy	Implementation of the STI framework, including the Smart Specialisation Strategy, is advancing well and is supported by an up-to-date Action Plan.	Strong
Increase investment in R&D	While overall investments in R&D remain low, Serbia's Government committed to increasing budget allocations for R&D by 50% over the next five years, and public sector spending has already begun to increase.	Moderate
Build capacity for better enforcement of intellectual property protection	Efforts to further align IP enforcement with the relevant EU directives and to increase internal co-ordination capacity are ongoing; however, prosecution capacity remains limited.	Limited
Stimulate more intense co-operation between industry and academia	Serbia's four-pillar STP network has grown substantially in recent years, with expansion plans well under way.	Moderate

The way forward for science, technology, and innovation

Serbia has progressed well with the implementation of its STI agenda, and the policy framework is showing signs of maturity and consolidation. Nevertheless, further efforts are needed, especially in creating opportunities for the commercialisation of research and public-private co-creation. Going forward, Serbia should focus its efforts on the following:

- **Prioritise STI initiatives of strategic importance**, including digitalisation, frontier technological development and sustainability. Serbia's participation in the UN Global Pilot Programme on STI for SDGs Roadmaps has laid the foundations for forward-looking STI initiatives with high relevance for global challenges. While both Serbia's Innovation and Science Funds already support relevant projects, the further tailoring of financing programmes – for instance, by introducing higher incentives or dedicated programme foci – would support the economy's efforts to stimulate R&D in priority areas, such as emerging technologies and green transition, and boost awareness among both academic and business representatives.

- **Adhere to the commitment to increase public funding for research and innovation** by 50% until 2028. Serbia has significantly increased funding for STI activities, and both the Innovation and Science Funds are operating large-scale funding programmes. However, to maintain the momentum of these schemes and provide long-term funding prospects for R&D to the economy, Serbia must work towards increasing GERD with a credible, time-bound and openly accessible funding plan.
- **Attract private investments into research and innovation (R&I)**. Increasing private sector spending on research and innovation remains a significant challenge for Serbia. While measures taken in recent years are showing encouraging signs, additional efforts to target R&D-intensive foreign direct investment (FDI) are needed to promote Serbia's image as an R&D location and boost private sector R&D activities via large-scale FDI investments. A network of cutting-edge, fully funded and well-equipped and staffed centres of excellence, such as the new Bio4 campus or AI institute, can attract international talent and corporate investments in R&D-intensive industries.
- **Consolidate improvements in the Intellectual Property (IP) protection regime**. Additional efforts to improve the co-ordination of law enforcement bodies, build capacity and digitalise information on intellectual property would help establish a track record in enforcing IP regulation. Improved enforcement can incentivise and strengthen the confidence of businesses to invest in research and development activities in the economy.
- **Develop a comprehensive action plan to promote open science**. Providing open access to science promotes academic integrity, builds trust in the public research system within the business community, and raises public awareness about the importance of research among the general public. A dedicated plan of actions, including measures such as training, digital literacy, awareness raising for researchers, and capacity building for research and development institutes would complement Serbia's National Platform for Open Access, and stimulate more co-operation within academia and beyond. The Netherlands can provide a relevant example of good practices in this regard (Box 10.2).

Box 10.2. The Netherlands' approach to Open Science

The Netherlands has actively spearheaded and integrated open science into public policies for several years, manifested in a National Plan Open Science developed under the National Programme for Open Science (NPOS), first launched in 2017. The Plan outlines the Dutch government's vision and strategic goals for advancing open science, built around four key pillars:

- **Open Access**: Ensuring that all publicly funded research publications are freely accessible to everyone.
- **FAIR Data**: Promoting the Findable, Accessible, Interoperable, and Reusable (FAIR) principles to enhance the quality and reuse of research data.
- **Recognition and Rewards**: Reforming the academic reward system to value and incentivis open science practices.
- **Skills and Training**: Providing researchers with the necessary skills and training to adopt open science practices.

Building on these principles and strengthening local capacity to foster open science, the Netherlands eScience Centre and the Research Data Netherlands consortium have developed and maintained national infrastructures to support open science. These platforms offer tools, services, and expertise to help researchers manage, share, and analyse their data effectively.

Dutch universities and research institutions have also negotiated with publishers to promote open access publishing. The Association of Universities in the Netherlands has negotiated transformative agreements with major publishers, ensuring that Dutch researchers can publish their work on open access platforms without additional costs.

Moreover, many Dutch funding agencies, including the Netherlands Organisation for Scientific Research, have implemented open research data policies. These policies require researchers to make their data openly available through repositories or archives to enhance transparency and reproducibility in research.

Serbia could take inspiration from several of these initiatives as it seeks to develop its open data policies. Possible benefits include increased collaboration between researchers, increased accessibility and reusability of scientific data as well as improved integrity and transparency in scientific research.

Source: National Programme Open Science (2022[9]).

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Notes

[1] Based on the understanding that STI plays a significant role in attaining the SDGs, the United Nations Inter-Agency Task Team launched the Global Pilot Programme on Science, Technology and Innovation for SDGs Roadmaps. The programme initially involved five pilot countries (Ethiopia, Ghana, India, Kenya and Serbia). These pilots provide inputs for developing roadmaps in other economies that successfully integrate STI into national actions addressing the SDGs (https://sdgs.un.org/universal/work-stream-9-sti-policy-frameworks-action-plan-and-roadmaps-32671).

[2] The SAIGE Project aims to foster Serbia's growth and competitiveness by improving the relevance and quality of scientific research, and to promote business innovation and growth finance accessibility. The project implementation has started in 2020 and is led by the Ministry of Science, Technological Development and Innovation (https://projects.worldbank.org/en/projects-operations/project-detail/P170185).

[3] The MSCA is an EU programme that provides grants to support research careers and encourages transnational, intersectoral and interdisciplinary mobility (https://marie-sklodowska-curie-actions.ec.europa.eu).

[4] Eureka is the largest intergovernmental network for co-operation in R&D and innovation in the world. It is present in over 45 economies, where it provides access to public funding, promotes collaboration and

innovation and offers advice, through various programmes (such as Eureka Clusters, Globalstars, InvestHorizon) (https://www.eurekanetwork.org/).

[5] COST is a funding organisation for the bottom-up creation of research networks, called COST Actions. These networks offer an open space for collaboration among scientists across Europe (and beyond), thereby fostering research advancements and innovation (https://www.cost.eu).

[6] ESFRI was established in 2002 with the aim of supporting the scientific integration of Europe and strengthening its international outreach. It brings together national governments, the scientific community and the European Commission, to promote a coherent and strategy-driven approach to policy making on research infrastructures in Europe (https://www.esfri.eu).

11 Digital society

Digital transformation, driving efficiency and productivity through the adoption of digital technologies and data utilisation, holds promise for fostering economic activity and competitiveness. This chapter assesses the scope and quality of the policy framework and strategies, as well as the implementation and adoption by Serbia. The first sub-dimension, access, explores government policies and initiatives to enable network infrastructure investment and broadband services take-up and to increase data accessibility. The second sub-dimension, use, review the government's plan to implement programmes to develop a user-centric digital government and help businesses achieve a digital transformation. The third sub-dimension, society, assesses whether governments have planned and implemented programmes to reduce the digital divide and create an inclusive society through green digital technologies. The fourth sub-dimension, trust, examines the economies' frameworks and how they are being implemented to protect data and privacy, build trust in e-commerce, and ensure cybersecurity through effective digital risk management systems.

Key findings

Serbia has slightly improved its performance in the digital society policy dimension since the last assessment (OECD, 2021[1]).[1] The country has made strides in data accessibility, digital government, privacy and data protection, and cybersecurity. Its performance particularly stands out in the newly assessed field of emerging digital technologies. However, there has been a decline in its performance in digital inclusion. Serbia's overall performance indicates that the economy is a Western Balkans regional leader in the digital society policy dimension (Table 11.1).

Table 11.1. Serbia's scores for digital society

Dimension	Sub-dimension	2018 score	2021 score	2024 score	2024 WB6 average
Digital society	10.1: Access			3.5	2.9
	10.2: Use			3.5	2.3
	10.3: Society			1.8	1.7
	10.4: Trust			3.5	2.7
Serbia's overall score		**2.4**	**3.0**	**3.2**	**2.5**

The **key findings** are:

- The enactment of the new Electronic Communications Law in 2023 is a major milestone toward establishing a gigabit society in Serbia. While the law aligns with the European Electronic Communications Code, essential reforms are still pending to foster an investment-friendly environment, minimise risk, and reduce the regulatory and administrative burden of deploying high-capacity networks.
- The successful implementation of the e-government programme has boosted the digitalisation of public administration and the delivery of e-services. Data openness is reinforced, and opportunities for the public and private sectors to share and reuse a wide range of datasets are readily available. An eager ecosystem of stakeholders strongly supports data-driven innovation.
- Serbia stands out as a regional leader in establishing a policy framework to ensure reliable and responsible use of emerging digital technologies, such as artificial intelligence (AI), harnessing their potential benefits for the greater good. Effective policy implementation has led to the establishment of the Research and Development Institute for Artificial Intelligence in 2021, which serves as an incubator for start-up companies specialising in AI and promotes cooperation between the public and private sectors in this field.
- The new Law on Consumer Protection enacted in late 2021, along with subsequent regulations for distance contracts, enhances the protection of online consumers in Serbia and provides opportunities for them to exercise their rights, including out-of-court resolution of disputes. However, awareness-raising initiatives for online consumer protection and the capacity building of employees in both the public and private sectors remain insufficient.
- The new cybersecurity strategy aims to foster legal alignment with the EU *acquis*, increase protective measures for critical information infrastructure, strengthen capacity-building initiatives in the public and private sectors, and promote public-private partnerships. Nevertheless, further reforms are still pending to complete the legal and regulatory alignment with the EU framework.

State of play and key developments

Serbia leads the way in digital society policies within the Western Balkan region, with its information and communication technology (ICT) sector accounting for a robust 5.1% of the national GDP in 2021 (Statistical Office of the Republic of Serbia, 2024[2]). As the largest net exporter industry in the economy, the ICT sector employed over 95 000 individuals and witnessed a remarkable 45% year-on-year increase, exporting nearly EUR 2.7 billion in ICT services in 2022 (European Commission, 2023[3]) .The sector's growth trajectory persisted in 2023, with projected ICT exports exceeding EUR 3.6 billion (RS, 2023[4]). In fact, the ICT sector has outpaced agriculture in its contribution to the nation's GDP for the first time. By the end of 2023, Russian nationals registered some 9 000 new businesses, operating mostly in the IT sector, which contributed to the ICT's sector and exports' growth. However, this remarkable growth can also be partially attributed to Serbia's performance in the artificial intelligence (AI) and biotechnology domains.

The economy has invested in expanding its high-speed optical backhaul network, bringing fibre broadband to 26.44% of all broadband connections in 2022. The government remains committed to digitalising public administration to drive innovation, competitiveness and growth.

However, despite efforts to increase the share of individuals with basic or above-basic digital skills in Serbia, there has been a concerning decline, from 41.3% in 2021 to 33.76% in 2023. This contrasts with the EU average, which increased from 53.92% in 2021 to 55.35% in 2023 (Eurostat, 2024[5]). These statistics highlight a notable disparity in digital skills development and emphasise the pressing need to reassess current policies and implement robust initiatives to enhance digital literacy.

Sub-dimension 10.1: Access

Serbia has made substantial progress in enhancing its **broadband infrastructure** since 2021, notably extending fibre network access to rural and remote areas. According to Serbia's telecoms regulator, more than 70% of fixed broadband Internet subscribers use connections faster than 30 Mbps (megabits per second), with over 50% exceeding 100 Mbps (RATEL, 2023[6]). The Statistical Office reports an increase in broadband connections for households in rural settlements, rising from 74.5% in 2021 to 79.8% in 2023. The government remains committed to the vision outlined in the Next Generation Networks Strategy, concluded in 2023, while currently preparing the new broadband policy framework towards a Gigabit Society by 2030. The Ministry of Information and Telecommunications (MIT) launched the EU and EBRD co-funded the Rural Broadband Rollout (RBB) project in December 2022.[2] The project aims to construct fibre networks to provide high-speed broadband access to 706 rural settlements by the end of 2025. This infrastructure will connect 728 schools and public buildings with ultra-fast broadband speeds above 1 Gbps (gigabit per second), while over 118 000 households will gain access to 50 Mps connectivity that will gradually upgrade to at least 100 Mps by 2025. The project draws from private sector investments alongside mid-mile investments made by the government for the development of last-mile network connectivity. In early 2024, 161 rural settlements are already connected with high-speed Internet, reaching around 25 000 households, and nearly 70 000 inhabitants (RS, 2024[7]). Legislation on state aid rules for developing broadband infrastructure is not yet aligned with the revised EC Guidelines enforced in 2023,[3] meaning that the project is currently developed on the pre-existing EC Guidelines from 2013.[4] The revised guidelines adjust the threshold for public support to fixed networks according to the latest technological and market developments, introduce a new assessment framework for deploying 5G mobile networks, and simplify rules to incentivise the adoption of broadband services.

Despite positive developments in broadband access, challenges persist. Issues that slow down or even discourage further broadband network investments include restricted access for users and operators to infrastructure like optical fibres, ducts, public operators' infrastructure, and dark fibres, alongside lingering constraints imposed by environmental and municipal planning legislation. Although a working group has identified and recommended measures to remove these obstacles, joint decisions among relevant institutions for their implementation are still pending. Furthermore, the draft Law on Broadband Development and subsequent regulations are not anticipated for adoption before the second quarter of 2024. These aim to align with the EU Broadband Cost Reduction Directive,[5] effectively reducing costs and regulatory and administrative burdens for network infrastructure investors.

Serbia continues on the path of aligning its **electronic communications regulatory framework** with the EU *acquis*, and the recent enactment of the new Law on Electronic Communications in May 2023 marks a positive step toward compliance with the European Electronic Communications Code (European Commission, 2023[3]). The new Law encourages broader Internet connectivity and incentivises private sector investments, outlining mandatory obligations for broadband network operators and refining the approach to radio frequency spectrum and numbering for developing new services, fostering competitiveness. However, the regulatory reform remains incomplete without adopting the necessary accompanying regulations. The Regulatory Authority for Electronic Communications and Postal Services (RATEL) has yet to align voice termination rates across fixed/wireless networks with the EU's Delegated Regulation[6] and to update the analysis of product and service markets within the electronic communications sector in line with the updated EC Recommendation[7] on relevant markets. The Law also reinforces the role of RATEL and aims to ensure its financial and operational independence, an aspect that remains subject to recurring scrutiny (European Commission, 2023[3]). RATEL is well staffed with 150 employees at the end of 2023, but staff retention faces challenges due to the imposed salary cap for RATEL personnel.

Despite adopting the new Law on Electronic Communications, the development of 5G has suffered significant delays. Regulations for simplifying and accelerating 5G network installations, including specifications for small-area wireless access points (small antennas), are yet to be prepared. The Ministry is drafting the rulebook on minimal conditions for issuing individual permits for spectrum use, thereby holding back the public bidding procedure for the 5G radio frequency spectrum for 2024.

Serbia has made notable advancements in developing **data accessibility** in the past three years, primarily driven by data openness objectives in the e-Government Development Programme 2021-25 and supported by measures outlined in the Strategy for Public Administration Reform 2030 and the Artificial Intelligence Strategy 2020-25. While the existing legal framework enables data sharing and reuse through legislation on e-Government and e-Documents, and secondary regulations that delineate the format of published datasets, data governance, and the operation of the national open data portal, it is not fully aligned with the EU Open Data Directive[8] or the EU Data Governance Act.[9] This alignment will introduce rules for government-held data marketplaces, delineate the reuse of high-value datasets, boost the development of trustworthy data-sharing systems and facilitate the use of public sector data that cannot be made available as open data, such as health data. Efforts are under way to analyse and amend the Law on e-Government in line with EU legislation, encompassing the definition of high-value datasets, governance and accessibility. Serbia is the first Western Balkan (WB) economy to establish a geospatial data-space, GeoSrbija,[10] curated by the Republic Geodetic Authority of Serbia, promoting the sharing and reuse of relevant data.

Serbia has developed its national open data portal[11] into the most advanced platform of its kind in the WB region. As of early 2024, it offers more than 2 400 open datasets across various thematic topics, a significant increase from the 1 643 datasets available in 2021. The portal presents 42 use-case examples, demonstrating the practical application of open data reuse and stimulating interest in data innovation. Developers can access open datasets published in machine-readable formats through an application programming interface (API) that facilitates the development of innovative services. The Office for IT and e-Government (ITE) operates the portal and offers direct support to data publishers, including an API Guide to support holders of real-time or dynamic data. It further supports data-ecosystem participants from the public and private sectors through the Open Data Hub[12] (ODH). The ODH is a platform offering training on the open data portal, educational activities on data reuse, and various events and meet-ups (hackathons, datathons, Open Data Week) organised in the past three years. Serbia's progress in developing data openness and accessibility is evident in the 2023 Open Data maturity report (Page et al., 2023[8]), where Serbia ranks 25th among 35 countries with a 75% overall score across the four dimensions of open data maturity assessed.[13] Although slightly below the EU average score of 79%, Serbia has significantly improved its score since 2022. This improvement primarily refers to the portal and quality dimensions and stems directly from the creation of guidelines, active assistance to data providers in publishing high-quality metadata, a higher number of automatically sourced datasets, and the availability of more datasets with open licences in a structured format.

Sub-dimension 10.2: Use

Serbia stands at the forefront of **digital government** development in the WB region, maintaining a strong performance in digitalising public administration and services over the past three years. The European Commission's 2023 eGovernment benchmark report, monitoring Europe's progress in digitalising public services (Capgemini, Sogeti, IDC and Politecnico di Milano, 2023[9]) reveals that Serbia made significant progress in digitalising public services compared to 2022. Serbia is approaching the EU average in user centricity, transparency and key enablers such as eID, e-Documents, pre-filled forms and digital post, although it still lags behind in developing cross-border services. Additionally, Serbia reported the highest percentage of individuals that used the Internet to interact with public authorities (51.1%), compared to WB economies and the EU average (50.65%) in 2022 (Eurostat, 2024[10]). These positive results in digital government development were underpinned by the Strategy for Public Administration Reform (PAR) 2021-30 and the Programme for Simplifying Administrative Procedures and Regulations "e-PAPER". Moreover, they are currently boosted by the e-Government Development Programme with its 2023-25 action plan. Implementing these policies, driven by the pandemic, the ITE Office was mandated to prioritise and accelerate the introduction of citizen-centric digital services. Those services are well grounded on a legal framework that aligns with the EU *acquis*, comprising the Law on e-Government and complementary regulations. The national eID scheme aligns with the eIDAS[14] regulation, and the eID system, complete with mobile eID, is seamlessly integrated into the e-government portal and the population register. Currently, many databases are connected to the government information system, and approximately 340 services are available on the national e-government portal. 80% of these enable submission of forms and e-payment, although in some cases, a visit to the counter might still be required to complete the service (MPALSG, 2023[11]). The uptake of the eID system is rapidly increasing, with over 830 000 eIDs activated so far.

Despite these developments, several challenges persist. While progress has been made in establishing a robust technical framework and ICT infrastructure – ensuring interoperability and further integration of electronic registers – maximising the utilisation of digital government infrastructure and raising awareness of the benefits of digitalisation require further attention. The ex post assessment of the e-Government Programme for 2020-22, conducted in March 2022, identified inadequate co-ordination among public authorities due to a lack of well-developed strategic management of e-Government reforms (Mysun En Natour, 2022[12]). Moreover, the mid-term implementation report of the PAR strategy up to June 2023, although positive in terms of implementation progress, highlighted the need to strengthen monitoring of service provision quality and user satisfaction, and to adopt a centralised approach with clear co-ordination mechanisms for service provision (MPALSG, 2023[11]). Furthermore, the same report unveiled persisting impediments to digitalisation, including a lack of pro-digitalisation culture among public sector officials, a shortage of digital skills among civil servants, and challenges in recruiting and retaining professional IT staff. In response, an electronic platform[15] for constant visibility and monitoring of planned activities in public administration reform and public finance was established, to support informed decision making and improved results.

Serbia has made progress in supporting **digital business** development in the current assessment period. However, the impact of implemented activities remains limited due to the insufficient allocation of financial resources. Various policy documents come together to form a framework supporting enterprises, with a particular emphasis on small and medium-sized enterprises (SMEs), in digitalising their business operations and engaging in technological innovation. The Industrial Policy Strategy 2021-30 and the Strategy for the Development of Information Society and Information Security 2021-26 delineate measures aimed at micro-SMEs digitalisation, e-business development, and enhancing digital skills for citizens and employees. Despite establishing the Council for Development of Digital Economy in 2021 to strengthen horizontal co-ordination, inadequate monitoring of the implementation of policy initiatives and programmes and the complete absence of impact assessments in this field necessitate immediate action.

The Centre for Digital Transformation (CDT) of the Chamber of Commerce and Industry successfully implemented the SME Digital Transformation Support Program in 2023, building on the accomplishments of the preceding SPEED 1.0 and SPEED 2.0 programmes in 2021 and 2022. These initiatives have provided valuable support to SMEs across sectors, facilitating equipment and software purchases and offering consulting services for digitalisation and engagement in digital innovation. Over the six years of its operation, more than 4 500 companies have applied for CDT programmes (Serbia Monthly, 2023[13]), indicating significant demand in similar initiatives. However, the allocation of financial resources falls short of meeting the industry's demand. The Ministry of Information and Telecommunications (MIT), overseeing Information Society policy implementation, reported that 447 businesses applied for consulting services in the framework of the micro-SME Digital Transformation programme in 2022, and 272 projects received funding (MIT, 2022[14]). Additionally, the Digital Academy of the CDT, through its Fundamentals of Digital Transformation programme, offers free-of-charge digital skills training to managers and SME owners, contributing to a more digitally adept business landscape. Serbian businesses are also at the forefront of e-commerce engagement compared to the Western Balkan region, with 28.9% of enterprises with more than ten employees selling on line. This figure surpasses the EU average of 22.9% in 2023 (Eurostat, 2024[15]).

Serbia boasts a strong ICT industry with a dynamic IT ecosystem. The landscape includes 4 Science Technology Parks, 23 start-up centres, 5 IT clusters and more than 20 co-working hubs. The policy framework nurtures ICT industry growth, emphasising innovation, internationalisation, and Intellectual Property Rights (IPR) management. In 2022, 24 events were organised by competent authorities abroad to support businesses' internationalisation, while 17 domestic events were organised to promote participation in business delegations abroad (MIT, 2022[14]). The Innovation Fund stands out as a pivotal instrument, notably supporting start-ups and SMEs, with ICT SMEs constituting most of its beneficiaries (51% of the total in 2022). The government has adopted the Strategy for the Development of Information Society and Information Security 2021-26 to support digital transformation of SMEs and electronic business development. Nevertheless, the challenges facing the ICT sector remain. The predominant constraint for ICT companies lies in the scarcity of IT professionals and the misalignment of ICT graduates' skills with labour market needs (Matijević and Šolaja, 2022[16]). Addressing this gap, the government is implementing key initiatives aimed at increasing the capacities of technical faculties in universities, enhancing programming in high schools, and implementing IT Retraining[16] for the employed and unemployed according to surveyed industry needs, which has already trained 2 200 participants in two successful rounds completed so far.

Serbia has positioned itself as a pioneer in supporting **emerging digital technologies** in the Western Balkans, not only adopting a comprehensive policy framework for artificial intelligence (AI) development but also advocating ethical guidelines to ensure the responsible and reliable use of this transformative technology. Serbia ranks 57th out of 172 countries on the Government AI Readiness Index 2023, which is the best ranking in the Western Balkans (Oxford Insights, 2023[17]). The government adopted the Strategy for the Development of Artificial Intelligence 2020-25 to harness the potential benefits of AI for the economy's advancement. The strategy encompasses over 30 projects, investing EUR 5 million in grants and equity for AI start-ups in Serbia. It also promotes the introduction of AI masters and Ph.D. programmes and boosts AI talent by retraining workers in AI skills. In 2021, the government took a significant step forward in establishing Serbia's Research and Development Institute for Artificial Intelligence. This institute serves as a catalyst for collaboration between public and private sector organisations, functioning as an incubator for AI start-ups. Actively engaging with international AI development events, the AI Institute plays a crucial role in raising awareness about diverse AI applications and building further on the skills of the existing IT talent pool in Serbia. Simultaneously, the Innovation Fund is pivotal in advancing the AI landscape by financing the GovTech programme, among other initiatives. This initiative is geared towards applying disruptive technologies to tackle public sector challenges, fostering collaboration between public and private entities, and ultimately fostering increased digitalisation. Through these efforts, Serbia is shaping a cohesive and forward-looking narrative for AI development and deployment. In December 2020, Serbia adopted the Law on Digital Assets to empower its innovative ecosystem and foster a welcoming business environment. This law recognises virtual currency and digital tokens as legal digital assets, paving the way for emerging opportunities in blockchain technology and creating new financing options for Serbian start-ups.

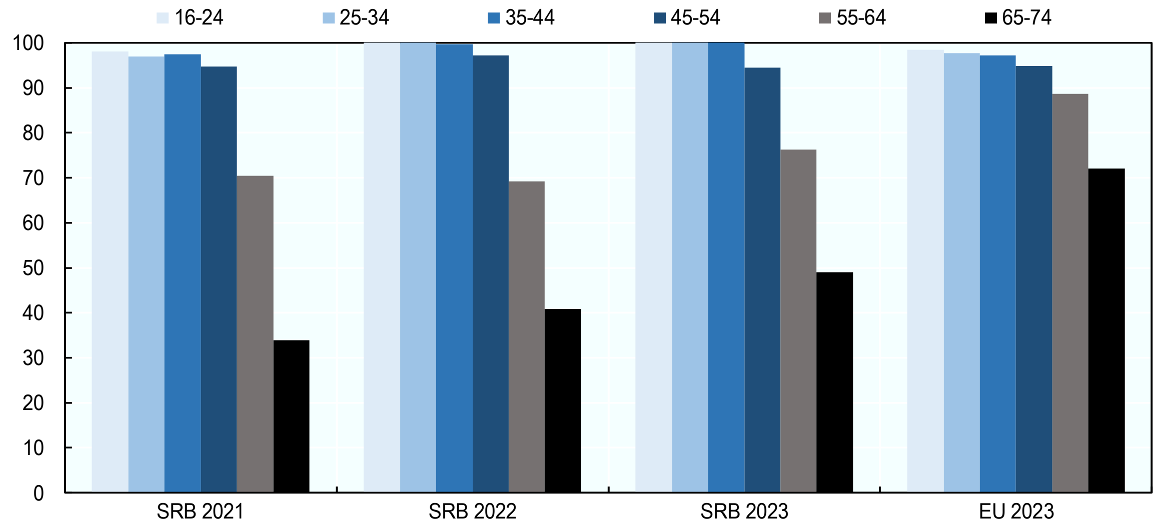
Sub-dimension 10.3: Society

Serbia has yet to yield significant tangible outcomes in its efforts toward **digital inclusion**, despite embedding measures to mitigate digital exclusion risks in various strategic documents. While the policy framework generally addresses digital inclusion challenges through activities implemented by different institutions, horizontal co-ordination and monitoring mechanisms for these activities are absent. Although social inclusion policies and action plans are monitored by the Public Policy Secretariat (RSJP), neither this body nor any other public institution is tasked with monitoring digital inclusion and performing relevant impact assessments. It is positive that the government has acknowledged the importance of enhancing digital literacy for vulnerable groups; it has outlined digital skills development initiatives in digital society policies, such as the Strategy for the Development of the Information Society and Information Security 2021-26 and the Strategy on the Development of Digital Skills for 2020-24. Additionally, measures contributing to digital inclusiveness are integrated into other strategic documents fostering equitable access for persons with disabilities, universal access to high-speed communications, child safety online, and access to e-government services for all citizens. Tangible results of policy implementation include the Ministry of Information and Telecommunications (MIT) allocating RSD 14 million (around EUR 120 000) to associations for the implementation of programmes aimed at raising the level of digital literacy and digital competencies of women in rural areas, training 1 530 women in the period 2021-22 (MIT, 2022[14]). However, no other vulnerable groups have had access to similar widespread training initiatives. Measures are planned but to be implemented to support groups at risk of digital exclusion, with financial subsidies for acquiring digital technologies; digital coupons for purchasing PCs, laptops or tablets; and free-of-charge digital skills training programmes.

Moreover, while Serbia has adopted EU guidelines[17] on e-accessibility since 2018, implementation is still lagging. Although some e-accessibility elements are embedded in the national e-government portal, the website of the Serbian Government[18] and the Office for IT and e-Government (ITE), full compliance with international standards such as the Web Content Accessibility Guidelines (WCAG) 2.0 is yet to be achieved in all public sector websites and applications. Furthermore, the legal framework lacks certification schemes for accessibility of ICT products and services, and public procurements have yet to embed such accessibility requirements. Notably, Internet usage has been increasing across age groups in the period 2021-23, according to the Statistical Office of Serbia. In 2023, 85.4% of individuals in Serbia used the Internet in the last three months, compared to the EU average of 91.41% (Figure 11.1). Additionally, while Internet users in the 65-74 age group marked the most significant increase, from 33.9% in 2021 to 49% in 2023, they are still behind the EU average in 2023 (72.07%).

Figure 11.1. Internet users (in the last three months) in Serbia according to age group, 2023

Share of age group expressed in percentage



Sources: Eurostat (2024[18]); Statistical Office of the Republic of Serbia (2024[19]).

StatLink https://stat.link/h1nbp6

Serbia currently lacks policies to ensure the integration of **green digital technologies** and environmentally sustainable practices into the digitalisation process. Programmes and policy initiatives designed to foster a green digital sector and harness its benefits for the green transition have yet to be developed. Existing digital society policies overlook the environmental impact of the ICT sector and the effect of the growing use of digital technologies on climate change. The current perspective on digitalisation primarily positions it to achieve eco-friendly outcomes. The government's Green.gov.rs concept illustrates this approach, featuring an online platform for measuring the environmental benefits derived from the digitalisation of public administration and the adoption of e-government services. Policies and programmes, such as the Circular Economy Programme 2022-24 and Innovation Fund initiatives, are promoting the use of technological innovations, including ICTs, to improve the environmental footprint of existing public administration and industrial processes. On a different note, Serbia has adopted a Waste Management Programme for the period 2022-31 aimed at gradually establishing a waste management system in alignment with the EU *acquis*, including waste electrical and electronic equipment (e-waste). According to the Environmental Protection Agency, municipal e-waste accounted for 5.7% of the total waste streams in Serbia in 2020. Moreover, e-waste management infrastructure has yet to be fully developed or, in rural areas, is entirely absent (Marinković T., 2022[20]). The Programme acknowledges that household e-waste collection remains insufficient, and the government has initiated establishing a relevant system. Currently, waste electrical and electronic equipment management is addressed in the Law on Waste Management, which was last amended in April 2023 and reflects the two main principles of Extended Producer Responsibility (EPR) for managing special waste streams. However, these principles have yet to be fully implemented in e-waste streams.

Sub-dimension 10.4: Trust

Serbia has significantly enhanced **privacy and data protection** since 2021, improving alignment with the EU *acquis*, enhancing implementation of the framework, and investing in civil servant training and awareness-raising campaigns. Nevertheless, while the situation regarding the protection of individuals' rights has improved compared to previous years, it is not yet entirely satisfactory. The new Personal Data Protection (PDP) law, adopted in August 2023, is aligned with the EU GDPR,[19] and accompanying regulations complete the alignment. While the Law is in the initial phase of implementation across the public and the private sectors, harmonisation of legacy legislation with the new law is pending. Additionally, challenges regarding law enforcement in personal data protection include the small size of imposed fines, unlike the GDPR, and the significant number of exceptions to the application of the Law, discouraging data practitioners' compliance efforts. The Commissioner for Information of Public Importance and Protection of Personal Data has prepared a strategy for personal data protection until 2030, adopted in August 2023. This strategy emphasises the need for legal harmonisation, identifies the shortcomings of the current law, and outlines priority areas requiring attention due to rapid digitalisation, such as video and audio surveillance, biometrics, genetic personal data and artificial intelligence. The Commissioner's Office employs 115 individuals for both fields of competence, empowering the authority to exercise its investigative and corrective powers within the Law. In 2022, the Commissioner reported a significant increase in PDP cases, attributed to heightened online activity and digitalisation, as well as increased awareness of personal data protection issues (Poverenik, 2022[21]). The Commissioner's office actively provides training for diverse groups, supports personal data handlers in implementing the Law, and assists citizens in exercising their rights. In 2023 alone, the Commissioner's office organised 38 PDP training sessions across Serbia, with over 1 450 participants from public authorities, civil society organisations, business associations, private sector actors, and university students and school pupils.

Public authorities have demonstrated improved compliance with the obligation to consult the Commissioner on relevant issues, submit draft legislation for review, and implement the Commissioner's decisions. However, the Commissioner flags public authorities' careless or untimely response and submission of evidence in relevant procedures (Poverenik, 2022[21]). A public opinion survey conducted in May 2023 for the Commissioner's Office revealed that the majority of respondents are not familiar with their rights to personal data protection, and 80% consider the risk of personal data abuse to be high. Citizens are increasingly cautious toward private companies, but there is also a noticeable decline in trust in many public institutions regarding the lawful use of personal data. Almost half of the respondents (47.6%) are familiar with the work of the Commissioner, and 78.4% of those express confidence in the level of protection provided by the Commissioner's Office (KANTAR, 2023[22]).

Serbia has made significant strides in **consumer protection in e-commerce** in the current assessment period, focusing on modernising its consumer protection framework, improving access to alternative dispute resolution (ADR) systems, and enhancing consumer education. Recognising the growing challenges in consumer protection and the increasing trend of e-commerce, Serbia's Strategy for Consumer Protection 2019-24 outlined a comprehensive initiative to update consumer protection rules and enhance education for both consumers and traders regarding their rights and obligations in online transactions. As of early 2024, the legal framework on consumer protection, effective since March 2022, aligns significantly with the EU *acquis*, incorporating provisions from 14 key EU Directives in this area. The Consumer Protection Law has improved the ADR mechanism, imposed restrictions on direct advertising, enhanced the involvement of consumer protection associations in awareness campaigns and emphasised public sector capacity building to implement EU standards, including in e-commerce. To encourage consumers to seek redress through the courts if their issues are not resolved otherwise, the government waved court fees for filing a claim and rendered judgements. Additionally, the establishment of the National Consumer Protection Portal[20] aims to provide educational resources for consumers and traders and facilitate the submission of complaints and requests for ADR. However, despite these reforms improving consumers' ability to exercise their rights including in e-commerce transactions, further actions are needed to complete the alignment with consumer protection practices in EU Member States. Challenges include the non-binding character of recommendations issued by impartial ADR bodies, weakening the effectiveness of ADR mechanisms, and the absence of mechanisms for class action lawsuits, which proved particularly effective in EU Member States and internationally. The Strategy's Action Plan for 2023-24 includes activities to draft amendments to the consumer protection law by the end of 2024, anticipated to address some of the existing shortcomings.

The Ministry of Internal and Foreign Trade, Department of Consumer Protection, has engaged in efforts to strengthen collaboration with consumer associations and local self-government and increase consumer awareness about the challenges posed by expanding e-commerce. In 2023, the ministry received nine competitive applications to finance consumer protection association programmes. In the first quarter of 2022, consumers in Serbia conducted 9.6 million e-commerce transactions with payment cards, a 31.2% increase year-over-year (RS, 2022[23]). According to the National Register of Consumer Complaints, despite the positive e-commerce trend, consumer complaints about online shopping decreased from 1 877 in 2020 to 1 673 in 2021, with only 7% of total consumer complaints in 2021 related to online shopping. This decline suggests that trust in e-commerce and online consumer protection in Serbia is gradually increasing.

Serbia has gradually advanced its cybersecurity capacity, albeit gradually, with a primary focus on strengthening the policy and legal framework and expanding capacity-building initiatives. Despite these efforts, challenges persist, particularly due to inadequate resources allocated to cybersecurity. The government is currently implementing two key strategies: the Strategy for the Development of Information Society and Information Security 2021-26 and the Strategy for the Fight Against Cybercrime for the period 2019-23, with an emphasis on aligning the framework with EU legislation. The government has improved inspection and incident reporting, leading to increased transparency in the cybersecurity domain. However, there is a need to enhance systematic approaches and transparency in monitoring policy implementation, particularly in conducting thorough analyses and impact assessments. The existing information security law defines critical information infrastructure, mandating operators of ICT systems of special importance to implement protective measures and strengthen systems' resilience. While the law aligns with the EU Networks and Information Security (NIS) Directive,[21] Serbia's cybersecurity preparedness is not at the level commonly adopted by EU Member States. In response, an amendment is under way to facilitate alignment with the updated EU NIS legislation (the NIS2 Directive[22]) and the EU Cybersecurity Act.[23] Establishing the Agency for Security of Networks and Information Systems and Digital Transformation, anticipated in 2025, is crucial for strengthening collaboration and information exchange with NIS authorities in EU Member States. Additionally, cybersecurity certification for ICT products, services and processes has yet to be adopted, and reforms consistent with the EU Toolbox for 5G Cybersecurity[24] are pending to ensure secure development of forthcoming 5G implementations.

Despite policy commitments and legislative reforms, Serbia's cybersecurity system is hampered by insufficient human and financial resources. However, the country's potential to nurture cybersecurity expertise is significant, supported by a growing ICT industry and academic discussions on expanding graduate and undergraduate cybersecurity programmes. Retaining cybersecurity professionals poses a challenge for the government due to the high demand in the industry. The Sector for Information Society and Information Security, within the Ministry of Information and Telecommunications, operates with ten staff members and the national CERT operates with seven employees as a unit of RATEL, the electronic communications regulator. Nonetheless, collaborative efforts are evident, with regular meetings and data exchange occurring between the national CERT and computer emergency response teams from the public and private sectors, including the Governmental CERT operating as a unit of the Office for IT and e-Government (ITE). Notably, the government exceeded the original targets outlined in the Information Security strategy regarding cybersecurity training volume. The National Academy for Public Administration (NAPA) conducted 134 training sessions under the General Civil Servant Training Programme for 2022, training 6 338 public administration and local self-government employees on cybersecurity and digital skills (MIT, 2022[14]). Moreover, the Ministry of Public Administration, RATEL and NAPA trained 340 individuals in ICT systems of special importance, in addition to 44 individuals from public and private CERTs. The government also developed a guide for SMEs, offering practical instructions on implementing simple and affordable cybersecurity measures based on proved good practice examples.

Overview of implementation of Competitiveness Outlook 2021 recommendations

Serbia's progress in implementing *Competitiveness Outlook 2021* Recommendations has been varied. The economy has made strong advances in promoting open data innovation and personal data protection. However, it has only moderately addressed recommendations regarding the electronic communications sector and the systematisation of digital government monitoring. On the contrary, there has been stagnation regarding digital inclusion initiatives. Table 11.2 shows the economy's progress in implementing past recommendations for developing a digital society.

Table 11.2. Serbia's progress on past recommendations for digital society policy

Competitiveness Outlook 2021 recommendations	Progress status	Level of progress
Accelerate the adoption of new laws and regulations to ensure an enabling ICT investment framework, including the new Law on Electronic Communications and the Law on Broadband Development	The new Law on Electronic Communications was enacted in May 2023. It improves alignment with the European Electronic Communications Code. Complementary regulations are pending. The draft Law on Broadband Development and subsequent regulations completing alignment with the Broadband Cost Reduction Directive have not yet been adopted.	Moderate
Strengthen the demand for open data innovation through inclusive co-creation processes to enable reuse of public sector data by the private sector to deliver e-services and applications to citizens	The Open Data portal is a one-stop-shop for the entire open data ecosystem in Serbia, which is comprised of individuals, start-ups, companies, experts, institutions, media, and the civil sector. The portal fosters 2 399 datasets as of January 2024 and highlights 42 examples of data use-cases in various thematic domains, promoting data innovation and the creation of data services. The portal includes an area for developers, comprising API interface documentation, examples and instructions on how to use datasets. The Open Data Hub (https://hub.data.gov.rs) provides a lively space for meetups, workshops, and open data education that has been available to the entire open data ecosystem since 2021.	Strong
Systematise the monitoring of digital government indicators to support informed policy making	Ex post impact assessment of the e-Government Development Programme 2020-22 was performed and published online in 2022. An interim report on the implementation of the PARS strategy is also publicly available. However, there is a lack of a digital government indicators database and a systematic approach for regular policy implementation monitoring. Such a database and/or reports could be published regularly on the Office of IT and e-Government website.	Moderate
Empower citizens to reap the benefits of digitalisation and monitor progress in digital inclusion	The government has not assigned co-ordination and policy implementation monitoring regarding digital inclusion initiatives to any state institution. There is no single database or online repository where digital inclusion indicators are accessible. Data are arbitrarily published by diverse government bodies monitoring indicators that directly or indirectly impact digital inclusion (e.g. RATEL, the Statistical Office, etc.). Digital skills training for vulnerable groups have not been implemented, except for around 1 500 women in rural areas under the Strategy for the Development of the Information Society and Information Security.	Limited
Complete the alignment of the framework for personal data protection with the EU and ensure its stronger enforcement	The Law on Personal Data Protection, along with supplementary regulations enacted in 2019 and 2020, exhibits substantial alignment with the EU GDPR. Some further harmonisation with existing legislation is still required. The Personal Data Protection Strategy 2030 outlines specific legislative reforms. There is overall improvement in the state of personal data protection enforcement and respect for the Commissioners' decisions.	Strong

The way forward for digital society

Considering the level of the previous recommendations' implementation, there are still areas in which Serbia could enhance the digital society policy framework and further improve aspects of access to electronic communications and public data, digitalisation of government and businesses, inclusiveness of the digital society, and trust in digital technologies. As such, policy makers may wish to:

- **Undertake comprehensive legal and regulatory reforms to foster private sector investments in high-speed communications networks**. Necessary reforms include the long-delayed adoption of the Law on Broadband Infrastructure to align with the EU Broadband Cost Reduction Directive and consideration of the 2023 revised EC Guidelines on state aid rules for developing broadband infrastructure. The electronic communications regulator should accelerate the adoption of regulations accompanying the new law on electronic communications in line with the EU Delegated Act to eliminate roaming charges with EU Member States, and the updated EC Recommendation on relevant markets. Serbia should actively consider and integrate the EU Connectivity Toolbox and expedite 5G spectrum auctions, eagerly anticipated by market investors, to facilitate the rollout of commercial 5G services.
- **Prioritise adopting updated legislation on reusing public sector information and take measures to enhance the development of trustworthy data-sharing systems.** Ensure complete alignment with the EU Open Data Directive and amend existing legislation following the EU Data Governance Act to introduce rules for trustworthy data intermediary services. These reforms will facilitate data sharing across sectors and borders and ensure the reuse of public sector data, including those that cannot be made available as open data, such as health data. The government should specifically focus on establishing real-time, linked, interoperable Data Spaces that function as data marketplaces. This initiative aligns with the Common European Data Spaces concept, boosting the data economy and capitalising on the momentum building up in the domestic open data ecosystem.
- **Increase cross-border interoperability in the government's digitalisation and introduce cross-border e-services.** As Serbia progresses towards EU Accession, the government could consider streamlining its national eID scheme to ensure interoperability with EU Member States by applying common standards and requirements for electronic identification and trust services. Serbia is well positioned to follow developments regarding the forthcoming European Digital Identity Wallet introduction. These reforms will foster collaborations with EU Member States and facilitate the effective deployment of cross-border services (Box 11.1).
- **Strengthen horizontal co-ordination and oversight of digital inclusion initiatives and introduce accessibility criteria for ICT products and services in public procurement.** Despite ongoing efforts to cultivate an inclusive information society through various policies and programmes addressing digital skills, e-government services and broadband infrastructure, there is a need for more effective collaboration among state bodies implementing measures that impact digital inclusion development. The government should assign a dedicated body to coordinate relevant activities with implementing institutions horizontally, ensuring cohesive data collection to facilitate impact assessments and evaluation of measures' efficacy. This entity could also spearhead the development of future digital inclusion policies or initiatives and ensure the application of accessibility requirements for ICT products and services in public procurement processes based on established accessibility standards.

Box 11.1. Access Luxembourg's online public services from another European country

Interoperability between the various means of electronic identification used in the 27 EU Member States and Iceland, Norway and Liechtenstein (European Economic Area) is progressing rapidly. The eIDAS-compliant ecosystem aims to enable citizens and businesses to carry out administrative procedures online in any other European country using the authentication system recognised in their own country. The eIDAS Regulation establishes the cross-border recognition of national electronic identification schemes, in cases where Member States have notified these schemes.

Since the end of 2022, identification systems used in 14 Member States (Belgium, the Czech Republic, Germany, Denmark, Estonia, Spain, Croatia, Italy, Latvia, Malta, the Netherlands, Portugal, Sweden and Slovakia) can be used to connect to the following Luxembourg online public services:

- MyGuichet.lu
- Luxembourg Business Registers (lbr.lu): Trade and Companies Register (RCS), Register of Beneficial Owners (RBE), etc.
- eCDF.lu, the platform for the electronic gathering of financial data
- Public Procurement Portal.

According to the same principle, Luxembourg citizens can access the online public services of 22 other Member States, the European Commission, and Liechtenstein with an electronic identity card (eID).

Source: Government of the Grand Duchy of Luxembourg (2024[24]).

- **Increase human and financial resources for cybersecurity and introduce cybersecurity certification requirements for ICT products and services.** While alignment of the information security law with the EU Directive on measures for a high common level of cybersecurity across the Union (NIS2) is under way, current staff and financial resources earmarked for cybersecurity are insufficient to combat cybercrime effectively. The government should prioritise the substantial enhancement of operational capacities for both the national CERT and the forthcoming Cybersecurity Agency, empowering them to elevate Serbia's cyber-resilience and foster increased collaboration and information sharing with competent authorities abroad (see Box 11.2). Additionally, a key focus should be the timely introduction of cybersecurity certification for ICT products, services, and systems, which should align with the EU Cybersecurity Certification Framework and the EU Cybersecurity Act. In preparation for the 5G spectrum auctions in 2024, the government is advised to implement the EC Recommendations on Cybersecurity of 5G Networks.

Box 11.2. Increasing the United Kingdom's cyber security capability

The United Kingdom initially established a National Cyber Security Strategy to ensure that "the UK has a sustainable supply of home-grown cyber skilled professionals to meet the growing demands of an increasingly digital economy, in both the public and private sectors, and defence". However, due to the increasing demand for digital security skills, it now seeks to go much further.

The government's ambition is to address the broader cyber security capability gap: ensuring the right skilled professionals are in the workforce now and in the future; that organisations and their staff are equipped to manage their cyber risks effectively, and that individuals have an understanding of the value of their personal data and are able to adopt basic cyber hygiene to keep themselves and the organisations they work for protected.

Its mission is, therefore, to increase cyber security capacity across all sectors to ensure that the United Kingdom has the right level and blend of skills required to maintain resilience to cyber threats and be the world's leading digital economy.

It will pursue its mission by working toward the following objectives:

- to ensure the United Kingdom has a well-structured and easy to navigate profession which represents, supports and drives excellence in the different cyber security specialisms, and is sustainable and responsive to change
- to ensure the United Kingdom has education and training systems that provide the right building blocks to help identify, train, and place new and untapped cyber security talent
- to ensure the United Kingdom's general workforce has the right blend and level of skills needed for a truly secure digital economy, with UK-based organisations across all sectors equipped to make informed decisions about their cyber security risk management
- to ensure the United Kingdom remains a global leader in cyber security with access to the best talent, with a public sector that leads by example in developing cyber security capability.

Source: Initial National Cyber Security Skills Strategy: Increasing the UK's Cyber Security Capability - A Call for Views, Executive Summary, Government of the United Kingdom (2019[25]).

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Notes

[1] Decreased scores in the Use and Society sub-dimensions in the current assessment (CO 2024), compared with scores in the CO 2021 assessment, are mainly attributed to the incorporation of two new, forward-looking qualitative indicators in the current digital society assessment framework. Scores for these new indicators, namely emerging digital technologies and green digital technologies, are relatively low since they are still in the early stages of development in the Western Balkan region. Furthermore, the scores from the CO 2018 assessment are not directly comparable with current scores due to a significant restructuring of the digital society assessment framework.

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[10] GeoSrbija (https://geosrbija.rs/) is a national digital platform that provides insight into the National Infrastructure of Geospatial Data, a database of all geospatial data of the Republic of Serbia that can be used by citizens, state authorities, businesses and the public sector. GeoSrbija offers more than 335 datasets from various institutions and 44 geospatial data services, processing around 10 million requests per year.

[11] National open data portal: https://data.gov.rs/sr/.

[12] Open Data Hub: https://hub.data.gov.rs/. The ODH is a one-stop-shop for all the participants in the open-data ecosystem in Serbia (individuals, start-ups, companies, experts, institutions, media, civil sector), offering support in tapping into and using open data and ancillary processes. It came into existence as part of the Open Data Initiative, which was launched in Serbia in 2015.

[13] The open data maturity (ODM) assessment is part of the European Commission's data portal (data.europa.eu) aiming to evaluate countries' maturity in the open data field. In particular, the assessment measures the progress of European countries in making public sector information available and stimulating its reuse, in line with the open data directive (Directive [EU] 2019/1024).

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12 Transport policy

Through the development of a modern, sustainable, efficient, interoperable and integrated transport network, a sound transport policy can promote closer co-operation with neighbouring economies and be a key driver of competitiveness, both for the economy as well as for the region. The first sub-dimension, planning and management, measures the extent to which an orderly, coherent, consistent and transparent process is in place for developing transport policy and implementing infrastructure projects. The second sub-dimension, regulation and connectivity, determines how well transport modes and networks are regulated and operated, as well as how they are leveraged to promote regional connectivity. The third sub-dimension, sustainability, measures progress towards resource efficiency, environmental protection, reducing health impacts and increasing safety and social inclusion.

Key findings

While Serbia performs above the regional average in all areas covered by the assessment, delays in the adoption of a strategic framework for transport policy and the lack of a policy framework to support multimodal transport and smart transport led to a slight decrease in overall performance compared to the last cycle (Table 12.1). However, since the last assessment, Serbia has made important improvements in aligning with the EU *acquis* across all transport modes. Implementation of policies promoting environmentally sustainable transport has also improved Serbia's performance in this area.

Table 12.1. Serbia's scores for transport policy

Dimension	Sub-dimension	2018 score	2021 score	2024 score	2024 WB6 average
Transport	11.1: Planning and management			3.3	2.6
	11.2: Regulation and connectivity			2.3	1.9
	11.3: Sustainability			2.8	2.1
Serbia's overall score		**2.6**	**3.0**	**2.8**	**2.2**

The **key findings** are:

- Serbia's public spending on road infrastructure increased significantly, by 82% from 2019 to 2022. Infrastructure spending for road and rail, at 1.76% and 0.87% of GDP, respectively surpassed EU (0.59% and 0.3%) and OECD area (0.57% and 0.3%) average levels in 2022, translating an important dynamic of investments into new infrastructure.
- Maintenance spending for rail infrastructure increased considerably (82%) between 2019 and 2022. However, maintenance spending for road infrastructure, at 0.1% of GDP, remains below the EU (0.27%) and OECD area (0.28%) averages, indicating room for improvement in asset management systems for roads.
- Serbia has the most open and competitive railway market in the Western Balkans, with around a quarter of the market share belonging to private operators. Recent amendments to the Railway Law and Railway Interoperability Law further align with key EU *acquis*. Driven by the modernisation of infrastructure, rail network utilisation by passengers increased by 136% from 2019 to 2022 and by 54% for freight.
- While no dedicated policy framework exists to support the development of combined transport, Serbia has invested in the development of the Batajnica intermodal terminal, which could become a key intermodal hub. Despite completion, the terminal is not yet operational, posing a delay in drawing from its potential to increase combined transport capacities.
- Serbia has taken notable steps towards an environmentally sustainable transport system, enacting legislation to address climate change, releasing a green bond, and offering subsidies for electric and hybrid vehicles. However, there is a need to formulate a detailed and more comprehensive plan that integrates environmental considerations seamlessly into the transport strategic framework.
- Further efforts need to be taken to improve road safety, as Serbia's road fatality rate, at 82 fatalities per million inhabitants, was almost double the EU average (46) in 2022. To address this, Serbia has adopted a new Road Safety Strategy 2023-30 and has implemented various measures, such as collecting road safety key performance indicators (KPIs), aligning national road safety data with EU standards, and conducting interactive workshops for elementary school students.

State of play and key developments

Sub-dimension 11.1: Planning and management

Serbia's Ministry of Construction, Transport and Infrastructure is currently developing its National Transport Strategy 2023-30 with support from the Western Balkans Trade and Transport Facilitation Project.[1] The strategy is expected to outline the **vision of transport** for the economy and plan priority reforms for the transport sector. However, the strategy's development and adoption have encountered significant delays, as its initial development was announced in 2020, and the initial implementation period was planned to start in 2022. Stakeholders have also raised concerns over a lack of public involvement and consultations in the strategy's development.

While the strategy is still under development, Serbia has passed amendments to several laws since the last assessment to support the efficient implementation of planned measures. These include:

- the Law on the Fees for the Use of Public Goods, amended in 2023,
- the Law on Planning and Construction, amended in 2023,
- the Law Confirming the Agreement on the Maintenance of Interstate Roads and Bridges between Serbia and Bosnia and Herzegovina, adopted in 2021,
- the Law on the Protection of Nature, amended in 2021.

Additionally, as part of the strategy, Serbia created a National Transport Model with demand forecasts to establish a demand-supply model for inter-city road, rail, and inland waterway networks for passenger and freight traffic. This model aims to assess future bottlenecks in the inter-city network of motorways/national-level roads, rail links and terminals, waterway sections and river ports and presents an important step towards increasingly data-driven policy planning.

Building on the progress that was reported during the previous assessment,[2] some updates have been made regarding the **transport project selection** in Serbia. In 2023, Serbia adopted the Regulation on Capital Projects, which provides more detailed guidance on the content, preparation method, assessment procedures, readiness evaluation, and selection criteria for capital projects. It also includes provisions for monitoring implementation, performance reporting, and comprehensive evaluation of both positive and negative impacts of capital projects. The overarching goal is to facilitate public funds' effective and efficient management (Ministry of Finance, 2023[1]). National Cost-Benefit Analysis (CBA) guidelines, tailored to Serbia's context and needs and providing the appropriate discount rates and benchmarks, exist only for road transport, and these have not been updated since 2010. Serbia is implementing CBA for other transport modes according to international and European guidelines.

For **implementation and procurement**, the Public Procurement Law of 2019 permits alternative procurement procedures for designated project categories outlined in the implementation strategy. These categories include projects financed through contracts resulting from international co-operation and projects funded by international organisations. An ongoing challenge is ensuring the consistency of checks for compliance with criteria for public financial management and transparency for all projects, as a significant share of projects is implemented through special procedures that allow them to bypass these checks.

In 2023, Serbia adopted amendments to the Public Procurement Law, marking significant changes in the procurement landscape. The main revisions include a shift in the critical criterion for selecting certain services/goods, prioritising quality over price. Additionally, the amendments introduce principles of environmental protection into the public procurement awarding process, emphasising criteria such as the product's lifespan, maintenance costs, water and electricity consumption, and the recyclability of materials. Notably, the legal framework now specifies the initiation of misdemeanour proceedings in unlawful expenditure of public procurement funds. These adjustments aim to enhance the effectiveness and integrity of the public procurement system, aligning it more closely with contemporary considerations such as quality standards and environmental sustainability. These amendments came into force in January 2024.

Serbia made efforts to establish a **road asset management system** during the assessment period. The Public Enterprise "Roads of Serbia" (PERS) has outlined a project in its annual business programme[3] for 2023 aimed at updating and expanding the databases of the current state road network. This initiative includes technical support for programme analysis to lay the groundwork for a multi-year maintenance plan. The Service Level Agreement (SLA) contract between PERS and the government of Serbia, which will ensure funds for implementing the Performance-Based Maintenance Contract (PBMC), was signed in December 2023. Within the Annual Business Programme for 2023, PERS has allocated financial resources to operate the Reliability, Availability, Maintainability, and Safety (RAMS) unit. The RAMS unit's primary responsibility is to formulate a multi-year maintenance plan for the road network.

With assistance from the World Bank, Serbia is persisting in its efforts to establish a rail infrastructure asset management system (RIAMS) (World Bank, 2021[2]). The comprehensive project aims to offer a foundation and direction for measures related to railway safety management systems, rail asset management systems, resilience, and the adoption of technology in the railway sector.

Sub-dimension 11.2: Regulation and connectivity

Serbia has advanced in updating and aligning its **rail regulations** more closely with the EU’s Rail Action Plan’s fourth package. Serbia regularly updates and publishes its railway network statement and has completed the overhaul of its institutional framework, with the Directorate of Railways being a self-governing body. It is a state authority of the Republic of Serbia whose main activities are related to the regulation of the railway service market, regulation of safety and interoperability of railway traffic, passenger rights, and operation of cableways and specific traction installations. The rail market has been fully open for a few years, and more than ten private railway companies are operational. Four new private freight companies have started operations since the last assessment. Collectively, all the private operators hold a 25% market share (Transport Community, 2023[3]). This represents the highest count of private operators in the region and could serve as a noteworthy regional example of an open and competitive rail market.

Serbia has more closely aligned its legislation with the interoperability and safety regulations of the EU *acquis*, achieved through the amendments to the Railway Law and the Railway Interoperability laws in 2023 (European Commission, 2023[4]). In 2022, Serbia achieved notable success by inaugurating the railway line between Belgrade and Novi Sad, allowing for a maximum travel speed of 200 km/h (kilometres per hour). This marks the first route in the Western Balkans with a design speed exceeding 120 km/h and incorporates the European Railway Traffic Management System (ERTMS). Work is in progress on the Novi Sad-Subotica section, with construction expected to conclude by the end of 2024 or early 2025 (See News, 2024[5]). This is part of the project of building a high-speed rail connection between Belgrade and Budapest by the end of 2026, which would greatly improve Serbia’s rail connectivity with Central Europe. However, the project recently encountered challenges related to implementing a security system in line with EU standards, as well as rising project costs, casting doubts on its timely realisation.[4] Plans for constructing a centralised operational centre for railway traffic management across Serbia's railway network are well developed and ready for implementation (Transport Community, 2023[3]).

Serbia's rail network utilisation is presented in Table 12.2. A significant upward trend has been noticed in passenger railway transport: network utilisation is up by 136% but still low compared to the EU average. Similarly, in freight transport the network utilisation has increased during the period 2019-22 but remains lower than the EU average, reflecting the need for a more efficient use of resources and infrastructure for transporting goods. It also indicates the need for continued investments in upgrading and modernising railway infrastructure to better align with EU standards and improve the competitiveness of rail for freight transport.

Table 12.2. Trends in rail network utilisation in Serbia (2019-22)

	Change 2019-22 (in%)	2022	EU average (2021)
Passenger (passenger-kilometres/km of track)	136	0.13	0.99
Freight (tonne-kilometres/km of track)	54	0.83	2.02

Sources: European Commission (2023[6]); information was provided by the Serbian government for the *Competitiveness Outlook* assessment.

Serbia has taken steps to reform **road transport regulations** since the last CO assessment, mainly by establishing the road asset management system and deploying intelligent transport systems (ITS) on its road network. The initial version of the ITS Strategy was projected to be finalised by the end of 2023 but is currently pending. However, the construction phase of the regional ITS centre in Niš is complete. Equipment procurement and installation have been finalised, and staff relocation and training commenced in April 2023 (Transport Community, 2023[3]). Public procurement for additional equipment is in progress. In March 2023, a memorandum of understanding on the interoperability of electronic toll collection was signed between Serbia and North Macedonia. The Electronic Toll Collection (ETC) system's interoperability between the two economies came into effect in July 2023 (Transport Community, 2023[7]), enabling citizens from both Serbia and North Macedonia to use a unified tag device. The system's interoperability is planned to be extended to Montenegro, Croatia and Greece, and similar co-operation is planned with Bosnia and Herzegovina and Albania in the future, which would facilitate travel by road throughout the region.

Serbia has a good level of alignment with the EU *acquis* on **aviation** and has continued with further regulatory reforms**.** Namely, Serbia had already completed the transposition and the local implementation of Single European Sky II (SES II) provisions on air traffic. Building on this, during this assessment cycle, Serbia implemented multiple regulations concerning aerodrome certificates, air traffic control, alerts, flight information services, air operations, and civil aviation security standards. Notably, Serbia is nearing completion of all obligations outlined in the initial transitional period of the European Common Aviation Area Agreement (European Commission, 2023[8]).

During the last assessment, Serbia's waterborne transport legislation had already achieved a high level of alignment with the EU *acquis*. Since then, Serbia has effectively adopted the directive on recognising professional qualifications in inland navigation in 2022 (Transport Community, 2023[3]). Furthermore, Serbia approved Protocol '88 to the International Convention for the Safety of Life at Sea (SOLAS Convention) by adopting the required legislation.[5] Implementing Vessel Traffic Services[6] (VTS) commenced in May 2023, with plans to enter the testing phase (Transport Community, 2023[3]). Serbia has also outlined plans to implement Regulation 2015/757 by 2026, which focuses on overseeing, reporting, and verifying carbon dioxide emissions in maritime transport (Balkan Green Energy News, 2023[9]).

The Aids to Navigation (ATONs) project, initiated in July 2023, successfully covered the Danube River with buoys, offering real-time information to navigators. The project's second phase, focusing on applying ATONs in the Sava River, is expected to conclude within 2024 (IRD Engineering, 2023[10]). The inaugural phase of the "FAIRway works" project, dedicated to upgrading the Iron Gate II locks, also began in July 2023. This encompasses significant modifications to mechanical, hydraulic, and electrical components, with a scheduled completion period of one year, and will remove bottlenecks to navigation along the Serbian sections of the Danube (European IWT Platform, 2023[11]).

Investment in road infrastructure is considerably higher in the 2022 period than for rail and inland waterways transport (Table 12.3) due to the ongoing construction and rehabilitation projects. This investment even surpasses the EU and OECD average regarding the share of GDP spent on road infrastructure in 2022. Similarly, the investment in rail transport in 2022 surpasses the EU and OECD average for the share of GDP spent, even though it has decreased during the period by 11%. Investment in inland waterways transport has also increased during the period and remains higher than the EU and OECD area average in 2022. Meanwhile, maintenance of road, rail and inland waterways infrastructure has increased, with rail transport the highest increase at 82%. Except for road infrastructure, rail and inland waterways infrastructure maintenance is above the EU and OECD area average. This reflects that Serbia has prioritised investment in road infrastructure, with considerable spending exceeding both EU and OECD area averages.

Table 12.3. Trends in transport infrastructure investments and maintenance, Serbia (2019-22)

	Investment					Maintenance				
	Change 2019-22 (in %)	Value in 2022 (million EUR)	% of GDP (2022)	OECD average - % of GDP (2021)	EU average - % of GDP (2021)	Change 2019-22 (in %)	Value in 2022 (million EUR)	% of GDP (2022)	OECD average - % of GDP (2021)	EU average - % of GDP (2021)
Road infrastructure	82	1060.9	1.76	0.57	0.59	18	6.3	0.1	0.27	0.28
Rail infrastructure	-11	525.0	0.87	0.30	0.30	82	43.6	0.4	0.17	0.18
Inland waterways infrastructure	12	55.2	0.09	0.02	0.02	30	3.6	0.1	0.04	0.04

Note: OECD and EU averages represent the average value for the economies with available data.
Source: ITF (2024[12]).

Since the last CO assessment, there has been good co-operation with several neighbouring economies to enhance **regional connectivity**. Serbia has been negotiating with Bosnia and Herzegovina and Croatia for agreements regulating rail border control and procedures in railway traffic. The processes experienced a slowdown but have picked up again in the past few months and are progressing well. Serbia and Hungary signed an agreement in July 2022 to amend the Agreement on border control for road, rail, and water traffic. The primary focus of the Agreement is to facilitate effective traffic and border crossing procedures along the alternate Subotica-Horgos-Reske route, with a suspension of railway traffic on the Subotica-Kelebia route (Government of Serbia, 2022[13]).

The upgraded road border control post (BCP) Kotroman in Serbia on the border with Bosnia and Herzegovina officially opened on 27 June 2022 (Transport Community, 2022[14]). The improvements aim to enhance passenger travel quality and working conditions for customs officers and border police. BCP Kotroman now complies with high standards, including three traffic lanes each for entry and exit and control booths, and is expected to improve freight traffic with a dedicated cargo terminal. Works at road BCP Gostun between Serbia and Montenegro were also completed in March 2023 (Transport Community, 2023[3]). The project involved constructing seven entry and exit lanes and necessary facilities for the smooth operation of border services. The reconstruction project for road BCP Backi Breg-Hercegszanto between Serbia and Hungary is ongoing, part of the Instrument for Pre-accession Assistance (IPA)-Interreg Programme of Cross-Border Cooperation Hungary-Serbia 2021-24. The project is anticipated to ease the load on the primary BCPs between Serbia and Hungary (Keep.Eu, 2022[15]).

There is no dedicated policy framework regarding **combined transport** in Serbia, but the economy consistently earmarks budgetary resources to support and encourage combined transport. The first modern intermodal terminal in Batajnica, near Belgrade, was finished in November 2022 (European Commission, 2023[4]). However, the terminal is not yet operational. Once operational, the terminal would boost railway transport, establish links with road networks, and enhance market competitiveness. The terminal is expected to increase Serbia's combined transport capacities eightfold.[7]

Sub-dimension 11.3: Sustainability

Serbia has taken steps to advance towards an **environmentally sustainable transport** system. The economy has implemented various measures to address the climate impact of the transport sector, including the enactment of legislation such as the Climate Change Law, the Law on Renewable Energy Sources and the Law on Energy Efficiency and Rational Use of Energy. Serbia continues to lead initiatives aimed at decarbonising road transport, standing as the sole WB6 economy to have released a green bond in 2021. The funds raised from this bond are primarily dedicated to transport projects that prioritise environmentally friendly modes such as railways and inland waterways. The issuance of the green bond facilitated the acquisition of three trains and the reconstruction of 79.4 kilometres of railway (Balkan Green Energy News, 2024[16]).

Owners of electric and hybrid vehicles are exempt from annual motor vehicle taxes and can benefit from toll discounts. In March 2020, a regulation was adopted to subsidise the purchase of electric and hybrid vehicles. Subsidies are provided for various categories, including hybrid passenger vehicles, plug-in hybrid electric vehicles (PHEVs), and fully electric vehicles. Additionally, subsidies and incentives are extended to public transport and taxi fleet upgrades, specifying criteria such as fully electric, hybrid, or compressed natural gas drives or meeting at least EURO 6 engine standards for exhaust emissions. In 2023, a decree doubled the subsidies for acquiring new electric and hybrid vehicles. The total subsidies available now amount to approximately EUR 2.5 million, a significant increase from the previous year's allocation (Euractiv, 2023[17]). Amendments to the Law on Planning and Constructions, adopted in July 2023, introduced the obligation to install e-chargers at gas stations on highways. Progress has been reported on the deployment of e-charging stations on Serbia’s Trans-European Transport Network (TEN-T) highways, and tenders have been launched to further accelerate their deployment. A draft of the National Strategy for the Development of Cycling in the Republic of Serbia 2022-26 has been prepared to further support cycling as a means of green mobility.

Despite these encouraging measures, pending the adoption of the National Transport Strategy, Serbia is left without an overarching and co-ordinated policy framework to guide the decarbonisation of the transport sector. The draft National Energy and Climate Plan (NECP) contains measures primarily focused on road transport, whose presence in the overall structure of the NECP remains marginal.

Serbia has continued efforts to improve **road safety**. Serbia has already implemented various actions outlined in the TCT Road Safety Action Plan. These measures include collecting road safety Key Performance Indicators (KPIs) per the EU methodology; aligning national road safety data with the EU Common Accident Data Set (CADaS) model; and enhancing collaboration among all pertinent stakeholders in road safety. Serbia has also commenced a new project called "Together and Safely through Childhood", featuring interactive workshops for elementary school students in the first to fourth grades to improve child safety in traffic.[8]

The Road Safety Strategy 2023-30 and its Action Plan 2023-25 were adopted in October 2023, and align with key international documents.[9] The Law on Road Traffic Safety was amended in September 2023, introducing stricter penalties for road safety violations. The primary objective is to achieve a 50% reduction in road deaths and serious injuries by 2030 and adopt the Vision Zero approach (UNECE, 2023[18]). In 2023, the EU High-Level Group on Road Safety approved the TCT proposal, inviting Serbia to join the Community Database on Accidents on the Roads in Europe (CARE) (Transport Community, 2023[19]). As a result, Serbia became the first regional partner in the Western Balkans to participate in the European Union CARE expert group for traffic safety.

Despite an overall encouraging trend in 2012-22, the absolute number of road fatalities increased by 4% in the economy during 2019-22 (Table 12.4) and the number of fatalities per million inhabitants is nearly double the EU average. This indicates that Serbia is facing challenges in reducing road fatalities, as the absolute fatality increase was despite efforts to improve road safety. This necessitates further attention and measures to align with European standards.

Table 12.4. Road safety trends in Serbia and the EU (2012-22)

Changes are expressed in percentage

	2012-22	2019-22	2022
Change in the number of road fatalities (SRB)	-20	4	
Change in the number of road fatalities (EU)	-22	-9	
Change in the number of fatalities per million inhabitants (SRB)		8	82
Change in the number of fatalities per million inhabitants (EU)		-10	46

Sources: EU data: European Commission (2023[8]).; Serbia data: information provided by the Serbian government for this assessment.

Overview of implementation of Competitiveness Outlook 2021 recommendations

Serbia has made progress in following up on the Recommendations of the *Competitiveness Outlook 2021* assessment (Table 12.5). Efforts have been made to align with the EU *acquis* and update the policy framework. Collaborative efforts with neighbouring economies and the signing of agreements, such as the one with Hungary to improve traffic and border crossing procedures, indicate a commitment to keeping transport facilitation as a key priority. Serbia has also taken focused steps to address environmental challenges in the context of transportation. The legislative framework provides a foundation for these efforts. Meanwhile the practical steps taken – such as the issuance of a green bond in 2021 to fund environmentally friendly transport projects, and incentives for encouraging low carbon mobility – present tangible actions towards integrating environmental considerations into transport planning.

Table 12.5. Serbia's progress on past recommendations for transport policy

Competitiveness Outlook 2021 recommendations	Progress status	Level of progress
Enhance the implementation, monitoring and readjustment of the existing policy framework	Serbia is developing its National Transport Strategy 2023-30 and its ITS strategy for the same period, reflecting efforts to enhance the existing policy framework, but it has not yet been adopted. Amendments to various laws, including those related to planning and construction, interstate roads, and nature protection, highlight the commitment to updating and aligning policies with evolving needs.	Moderate
Update or renew outdated national cost-benefit analysis guidelines, covering all transport modes	While amendments to laws related to public procurement and capital projects have been enacted, the CBA guidelines followed in the economy have not been updated.	Limited
Ensure road safety remains a key priority	Serbia has adopted a new Road Safety Strategy 2023-30, indicating a commitment to ensuring road safety remains a key priority. The strategy aligns with international documents and aims for a 50% reduction in road deaths and serious injuries by 2030, employing the Vision Zero approach.	Strong
Establish the basics of a transport asset management system in line with the national inventory system	Efforts have been made to establish a road asset management system. PERS has outlined a project in its Annual Business Programme for 2023 for updating and expanding road network databases, laying the groundwork for a multi-year maintenance plan. Asset management systems for other transport modes are still lacking.	Limited
Keep transport facilitation as a key priority	Serbia has prioritised transport facilitation and regional connectivity efforts by actively engaging in initiatives with neighbouring economies. These efforts include ongoing negotiations with Bosnia, Herzegovina, and Croatia to regulate rail border control and the signed Agreement with Hungary to improve overall traffic and border crossing procedures.	Strong
Develop an Integrated Environmental and Transport Action Plan	Serbia has taken tangible steps to address environmental sustainability within the transport sector. While legislative efforts are commendable, more concrete actions and the formulation of a detailed plan that integrates environmental considerations seamlessly into transport strategies are needed.	Moderate

The way forward for transport policy

Given that some of the recommendations outlined in the previous assessment remain valid, despite progress on several key fronts, policy makers in Serbia could:

- **Renew domestic CBA guidelines for all transport modes**. Serbia needs to update its CBA guidelines and accompanying technical instructions. The guidance should be updated regularly, at least every two years**.** Developing a benchmark for all technical and economic parameters is necessary to ensure consistency in the discount rates used for similar projects in the same economy, including the financial and economic discount rates in the state guidance documents. This benchmark should be consistently applied in project appraisal at the national level. By ensuring that CBA guidelines are up-to-date, Serbia can strengthen the evidence-based decision-making process, improve project prioritisation, and ultimately contribute to its transport infrastructure's successful and sustainable development.
- **Develop an Integrated Environment and Transport Action Plan**. While progress is being made on tangible measures and legislative efforts to address environmental sustainability in transport, Serbia could also consider developing an Integrated Environment and Transport Action Plan. This plan needs to integrate existing indicators and develop additional ones by developing a comprehensive framework for improving environmental sustainability in the transport sector. Measures and indicators could also be included in the upcoming National Transport Strategy. The European Environmental Agency developed a good example of monitoring in the form of the Transport and Environment Reporting Mechanism, which prescribes indicators for monitoring the relationship between transport and the environment in the EU. The TERM could work as a starting point for Serbia to assess and monitor policies related to sustainable transport.[10]

- **Enhance efforts to develop well-functioning combined transport.** Combined transport is the most cost-efficient mode of transport, reducing environmental pollution and increasing cooperation between freight forwarding network companies. Achieving well-functioning logistical chains and establishing an international corridor approach and intermodal solutions could promote high competitiveness in Serbia's transport market. Legislation should encompass clear guidelines and incentives for promoting combined transport, fostering collaboration between various transport modes and among different stakeholders, and establishing a comprehensive regulatory framework that can contribute to integrating modern technologies, ensuring a seamless and efficient combined transport network.
- **Continue efforts to develop asset management systems for all transport modes**. To ensure a comprehensive and integrated approach to asset management across all transport modes, it is recommended that Serbia expand its focus beyond roads and develop asset management systems covering railways, waterways, and other modes. These should integrate modern technologies and data analytics to effectively monitor, maintain, and optimise the entire sector's infrastructure. Such an expanded approach would enable Serbia to enhance its diverse transportation networks' longevity, efficiency and performance.

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Notes

[1] The Western Balkans Trade and Transport Facilitation Project is promoted by the World Bank. The development objective is to reduce trade costs and increase transport efficiency in Albania, North Macedonia and Serbia. The project has four main components:

- facilitate the movement of goods across the region,
- enhance transport efficiency and predictability,
- improve market access in services and foster regional investment,
- support project implementation units and provide additional technical support.

[2] Namely adoption of the Rulebook on the Management of Capital Projects in 2019 (Legal Information System Republic of Serbia, n.d.5).

[3] Available at: https://www.putevi-srbije.rs/images/pdf/organi_upravljanja/2023-05-25-Program-poslovanja-JPPS-za-2023.pdf

[4] For more information, see: https://www.constructionbriefing.com/news/budapest-belgrade-railway-hits-a-roadblock/8031849.article.

[5] For more information, please see: Available at: https://wwwcdn.imo.org/localresources/en/About/Conventions/StatusOfConventions/Status%202023.pdf

[6] VTS involves the proactive surveillance and control of vessel movements within designated regions, commonly in busy harbours, ports, and other maritime zones with high traffic. The principal objective of VTS is to improve navigation safety and efficiency by providing up-to-the-minute information, effective communication, and the organisation of maritime traffic.

[7] For more information, please see: https://www.euzatebe.rs/en/projects/construction-of-intermodal-terminal-in-batajnica

[8] For more information, please see: https://prosveta.gov.rs/vesti/predstavljen-projekat-zajedno-i-bezbedno-kroz-detinjstvo/

[9] Such as UN Resolution A/Res/74/299; the Global Plan for the Decade of Action 2021-30; the Stockholm Declaration; the EU Policy Framework for Road Safety 2021-30; and the Road Safety Action Plan for the Western Balkans.

[10] For more information, please see: https://www.eea.europa.eu/themes/transport/term.

13 Energy policy

The competitiveness of any economy is heavily influenced by its energy policies. This chapter investigates the energy policies to ensure that energy markets are well-regulated, sustainable and competitive. The first sub-dimension, governance and regulation, focuses on how the energy markets are governed and whether policy is conducive to establishing efficient and competitive energy markets. The second, energy security, explores measures taken to make the energy sector more resilient, including through the diversification of energy supply. The third sub-dimension, sustainability, focuses on the energy sector decarbonisation, including promoting renewable energy and energy efficiency policies. The fourth sub-dimension, energy markets, analyses how energy markets are operated, whether competition is used to promote efficient allocation of energy resources and the degree of regional integration.

Key findings

With a score of 3.0, Serbia's rating is stable and remains comparable to the regional average. On the one hand, Serbia has made good progress in developing its energy market structure and efficiency. However, additional efforts should be geared towards crisis response and resilience and the diversification of energy supply – policy areas which lowered Serbia's score in this cycle.

Table 13.1. Serbia's scores for energy policy

Dimension	Sub-dimension	2018 score	2021 score	2024 score	2024 WB6 average
Energy	12.1: Governance and regulation			3.5	3.3
	12.2: Energy security			2.5	2.5
	12.3: Sustainability			3.0	2.8
	12.4: Energy markets			3.2	3.3
Serbia's overall score		**2.2**	**3.0**	**3.0**	**3.0**

The **key findings** are:

- The development of the National Energy and Climate Plan (NECP) constitutes an important step towards transposing the EU *acquis* such as the Governance Regulation. Along with other key policy documents, such as the Low Carbon Development Strategy 2023-30, the Plan provides the basis for decarbonising Serbia's energy sector. However, the NECP lacks a climate neutrality target.
- Serbia heavily relies on imports from only one economy, Russia, for its natural gas supply. However, recent developments, such as the natural gas supply agreement with Azerbaijan and the launch of a new interconnector with Bulgaria in December 2023, have the potential to contribute to diversifying Serbia's gas consumption (around 3 billion cubic metres annually) by adding an additional import capacity of up to 400 million cubic metres.
- Serbia became the first economy in the Western Balkans to establish an intraday electricity market in July 2023. However, the benefits of markets are limited since deregulation is only taking place to a limited extent. Despite an advanced legal framework, in practice, the dominant position of the established supplier prevents the formation of truly competitive power markets.
- Serbia reached an important milestone in the deployment of renewable energy capacity under market-based mechanisms through the first-ever auctions for solar capacity (50 MW) and wind capacity (400 MW), completed in 2023 and procured through a contract for difference (CfD) model, ensuring price stability and risk reduction for investors.
- Unbundling of the gas transmission system is experiencing delays – leading to a lack of compliance with the Third Energy Package – and impeding the development of a competitive natural gas market. Moreover, third-party access rules in natural gas still do not comply with the Third Energy Package, leading to discriminatory market access practices.

State of play and key developments

Sub-dimension 12.1: Governance and regulation

The **energy policy, legal and institutional framework** in Serbia is currently undergoing significant changes. Key developments include the preparation of the Integrated National Energy and Climate Plan, the new Energy Development Strategy and the Low Carbon Development Strategy (covering the period until 2030). These documents, which are foreseen to be adopted once the formation of the Serbian government has been completed,[1] aim to define Serbia's new energy policy in line with its obligations pursuant to the EU and Energy Community *acquis*.

The process, however, has faced delays, partly due to the regional and national impacts of the recent energy crisis caused by the Russian war of aggression against Ukraine. This necessitated additional analyses, pushing back the timeline for adopting the new strategy. Legislative changes have also been a part of the landscape, with amendments to the Law on Energy and the adoption of new laws on renewable energy sources (RES) and energy efficiency.

Serbia has largely transposed the Third Energy Package into national law, and the transposition of the Clean Energy Package is also progressing, though alignment with specific directives and regulations needs completion. Additionally, the transposition and implementation of the New Electricity Integration Package and network codes are yet to be finalised. Regarding market dynamics, the legal framework theoretically allows customers to choose their suppliers. However, the reality differs, with only a small fraction of customers participating in the competitive market and changing their suppliers.

A broad range of energy indicators and data is being collected and published in annual reports. However, while a database of key indicators exists, evaluation procedures appear to lack full institutionalisation and are limited to standard consultation procedures without regular evaluation cycles.

The legislation concerning the **energy regulator** complies with the EU and Energy Community *acquis*, establishing a legal framework for an independent regulator. Decision making within the Energy Agency of the Republic of Serbia (AERS) is designed to be fully independent from executive authorities, with its decisions subject to review only by relevant courts. Despite this framework, there are concerns about the regulator's effectiveness and true independence, highlighted by its failure to enforce deregulation and unbundling obligations fully.

Staffing and capacity building at AERS present notable challenges. With 42 full-time employees, the agency's staffing levels are inadequate for managing the comprehensive tasks outlined in the Third Energy Package and the Clean Energy Package. Efforts such as task prioritisation, twinning projects, and IT support have been undertaken, yet the regulator still faces resource limitations. Financial resources are mostly sufficient, but hurdles in hiring additional staff persist, which could also result from AERS' salaries, which are not at industry standard. Full-time staff at AERS only increased marginally over the past years (Table 13.2).

Table 13.2. Full-time staff at the Energy Agency of the Republic of Serbia

Year	2019	2020	2021	2022	2023
Number of full-time staff	38	40	41	41	42

Source: Data collected from the Energy Agency of the Republic of Serbia as part of the Competitiveness Outlook 2024 assessment.

AERS has not been involved with the Agency for the Cooperation of Energy Regulators (ACER) in the past. While extensive monitoring and auditing processes are in place with clear accountability mechanisms, assessment and co-ordination appear limited to internal review procedures and regular reporting to the parliament. A noteworthy development concerning institutional co-ordination is that AERS has signed memorandums of understanding with the Competition Protection Authority to streamline the exchange procedures between those two institutions.

Sub-dimension 12.2: Energy security

In response to the energy crisis, a series of measures have been implemented along with relevant planning documents to strengthen **crisis response and resilience**. These measures include setting retail price caps, initiating support schemes for specific customer groups, and launching energy efficiency and saving campaigns. Additionally, there have been investment incentives in energy savings, energy efficiency, generation, and storage. Promoting state investments in these areas, along with regional co-operation for generation and supply adequacy, has been a key focus.

A risk resilience plan is set to be developed following the transposition of the Risk Preparedness Regulation. This plan is expected to enhance the sector's preparedness for future challenges and to provide a comprehensive framework for disaster response and resilience policy, but its drafting has yet to be commenced, pending the alignment of the legal framework with the necessary EU *acquis*. Network Development Plans have been revised to increase resilience against external factors, including the impact of climate change. While a broad range of measures has been taken to address the crisis, a more structural approach to managing crisis response and building resilience is still needed, and the extent to which the envisaged risk resilience plan will tackle that remains to be seen.

Monitoring and evaluating these measures are overseen by a government working group dedicated to energy supply security. This group regularly assesses the situation and proposes measures to ensure supply security. The composition and frequency of meetings of this working group have been revised to address the ongoing challenges better. While co-ordination meetings are held regularly, it remains unclear to what extent these discussions and conclusions are translated into policy changes.

Several planned investments in energy infrastructure projects have been delayed or not implemented on time due to budget constraints, issues with land purchase or usage rights, and a lack of human resources.

The NECP contains objectives and measures aiming to contribute to the **diversification of energy supply**. A significant development in this regard was the completion and operation of a new interconnector with Bulgaria, enhancing interconnection with neighbouring economies. A key concern, nevertheless, remains the dependence on Gazprom, which poses challenges to diversification and security of supply for natural gas. However, important positive developments have taken place in this regard, as Serbia signed a gas supply agreement with Azerbaijan in November 2023. This supply will be enabled by another interconnector with Bulgaria, commissioned in December 2023. Serbia also leased an annual capacity of 300 million cubic metres for liquefied natural gas (LNG) imports from Greece’s Alexandroupolis terminal, the construction of which is planned to be completed in 2024. These developments are anticipated to impact diversification and strengthen the security of the energy supply positively.

No progress has been made in establishing competitive wholesale or retail markets for natural gas in compliance with the EU Third Energy Package. Despite positive developments, there is insufficient information to fully assess the extent to which existing initiatives and plans comprehensively address the issue of energy diversification.

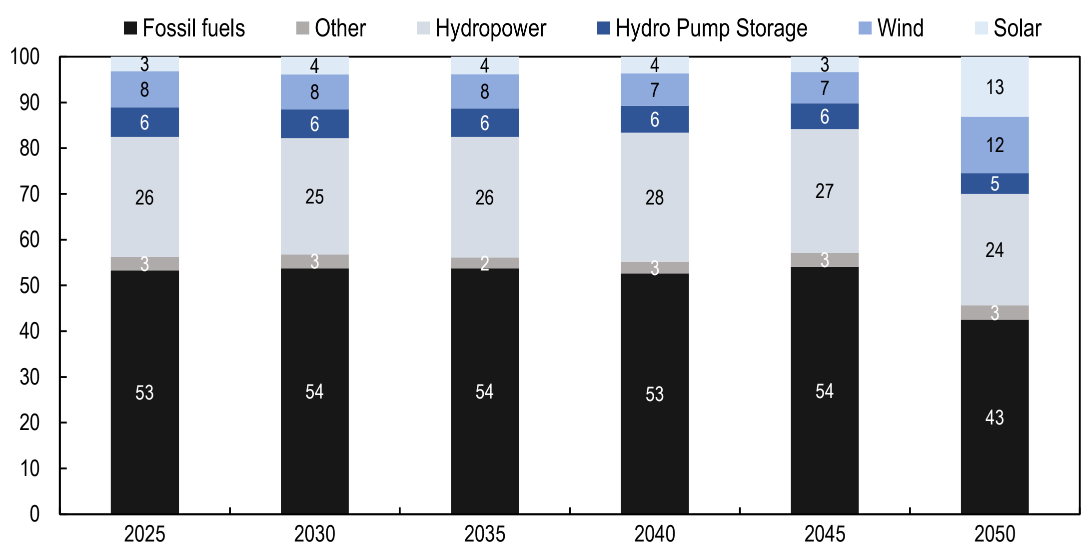
Sub-dimension 12.3: Sustainability

Serbia has recently placed additional focus on energy sector decarbonisation, which is in line with the EU and Energy Community *acquis*. The Governance Regulation has been successfully transposed through the Law on Climate Change and the Law on Energy. Additional secondary legislation implementing the

Law on Climate Change has also been adopted to further the implementation of the Governance Regulation. In June 2023, the National Energy and Climate Plan (NECP) was submitted to the Energy Community Secretariat, which issued its feedback in November 2023, asking for a revision of the plan to bring it in line with the Energy Community's 2030 targets on renewable energy and energy efficiency (Energy Community Secretariat, 2023[1]). A revised version of the NECP was prepared by December 2023, partially integrating the Secretariat's recommendations. In addition to the NECP, a Low Carbon Development Strategy covering the timeframe from 2023 to 2030 was adopted by the government in June 2023. This strategy also sets forth an outlook until 2050 but does not include a carbon neutrality target. Figures 13.1 and 13.2 show the difference in the scenarios planned under the NECP, as under the scenario comprising additional measures (WAM), Serbia plans to reduce its share of coal-fired generation while increasing its renewable generation capacity. Significant efforts will be needed to ensure the reduction in coal-based capacity is effective and takes place in a gradual timeline, in a way that is more ambitious compared to the scenario with existing measures (WEM).

Figure 13.1. Serbia's electricity generation capacity sources under the National Energy and Climate Plan's scenario with existing measures (2025-2050)

Share of each electricity source is denoted in percentage

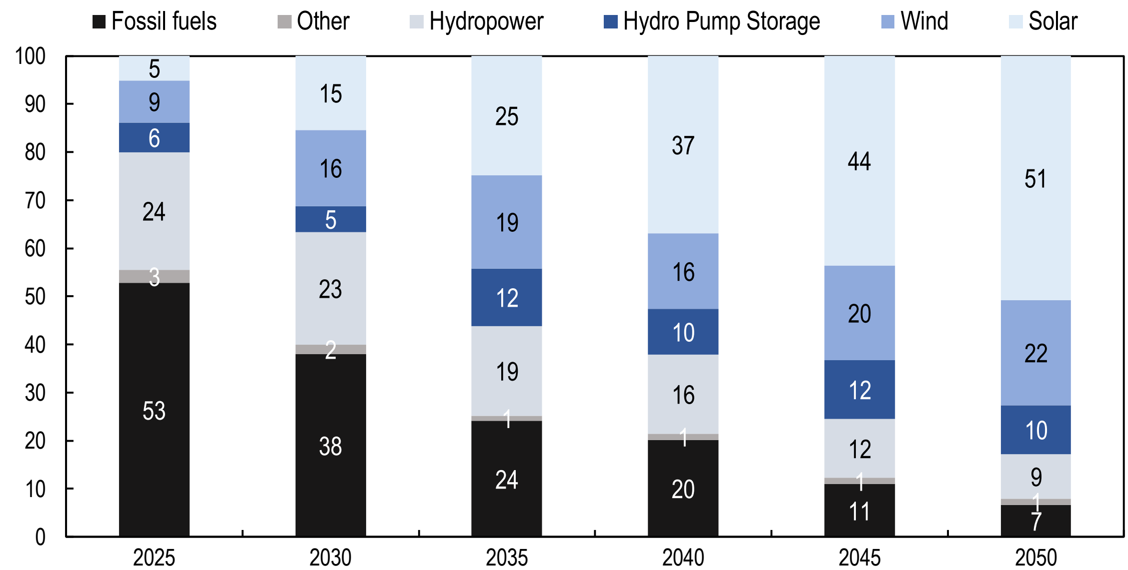


Notes: "Fossil fuels" is a grouping of data on solid fuels and natural gas from the source document. "Other" is a grouping of bioenergy and waste and industrial combined heat and power.
Source: Ministry of Mining and Energy (2023[2]).

The Serbian government has indicated its intention to gradually reduce budget allocations to subsidise fossil fuel production, particularly coal. However, there is currently no greenhouse gas (GHG) pricing mechanism in place. This point is particularly concerning given the upcoming introduction of the EU's Carbon Border Adjustment Mechanism (CBAM), which could have significant impacts on Serbia's exports to the EU if an appropriate GHG pricing mechanism is not introduced. The Serbian NECP does plan to introduce a carbon pricing scheme in its WAM scenario, which would start in 2027 with a price of EUR 4 per ton, to be increased to EUR 40 per ton in 2030, and only matching the EU-ETS price in 2045. A national GHG inventory system is in place, as mandated by the Law on Climate Change. This system is established, maintained, and continuously improved to assess GHG emissions following the requirements of the United Nations Framework Convention on Climate Change.

Figure 13.2. Serbia's electricity generation capacity sources under the National Energy and Climate Plan's scenario with additional measures (2025-2050)

Share of each electricity source is denoted in percentage



Notes: "Fossil fuels" is a grouping of data on solid fuels and natural gas from the source document. "Other" is a grouping of bioenergy and waste and industrial combined heat and power.
Source: Ministry of Mining and Energy (2023[2]).

A just transition plan is paramount when phasing out coal, as it addresses the complex economic, social, and environmental challenges associated with this necessary shift (Box 13.1). Progress towards decarbonisation goals in the energy sector is regularly monitored and evaluated by the Ministry of Mining and Energy and the Ministry of Environment. Additionally, a study on just transition is under way, and includes a broad range of consultations. This study is integral to understanding and managing the socio-economic impacts of transitioning from fossil fuels to a more sustainable energy mix, ensuring that the shift towards greener energy sources is effective and equitable. However, there is currently insufficient political commitment to drive such a just transition, which presents a big risk, as societal engagement and acceptance are of the utmost importance for a successful phaseout of fossil fuels.

The **renewable energy policy** framework has seen significant developments in recent years. A National Renewable Energy Action Plan (NREAP) has been drafted and adopted, marking a crucial step towards renewable energy development. The Law on Renewable Energy Sources and its amendments have significantly advanced Serbia's alignment with the EU's Renewable Energy Directive. Secondary legislation related to the sustainability criteria for biofuels, bioliquids, and biomass fuels has also been enacted in November 2023.[2] In June 2023, Serbia launched its first auctions for solar capacity (50 MW) and wind capacity (400 MW) after adopting the necessary bylaws related to the RES auction. Serbia has opted for the Contract for Difference (CfD) model to procure this renewable capacity. In the area of wind capacity, the entire 400 MW were successfully auctioned, with the successful bids ranging between EUR 64.5 and EUR 79 per MWh. Moreover, four solar photovoltaic projects were allocated 25.2 MW, with their winning bids varying from EUR 88.7 to EUR 98.8 per MWh. The capacity of prosumers in Serbia remains relatively low compared to other Western Balkan economies, with an installed capacity of 40 MW.

Box 13.1. Need for and importance of just transition plans

First and foremost, a just transition plan ensures that the individuals and communities reliant on the coal industry are not left behind. It focuses on retraining and upskilling workers, offering alternative job opportunities in clean energy sectors. This safeguards livelihoods and capitalises on the existing workforce's skills and expertise.

Moreover, a just transition plan prioritises environmental justice. It aims to minimise the adverse effects of coal mining on marginalised communities, which often suffer the most from pollution and its health consequences. Additionally, such a plan fosters economic diversification. By investing in renewable energy projects and green technologies, regions can create new industries, attract investments, and revitalise their economies. This helps offset the economic impact of coal phaseouts and positions communities for long-term growth and sustainability.

In conclusion, a just transition plan for coal phaseouts is indispensable for mitigating the negative impacts on workers, communities, and the environment. It ensures fairness, equity, and resilience in the face of a necessary energy transition.

Sources: Smith (2017[3]); World Bank (2021[4]).

Renewable Guarantees of Origin (GOs) are certificates that provide transparency and verification of the renewable origin of electricity generated from renewable energy sources (Box 13.2). Serbia has a functional system for Guarantees of Origin and is a full member of the Association of Issuing Bodies. This system is crucial for tracking renewable energy generation and ensuring transparency and reliability in the renewable energy market.

Box 13.2. Guarantees of Origin as a tool to strengthen the uptake of Renewable Energy Sources

Renewable Guarantees of Origin (GOs) are certificates that provide transparency and verification of the renewable origin of electricity generated from renewable energy sources. They serve as a valuable tool to promote renewable energy and bring several advantages to both producers and consumers, as they offer a reliable and standardised method for verifying the renewable origin of electricity. This helps consumers make informed choices about their energy sources, ensuring they are supporting environmentally friendly options.

Furthermore, Guarantees of Origin enhance transparency in the energy market by clearly identifying the source of electricity generation. This transparency holds producers accountable for their claims regarding their energy sources and fosters consumer trust. At the same time, such guarantees empower consumers to make conscious choices about their energy consumption. They can choose electricity from specific renewable sources like wind, solar, or hydro, aligning their energy consumption with environmental values.

Having a functional system for Guarantees of Origin in place and being a full member of the Association of Issuing Bodies, Serbia is a forerunner in the Western Balkan region.

Source: Association of Issuing Bodies (2024[5]).

In Serbia, there have been significant legislative and policy developments aimed at enhancing **energy efficiency**. The primary legislation in this area saw adoption of the new Law on Energy Efficiency in April 2021, transposing the first Energy Efficiency Directive. However, full alignment with the EU's Clean Energy Package in Energy Efficiency is still outstanding, as the revised Energy Efficiency Directive and the Energy Performance of Buildings Directive have not been fully transposed.

In terms of secondary legislation, plans, and policies, there has been considerable activity in the past two years. Over 30 new bylaws and regulatory acts were adopted during 2022 and 2023. This includes the establishment of certification schemes for energy managers and energy auditors, with the schemes for energy auditors introduced for the first time. Also, the Framework Labelling Regulation was transposed in March 2023, introducing a comprehensive system for labelling energy-related products with the aim of providing consumers with clear, standardised information on the energy efficiency of products.[3]

Article 14 of the Energy Efficiency Law provides the legal basis for mandatory energy savings. In line with saving goals defined by the government of Serbia, big energy consumers in the industrial sectors are required to achieve energy savings of 1% of their primary energy consumption from the previous year. Serbia has also put in place a Long-Term Building Renovation Strategy to increase energy efficiency in buildings. A challenge that remains is the absence of consumption-based metering and billing in district heating, which is a barrier to investment in building sector refurbishment.

In the realm of incentives and awareness raising for energy efficiency, Serbia has taken proactive steps. The Rulebook on conditions for the allocation and use of resources from the budget fund for improving energy efficiency is published on the Ministry of Mining and Energy website, complemented by public calls. These calls and mechanisms for awarding subsidies have also been announced in the media. International Financial Institutions (IFIs) such as KfW (Credit Institute for Reconstruction, Germany) and EBRD (European Bank for Reconstruction and Development) offer various financing lines through commercial banks, providing accessible options for different users. However, the capacities of the newly established Administration for Financing and Promoting Energy Efficiency need to be strengthened to effectively implement energy efficiency measures across various market segments.

In Serbia, the issue of **energy poverty** has been gaining increasing attention, leading to the development of specific legal and policy frameworks. A government decree on vulnerable customers sets the criteria for acquiring that status. Based on the decree, there are three direct financial support measures for vulnerable consumers in the domains of electricity, gas and heating. These supports are in the form of monthly deductions from the energy bills. Additionally, local measures in the form of direct financial support are implemented in municipalities such as Belgrade, Novi Sad and others.

The above-mentioned decree does not contain a definition of energy poverty. However, a definition is provided in the Law on Energy Efficiency, which also cites reducing energy poverty as one of the objectives of energy efficiency. According to Article 73 of the same law, the newly established Administration for Financing and Promoting Energy Efficiency is responsible for designing programmes and implementing measures to support energy-vulnerable consumers and reduce energy poverty.

Sub-dimension 12.4: Energy markets

Regarding **market operation,** Serbia has made notable progress, largely driven by amendments to the Energy Law and Law on the Usage of Energy from Renewable Sources, as well as the introduction of new legislation. These amendments have introduced new concepts that are pivotal for the evolving energy landscape, including electricity prosumers, aggregators, energy communities, and electricity storage. Additionally, amendments to the Energy Law have facilitated the transposition of the EU Electricity Connection Codes and all five Gas Network Codes. These codes are crucial as they minimise market barriers for new entrants by containing transparent and non-discriminatory rules for Transmission System Operator (TSO) operations.

Another noteworthy development is that Serbia became the first economy in the Western Balkans to establish an intraday electricity market in July 2023. Legally, market liberalisation is also very advanced in Serbia. However, despite these advancements, the deregulation of the market is still not sufficiently advanced in practice due to the dominant position of the incumbent power supplier, joint-stock company Elektroprivreda Srbije (EPS). Nevertheless, the electricity market can be regarded as well developed, in line with the EU and Energy Community *acquis*. The gas market, however, is significantly lagging behind.

The so-called "REMIT Light" has been transposed
regarding transparency and surveillance in the energy market

. This establishes a framework to ensure the integrity of the wholesale market by banning specific types of market abuse and improving transparency. Additionally, it grants national regulatory bodies or other relevant authorities the power to implement actions against those participating in abusive practices within the wholesale energy market. This is of ever-increasing importance, given the further development of markets that have taken place in Serbia, which needs to be accompanied by appropriate transparency and surveillance standards. Thus, it is also a positive development that the Transparency Regulation has been fully transposed and implemented, with the fundamental data being submitted to the central data platform.

In the area of **unbundling,** a differentiation needs to be made between the electricity and the gas sector. In the electricity sector, Serbia advanced significantly by unbundling the new electricity distribution company from EPS. AERS has since approved the distribution system operator (DSO)'s compliance programme; in March 2023 a Compliance Officer was nominated. The Serbian Transmission System Operator is also legally and functionally unbundled. In the gas sector, however, unbundling has not progressed and non-compliance with the EU and Energy Community *acquis* persists (Energy Community Secretariat, 2023[6]). The 2023 European Commission enlargement report on Serbia also highlights that the process of certifying and separating gas companies is experiencing delays and that the current roadmap targets the completion of the gas sector utilities' unbundling by the end of 2024 – a notable and unfortunate postponement, extending the longstanding non-compliance with gas legislation (European Commission, 2023[7]).

Regarding **third-party access rules**, while the Connection Codes have been transposed into national legislation, transparent, non-discriminatory rules are in place only within the electricity sector. In the gas sector, third-party access to the Horgos gas interconnection pipeline is still refused, and effective third-party access is not granted to all gas entry points, indicating areas for much-needed improvements.

In the realm of **regional market integration**, the Serbian Power Exchange (SEEPEX) was designated as the nominated electricity market operator (NEMO) by the Serbian government. This designation aligns with the EU's Capacity Allocation and Congestion Management Regulation requirements. Following this designation, the Energy Community Secretariat was notified in June 2023, marking a step towards formalising SEEPEX's role in the regional energy market. Transposition of the Electricity Integration Package is ongoing and needs to be completed to establish a complete legal framework for market coupling. This transposition is essential for aligning Serbia's energy market with EU standards and facilitating more efficient electricity trading.

In its 2023 report the Energy Community Secretariat highlighted that insufficient progress was being made in using the Joint Allocation Office (JAO) and the Coordinated Auction Office in South East Europe (SEECAO) for capacity allocation and additional interconnection. Serbia has made some recent progress in this regard, as since January 2024, cross-zonal border capacity on the border with Hungary has been allocated through the Joint Allocation Office. However, additional efforts are needed for further expansion of the use of JAO and, in particular, SEECAO in order to not further impede regional integration.

Overview of implementation of Competitiveness Outlook 2021 recommendations

Serbia has made progress in transposing the Third Energy Package and switching to market-based mechanisms for RES promotion (Table 13.3). However, additional efforts are needed to tackle the persisting shortcomings in unbundling, third-party access, and regional integration.

Table 13.3. Serbia's progress on past recommendations for energy

Competitiveness Outlook 2021 recommendations	Progress status	Level of progress
Finalise the transposition of the EU Third Energy Package	The Third Energy Package has been largely transposed. New requirements for the Clean Energy Package have not yet been fully transposed. Concerning approximation with the EU target model and the focus on competitive energy markets particularly, the transposition and implementation of the Network Codes of the Electricity Integration Package need to be advanced.	Moderate
Improve implementation across all sub-dimensions. In particular: i) fully unbundle TSOs and DSOs and ii) implement non-discriminated and transparent third-party access to transmission and distribution systems	Insufficient progress. Unbundling remains incomplete, and third-party access has not been fully granted. In the electricity sector, Serbia made advances by unbundling the electricity distribution company, approving the DSO's compliance programme, and appointing a Compliance Officer. Progress was also made regarding the unbundling of the transmission system operator. Unbundling in the gas sector has not progressed, and non-compliance with the EU and Energy Community *acquis* persists. Non-discriminatory third-party access is only given in the electricity sector, not the gas sector.	Moderate
Improve regional integration and market coupling	Moderate progress was made on extending cross-border capacity allocation through the Joint Allocation Office, particularly on cross-zonal capacity on the border with Hungary.	Moderate
Implement a new approach to support renewable energy and diversification	The Law on Usage of Energy from Renewable Sources (2021), its 2023 amendments, and the Law on Energy Efficiency and Rational Usage of Energy introduced market premiums for electricity producers and feed-in tariffs for small generators. Two auctions were launched in 2023, both subject to a CfD regime. Diversification efforts, however, have not been sufficient.	Moderate
Increase the share of renewable energy by streamlining the approval process at every stage	Framework conditions for the approval of projects still need to be further improved.	Limited

The way forward for energy policy

Even though Serbia has improved in several areas since the last *Competitiveness Outlook*, more work is required to overcome existing challenges and further align with the EU and Energy Community *acquis*. The following recommendations offer a perspective on key issues that, if effectively managed, could significantly enhance the Serbian energy sector and its efforts to comply with the relevant *acquis*.

- **Enhance efforts to enforce deregulation.** A true market will only develop within Serbia if alternative suppliers are incentivised to enter the market. Thus, the regulator should play a more active role in this regard to prepare for a true de facto deregulation and liberalisation of the market. The relevance of this is further underlined by the fact that a broader opening of the market would also enhance both diversification and the security of supply. These steps are essential in ensuring a more resilient and diverse energy landscape in Serbia, reducing reliance on single sources and bolstering the overall energy infrastructure.

- **Complete the transposition of the Clean Energy Package.** The revised Energy Efficiency Directive and the Energy Performance of Buildings Directive have not yet been fully transposed into national law. Transposition of the Clean Energy Package should also entail the Electricity Integration Package, as the network codes thereunder in the electricity sector have not yet been transposed but are an essential part of preparing Serbia's legal framework for further regional integration. The legal framework could also be further amended to facilitate the creation of energy communities and further strengthen the role of prosumers.
- **Closely monitor the implementation of decarbonisation plans.** Serbia should ensure that its decarbonisation policies under the NECP and other documents are properly monitored and evaluated on a regular basis to ensure that interim targets are met and to adjust the planned measures in case of delay or challenges to implementation.
- **Bring unbundling and third-party access regime in line with the Energy Community *acquis*.** The shortcomings in those areas have already persisted for some time and need to be rectified. This should entail the unbundling and certification of all network operators in the gas sector in line with the applicable *acquis* and end the discriminatory third-party access regime in the gas sector.
- **Develop a comprehensive diversification strategy.** To alleviate supply security concerns, a fully fledged approach to diversification should be developed. In this regard, particular attention should be paid to striking a good balance between an increase in renewable generation capacity and other means, such as additional regional cooperation, which also can increase supply security.
- **Enhance regional integration**. Slow progress on the extension of cross-border capacity allocation hampers regional integration, so Serbia should make additional efforts to find a solution.

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Notes

[1] Serbia held early elections in 2023; see also www.politico.eu/article/serbian-pm-will-continue-on-the-reform-path.

[2] Serbia's legal act on sustainability criteria for biofuels, bioliquids and biomass fuels was adopted and published in the *Official Gazette of RS*, No. 96 of 2 November 2023.

[3] Articles 63-67 of the Energy Efficiency Law provide the legal basis for this, and additional bylaws and regulatory acts were adopted to give full effect to the labelling requirements.

14 Environment policy

A healthy and sustainable environment is crucial for economic competitiveness as it supports resource efficiency, enhances resilience to climate-related risks, fosters innovation, and attracts investments while mitigating environmental degradation and associated costs. The chapter analyses the robustness and comprehensiveness of environment policies across four sub-dimensions. The first sub-dimension, climate action, assesses strategies aimed at both mitigating and adapting to climate change. The second sub-dimension, circular economy, focuses on policies promoting waste minimisation, resource efficiency, as well as sustainable production and consumption. The third sub-dimension, protection of ecosystems, explores challenges in managing freshwater, biodiversity and forestry, as well as land-use. The fourth sub-dimension, depollution, analyses policies related to air quality, water supply and sanitation, and industrial risk management, paramount for enhancing competitiveness while ensuring environmental sustainability.

Key findings

Serbia has continued to improve its overall environment policy score since the last *Competitiveness Outlook* (Table 14.1). Particularly noteworthy are the strides in enhancing the climate action and circular economy frameworks. However, there remains room for improvement in strengthening the ecosystem protection framework, which currently falls below the regional average. This is particularly evident in the areas of biodiversity conservation, forestry practices, and land use management.

Table 14.1. Serbia's scores for environment policy

Dimension	Sub-dimension	2018 score	2021 score	2024 score	2024 WB6 average
Environment	13.1: Climate action			2.8	2.5
	13.2: Circular economy			3.0	2.2
	13.3: Protection of ecosystems			2.0	2.1
	13.4: Depollution			2.5	2.3
Serbia's overall score		**2.1**	**2.2**	**2.5**	**2.3**

The **key findings** are:

- Serbia has made strides in strengthening its climate change framework by committing to more ambitious mitigation targets in the Low-Carbon Development Strategy, adopted in 2023, and enhancing institutional co-ordination with the re-establishment of the Climate Change Council. Greater resilience to climate change has also been evidenced by the development of the Climate Change Adaptation Programme, which assesses vulnerabilities to climate change hazards, and the Digital Climate Atlas of Serbia, which enables enhanced monitoring of climate risks.
- As the first economy in the Western Balkans to adopt a circular economy roadmap, Serbia has strengthened its policy framework by implementing the Circular Economy Development Programme and Action Plan 2022-24, alongside improved co-ordination among relevant stakeholders. Nevertheless, additional efforts are needed to improve waste management practices for a successful transition, given that only 17.5% of waste was recycled in 2021.
- Efforts to improve ecosystem protection in Serbia have been limited. Although the strategic framework on freshwater conservation has been strengthened and a forestry inventory has been conducted, there is still a need to expand land use management policies. Biodiversity preservation requires attention as the proportion of protected areas remains minimal and limited actions to mitigate pollution and tackle illegal activities have been implemented.
- Important steps have been taken to address air, water and soil pollution. Serbia has committed to reducing health impacts from air quality by adopting its first Air Protection Programme (2022-30) and substantial investments have been secured to improve the water supply and sanitation system. Initial efforts have also been made to bolster industrial risk prevention, management, and remediation by updating legislative and policy frameworks, aligning them more closely with EU standards.

State of play and key developments

Sub-dimension 13.1: Climate action

Over the past two decades, Serbia has experienced a modest decline in greenhouse gas (GHG) emissions. In 2020, 79.2% of all GHG emissions originated from the energy sector, largely attributable to the heavy reliance on low-calorific lignite coal for about 70% of its energy production (UNFCCC, 2023[1]). This reliance contributes to high electricity consumption in Serbia, notably driven by electricity use for heating and a notable deficiency in energy efficiency. Another substantial emitter is the Agriculture, Forestry, and Other Land Use (AFOLU) sector (excluding removals), responsible for 7.2% of total emissions, primarily due to intensive agricultural practices. In the 2010-20 period, the AFOLU sector experienced a 16.2% drop in removals, mainly due to increased biomass use and natural disasters such as fires, strong winds, insect damage and diseases (UNFCCC, 2023[1]). Concurrently, Serbia is preparing for increasingly severe impacts of climate change, with projections indicating potential temperature rises of up to 4.3°C by the end of the century. Hydrometeorological hazards like seasonal flooding and periods of drought have already significantly impacted Serbia's economy and are expected to become more frequent. Annual precipitation has seen a 10% increase countrywide over the period 2008-17, with a notable rise of up to 20% in the southern regions. The Serbian economy also faced significant challenges in 2014 due to heavy floods, resulting in a 1.8% drop in real GDP compared to the previous year. Already, vulnerability is evident across water resources, agriculture, forestry (including biodiversity), and health sectors (UNFCCC, 2022[2]).

Serbia has taken significant steps to enhance its climate change framework, aligning with commitments outlined in the United Nations Framework Convention on Climate Change (UNFCCC) and the Green Agenda for the Western Balkans. In 2021, the Law on Climate Change was enacted, setting up the National Greenhouse Gas Inventory System and its reporting mechanism. This legislation also laid the groundwork for the formulation of the Low-Carbon Development Strategy, covering the period up to 2030, with projections reaching until 2050. The strategy, adopted in 2023, outlines an economy-wide target for reducing GHG emissions by 33.3% by 2030 compared to 1990 levels. This target aligns with the revised Nationally Determined Contributions (NDC) submitted in 2022 for the period 2021-30. It represents a significant increase from the initial NDC, which aimed for a 9.8% reduction during the same period. A relevant Action Plan and monitoring framework are under development to guarantee enforcement of the strategy. Moreover, Serbia was in the process of developing an Environmental Protection Strategy and Action Plan, in alignment with the Green Agenda for the Western Balkans and planned to be adopted in 2025. Co-ordination of climate change policies has been renewed since the last assessment, with the re-establishment of the National Climate Change Council in 2021, gathering 30 members representing various entities, including line ministries, institutions, civil society, and non-governmental organisations (NGOs). The Council has convened three times since its re-establishment, which falls short of the minimum requirement set in its Rules of Procedure, according to which it should meet at least once every six months.

In addition to the Low Carbon Development Strategy, Serbia is developing its National Energy and Climate Plan (NECP) to consolidate its **climate change mitigation** framework. The NECP, which underwent wide public consultations in 2023 and is supported by a Strategic Environment Impact Assessment Report,[1] was pending adoption at the time of writing. The measures outlined in the Plan are aligned with the Energy Development Strategy until 2040, which is under development at the time of writing. It incorporates projections until 2050 and establishes specific targets for renewable energy and energy efficiency, among other key areas. As part of the NECP, Serbia aims to achieve a 40% reduction in GHG emissions by 2030 compared to 1990 levels, which represents a more ambitious target than that stated in the NDC. While there is no GHG pricing mechanism in place, Serbia plans to introduce a carbon tax to attain this goal. Serbia also offers a range of investment incentives for renewable energy projects to mitigate carbon emissions in the energy sector, including auctions, tax incentives, grants, and subsidies[2] (see Chapter 13).

Serbia's **climate change adaptation** framework has considerably improved since the last assessment. In addition to adaptation measures introduced in the revised NDC,[3] the Climate Change Adaptation Programme until 2030 and Action Plan (2024-26) have been developed with the support of the Green Climate Fund and adopted at the end of 2023. Strategic targets of the Programme are to increase awareness of the impacts of climate change, increase capacities for the systematic implementation of adaptation measures, increase the resilience of critical infrastructure and natural resources, and improve financial support for adaptation measures. The Action Plan defines 25 measures, the financial and institutional frame, and the timeline for their implementation and monitoring. Resilience and preparedness for climate-related hazards are also expected to be enhanced with the National Strategy for Disaster Risk Reduction and Emergency Management and its Action Plan,[4] which remains to be adopted. The Strategy is aligned with the Sendai Framework for Disaster Risk Reduction[5] and covers all types of natural and geophysical hazards (water-related, extreme weather events, land-related disasters, earthquakes). Following climate change-related disasters, in particular the 2014 floods, implementation of adaptation measures has been solid and conducted by a consortium of international organisations (such as the programme "Making Cities Resilient 2030"[6]) and the Ministry of Interior (primarily awareness raising and preparedness activities[7]).

Climate-related data collection and distribution have also improved since the last assessment to enhance prevention, intervention and recovery. Namely, the Disaster Risk Register was introduced in 2022 as an interactive digital database on disaster risk assessment, intervention and infrastructure reconstruction; the Digital Climate Atlas of Serbia, established in 2022, includes climate datasets, including observation as well as regional and local-level climate model projections. Information exchange related to natural disasters, including scientific and technical data, is planned through bilateral agreements with 12 countries.

Sub-dimension 13.2: Circular economy

Currently, resource productivity remains low in Serbia (EUR 0.40/kg in 2021 compared to EUR 2.26/kg in the EU) (Eurostat, 2022[3]), underscoring the importance of embracing a circular economy with measures addressing the entire life cycle of products. This involves aspects ranging from design and manufacturing to consumption, repair, reuse, recycling, and the reintegration of resources back into the economy. Serbia was the first Western Balkan economy to develop a circular economic framework. In line with its circular economy roadmap adopted in 2020, a Circular Economy Development Programme and Action Plan for 2022-24 were developed, with clear objectives and measures covering **sustainable resource use, consumption and production** (Box 14.1). The Action Plan for the period 2025-30 is planned to be prepared and adopted in 2024.

Circular economy considerations have also been integrated into sectoral policies (such as the Industrial Policy Strategy, the Low-carbon Development Strategy, the Small and Medium-sized Enterprises Strategy and Waste Management Programme). Institutional co-ordination is well established through a new Department for Circular and Green Economy within the Ministry of Environmental Protection[8] and a Working Group on Circular Economy comprised of members from all parts of society, both ensuring active implementation of the framework (Box 14.1). The Chamber of Commerce and Industry of Serbia also actively promotes circular economy principles among businesses, notably through a dedicated digital platform established in 2021.

Box 14.1. Serbia's Circular Economy Development Programme 2022-24

Development of the Programme

A strategic framework for a circular economy in the Republic of Serbia began to be defined in 2019 by creating the "Ex-ante analysis of the effects of circular economy", which indicated that a separate policy document was needed for the field. In accordance with the results of the analysis and the Law on the Planning System of the Republic of Serbia, the Ministry of Environmental Protection initiated the development of the Circular Economy Development Programme in the Republic of Serbia 2022-24. The document was adopted in December 2022.

Wide stakeholder consultations were conducted for the development of the programme with all relevant ministries and the Circular Economy Working Group, which includes representatives from civil society, academia and the private sector.

Elements of the Programme

Five specific objectives, with measures and activities to be implemented in 2022-24, are envisaged to fulfil the overall objective.

- Support companies with the aim of improving the efficiency of production and removing waste from supply chains.
- Support local self-governments in developing local roadmaps for a circular economy, which will contribute to the creation of sustainable communities.
- Raise awareness of interested public and educational institutions about the circular economy concept.
- Strengthen co-operation between the business and academic sectors for innovations contributing to the circular economy.
- Encourage the application of green public procurements and voluntary instruments in the field of environmental protection.

Improving the waste management system through more efficient waste use in the circular economy is also seen as an important crosscutting element.

Implementation of the Programme

Monitoring of the Programme is conducted annually, reporting on inputs, outputs, indicators and performed activities. According to the latest report conducted in 2022, implementation is ongoing with some delays. The main activities conducted include:

- Adding a special section for Green Public Procurements to the Ministry of Environmental Protection website: six guideline documents have been prepared.
- Preparing an analysis with measures for further applying existing and introducing additional voluntary instruments.
- Preparation of a plan for an awareness-raising campaign on circular economy: at least 15 workshops, public events and roundtables are planned to be conducted. Some awareness-raising activities will also target the consumption footprint of public authorities and accompany them towards sustainable choices.

- Twelve circular vouchers were awarded through public calls for companies to develop innovations and solutions based on circular economy principles, in co-operation with scientific and research organisations.

Source: Ministry of Environmental Protection (2022[4]).

While progress has been made in the past decade on expanding the coverage of waste collection services (88% in 2021 compared to 78% in 2011 , waste treatment remains a challenge in Serbia: only 17.5% of waste was recycled in 2021, compared to 49% in the EU (EEA, 2023[5]). This discrepancy is primarily attributed to inadequate infrastructure for waste sorting and recycling, limited financial resources at the local level, and a lack of public awareness and engagement. Although envisaged in the legal framework, separation at source (of paper, glass and metal) remains marginal, and there is no systematically organised system for separate collection in place, except for a few ad hoc pilot projects in some cities. Important strides were nevertheless achieved to strengthen the **waste management framework,** with the adoption of amendments to the Law on Waste Management in 2023 and the Waste Management Programme (2022-31) and related Action Plan (2022-24). The law further aligns with the EU Waste Framework and Landfill Directives by introducing a legal basis for improving the waste disposal management systems and circular economy principles. The programme includes recycling and landfilling targets, which are in line with the Circular Economy Development Programme, and envisages the development of planning documents for specific waste streams (such as agricultural, mining, and medical waste). Nonetheless, illegal disposal of waste in unsanitary landfills remains common (only 25% of waste is sent to the 11 sanitary landfills) (EEA, 2021[6]), and the uptake of the extended producer responsibility scheme (which is currently only in place for packaging waste) has been slow. Steps were nevertheless taken to clean and prevent illegal dumpsites, and investments in new treatment facilities are ongoing in Belgrade. Another significant obstacle to scaling up waste management practices is the subpar quality of waste data. This issue arises from several public utility companies not following the prescribed methods for assessing quantities and analysing the composition of municipal waste, and the absence of proper weighing equipment at treatment facilities.

Sub-dimension 13.3: Protection of ecosystems

Serbia possesses significant water resources, although it heavily depends on external flows, with 92% of its water supply originating from external sources. In 2020, its renewable internal freshwater resources per capita amounted to 1 219 m^3, contrasting with the EU average of 3 037 m^3 (World Bank, 2023[7]). Despite this, Serbia does not face significant water scarcity conditions; its worst seasonal water use against renewable water resources reached 5.3% in 2019, far below the state of water stress (20%) (EEA, 2023[8]). In 2021, around 74% of water was used in the industry sector, mainly for cooling in electric power generation, followed by domestic and agricultural use (around 13% each) (SORS, 2023[9]). Considering the spatial and temporal unevenness in Serbia’s water regime, a solid legal and policy framework for **freshwater management** is crucial to address specific challenges presented at local levels (Ministry of Environmental Protection, 2022[4]). In particular, water pollution originating in the energy sector, waste and wastewater public companies, and chemical and mineral industries – as well as compliance of hydropower plants with environmental laws – requires attention (European Commission, 2023[10]). The policy framework on freshwater management is guided by the Water Management Strategy (2017-34) and its 2021-23 Action Plan. Additionally, the River Basin Management Plan by 2027, which aims to establish sustainable water management practices in Serbia's major basins and further aligns with the EU Water Framework Directive, was prepared in 2021 and adopted in 2023. Ongoing implementation efforts prioritise safeguarding water quality by expanding wastewater treatment capacities, mitigating agricultural pollution from nutrients and pesticides, remediating contaminated sites, and implementing pollution control measures in urban areas, traffic, built infrastructure, and forestry. These efforts align with the objectives of the International Commission for the Protection of the Danube River and the Sava Commission, of which

Serbia held the presidency in 2023. Nevertheless, the lack of a national water management body, resulting in the absence of a digitalised and comprehensively compiled dataset for national water quality and quantity, impedes proper implementation and monitoring of measures.

Limited advancements have been noted to strengthen the **biodiversity and forestry management** framework in Serbia. The Biodiversity Strategy has not been revised since it expired in 2018, and no monitoring report for the Nature Protection Programme (2021-23) has been produced to assess the progress of its implementation. Mainstreaming biodiversity policies into sectoral policies, awareness-raising activities, and adoption of additional national conservation instruments have not been undertaken during this assessment period. Additionally, there has been minimal alteration in Serbia's terrestrial protected areas, remaining at 8% in 2022, a slight increase from 7.6% in 2019. This falls short of the Aichi Target of 17% by the year 2020 (Convention on Biological Diversity, 2020[11]). A critical review of the nature protection system has nevertheless started as of 2023 with a new five-year project led by the International Union for Conservation of Nature, which has a particular emphasis on good governance and protected area management. The project is expected to establish a comprehensive nature management programme, in line with global conservation standards and best practices.

Forests covered 39.3% of Serbia's land in 2022, with this area seeing a gradual increase in recent decades attributed to consistent afforestation efforts and a decline in rural populations, leading to reduced extensive agrarian production in forested areas (UNFCCC, 2023[1]; Convention on Biological Diversity, 2024[12]). Serbia seeks to address the significant risks posed by illegal tree logging to its forestry resources with the development of the Law on Marketing of Wood and Wood Products, which had yet to be adopted at the time of writing. Moreover, the Roadmap for a National Forest Programme, developed in 2023 through an EU-funded project, aligns the framework with international best practices on forestry and emphasises the vital role of forests in climate change mitigation and adaptation. The results of the latest forestry inventory, conducted during 2019 and 2022 and published at the end of 2023, should also provide data for developing effective forest management plans. These plans will facilitate well-informed decisions regarding harvesting, conservation, and restoration activities.

Serbia is facing land degradation challenges, mainly due to issues such as unplanned urbanisation, unregulated land repurposing, mining operations, chemical pollution, and erosion. For instance, in 2020, total damages in state forests amounted to approximately 143 007 m^3 of wood volume, out of which man-made disasters caused damage to 26 000 m^3 (UNFCCC, 2023[1]). Serbia still lacks an overarching **land use management** framework due to delays in adopting the Spatial Plan for the period 2021-35. Initiated in 2020, the Plan encompasses 49 spatial development indicators to monitor spatial planning. Its primary goals include curbing illegal constructions, achieving a balance between land degradation and restoration rates, and promoting the implementation of ecologically sound systems for irrigation while addressing erosion. Despite this gap, Serbia’s Sustainable Urban Development Strategy (2020-30) is being implemented, focusing on promoting sustainable land use practices in urban areas by specifically addressing issues related to demographic changes and housing, infrastructure planning and the redevelopment of brownfields. Additionally, the strategy considers the importance of environmental conservation and tackles the potential effects of climate change. Moreover, Serbia defined several objectives relevant to land degradation and desertification as part of its seventh report to the United Nations Convention to Combat Desertification, submitted in 2022[9] (UNCCD, 2023[13]). During the assessed period, some activities related to land use were carried out, with a primary focus on identifying and restoring degraded land[10] (Serbia and Land Degradation, 2024[14]). However, overall implementation remains subdued, and land degradation persists. The recent expansion of mining activities in Serbia has impacted land use, particularly through the repurposing of forest and agricultural land and increased pollution. Mining activities are not always accompanied by Environmental Impact Assessments, exacerbating the environmental consequences. Though important for the economy, it is essential to conduct exploration activities responsibly, considering key spatial planning principles and environmental considerations (Ristivojevic and Lazar, 2023[15]; Heinrich Boll Stiftung, 2022[16]). Some indicators relevant to land use, such as trends in land use change and the spread of urban land, are systematically collected by the Serbian Environmental Protection Agency to inform policy making, although they are not harmonised across government bodies.

Sub-dimension 13.4: Depollution

Air pollution remains a pressing environmental issue in Serbia, with annual average concentrations of fine particulate matter ($PM_{2.5}$) reaching 20.5 µg/m^3 (microgrammes per cubic metre) in 2021, one of the highest levels in Europe and more than four times higher than WHO recommended levels of 5 µg/m^3 (EEA, 2023[17]). Air pollution in Serbia arises from diverse sources, notably the reliance on lignite and coal-fuelled power stations in the energy sector, coupled with the burning of solid fuels like coal and wood for residential heating. While implementation of measures to enhance **air quality** has been limited in the assessed period, Serbia has taken a significant step forward, by adopting its first Air Protection Programme (2022-30) along with an Action Plan spanning from 2022 to 2026. This comprehensive initiative is designed to reduce health damages resulting from poor air quality by 50%, compared to the levels recorded in 2015. Namely, the Programme's most ambitious targets are to reduce sulphur dioxide (SO_2) emissions by 92% and $PM_{2.5}$ emissions by 58.3% by 2030, complying with Best Available Technique-Associated Emission Levels (BAT-AELs) to decrease air pollutants and heavy metals from industrial processes. Ammonia (NH_3) emissions from the agriculture sector are also foreseen to be cut by 20.5% in 2030. Moreover, eight local air quality plans tailored to specific local circumstances have been approved, and more are expected in the upcoming period.[11] Since 2021, there has been enhanced reporting on air quality, with the Serbian Environmental Protection Agency initiating regular reporting of national emission inventories for all pollutants, aligning with EU requirements.[12] However, the area covered by official air quality monitoring only encompasses around 25% of Serbia's total territory, raising concerns about the comprehensiveness of air quality data (Bradaš et al., 2023[18]). Moreover, the absence of approved air quality plans across all municipalities, coupled with Serbia's legislation not aligning with the EU acquis on national emission ceilings, often leads to a lack of prompt responses when air pollutant limit values are exceeded.

Untreated sewage and wastewater stand out as primary contributors to water pollution in Serbia. Approximately 75% of the population had access to safe drinking water in 2020, a percentage that has remained unchanged since 2004 (Bradaš et al., 2023[18]). Only 55% of the population is connected to a sewage system and 16% to wastewater treatment as of 2021, a significant disparity compared to over 90% in the EU (SORS, 2023[9]). Moreover, more than half of the industrial facilities in Serbia do not treat wastewater, because there are no treatment systems in place (UNFCCC, 2023[1]). Water losses in the water system, exceeding 50% in some districts, represent another significant challenge.[13] The Water Management Strategy (2017-34) remains the guiding strategic document for **water supply and sanitation** in Serbia, and no major policy changes have occurred since the last assessment. Further efforts are needed to ensure alignment of the water legislation with the EU acquis and to strengthen administrative capacity for monitoring and co-ordination among all relevant stakeholders[14] (European Commission, 2023[10]). Despite current challenges, there are plans to enhance water supply and sanitation in the coming years. The Ministry of Construction, Transport, and Infrastructure announced the start of construction for around 800 kilometres of sewage and collector infrastructure in 2021, covering more than 20 municipalities and cities, with significant support from international donors. The government aims to extend sewage infrastructure coverage to 80% of the population until 2026 and additionally plans to integrate wastewater treatment plants into the utility infrastructure.[15] In this regard, the construction of a wastewater treatment plant has been finalised in Vranje and Kruševac at the end of 2021, and has started in Nis, Brus and Blace with international co-funding. While current water service fees have proved too low to cover or even supplement investment in water supply and sanitation infrastructure, EU-funded work on adequate water fees and tariffs continued in 20 municipalities to ensure proper covering of operational costs of the system[16] (European Commission, 2023[10]). Upon completion of this project in mid-2024, Serbia will need to ensure the capacities of local governance, especially concerning the operation, maintenance and budget planning of water and wastewater facilities.

Since the last assessment, additional steps have been taken to reinforce the legal framework concerning **industrial risk management**. Namely, two draft laws have been prepared: the draft law on Control of Major-accident Hazards Involving Dangerous Substances fully transposing the Seveso III Directive on preventing major industrial accidents,[17] and the revised law on Integrated Pollution Prevention and Control (IPPC), further aligning with the Industrial Emissions Directive.[18] During the assessed period, international co-operation partners[19] supported Serbia in preparing secondary legislation on IPPC and ensuring the compliance of all 221 IPPC installations, including applying the best available techniques. The institutions' capacities were also strengthened through training sessions on permit writing, inspections, and binding rules. Promisingly, the desulphurisation of the Kostolac B thermal power plant, Europe's biggest sulphur dioxide polluter, started in 2023 after being delayed for several years (European Commission, 2023[10]). Regarding chemicals, a new Rulebook was adopted in 2021 based on the Law on Chemicals, introducing a list of restrictions and prohibitions for hazardous components representing risks to human and environmental health. While this complements the official register of chemicals available on line since 2019, no mechanism is currently in place to identify new chemical substances outside the lists in the register and the rulebook. On the policy side, the National Programme for Industrial Safety, being prepared at the time of drafting and planned to be adopted at the end of 2024, will aim to strengthen disaster resilience and industrial risk management. To ensure proper remediation of contaminated sites by industrial activities, a Cadastre of Contaminated Sites Information System exists, and soil-monitoring data are regularly collected by the Serbian Environmental Protection Agency (SEPA) at the operational, post-operational and remediation stages to identify potential health risks.

Overview of implementation of Competitiveness Outlook 2021 recommendations

Serbia's progress on implementing *Competitiveness Outlook 2021* Recommendations has been moderate: below, Table 14.2 shows the economy's progress in implementing past recommendations for environment policy.

Table 14.2. Serbia's progress on past recommendations for environment policy

Competitiveness Outlook 2021 recommendations	Progress status	Level of progress
Step up efforts to combat air pollution and climate change, primarily by reforming power generation	The Programme of Air Protection of the Republic of Serbia 2022-30 and its Action Plan 2022-26 aim to cut health damages caused by low air quality in half compared to 2015 levels. To this end, measures to reduce high exposure to air pollution and harmonise pollution limits with EU regulations are foreseen. Moreover, Serbia offers a range of investment incentives for renewable energy projects, including tax incentives, grants, and subsidies. The feed-in tariff system was established by the Law on Renewable Energy Sources. Moreover, the Plan for the incentive system for the use of renewable energy sources for the period 2023-25 was adopted, focusing on electricity generation from wind farms and solar power plants.	Moderate
Invest in improving the water supply and sanitation system and treating more wastewater	Revision of municipalities' water fees and tariffs is ongoing as part of an EU-funded project to cover operation and maintenance of water infrastructure. While the share of wastewater treated remains low, investments for sewage systems and wastewater treatment are ongoing, mainly with the support of international donors.	Moderate

The way forward for environment policy

Despite taking important steps to strengthen its environment policy framework, in the areas of climate change and circular economy, Serbia could consider the following improvements:

- **Increase waste recycling rates by effectively implementing the extended producer responsibility (EPR) take-back scheme for packaging waste and extending the EPR system to new product groups**. While the EPR scheme has applied to packaging waste since 2010, the uptake by producers and consumers has been slow. To scale up its efficiency, Serbia could follow the guiding EPR principles laid out in Box 14.2. To align with relevant EU Directives, Serbia should also extend EPR schemes to other product categories or waste streams, such as end-of-life vehicles and electrical and electronic equipment, and motor oils and tyres.
- **Mainstream biodiversity considerations are included in all relevant strategic documents.** In line with the internationally led project to develop a comprehensive nature management programme, Serbia must develop a long-term national vision for biodiversity with clear targets and indicators. A global vision for 2050 already exists under the Convention on Biological Diversity, which Serbia can adopt or tailor to its national circumstances. Serbia should also ensure that biodiversity is mainstreamed across relevant strategies and programmes and strengthen inter-institutional co-ordination by setting clear roles and responsibilities. Biodiversity loss and climate change must be addressed together, considering that terrestrial ecosystems are natural carbon sinks, with an annual gross sequestration equivalent to about 60% of global anthropogenic emissions (IPBES, 2019[19]). Given Serbia's vulnerability to climate-related hazards, investing in nature can serve as a crucial means to protect the population from threats such as floods, droughts, storms, and other environmental risks (OECD, 2021[20]).
- **Elevate the commitment to safeguarding natural heritage by significantly expanding the coverage of protected areas.** To ensure efficient enforcement of biodiversity measures, Serbia needs to significantly expand the coverage of protected area, which is falling short of international targets. Costa Rica's Payment for Environmental Services programme is a successful model for expanding protected areas. Through this initiative, landowners receive financial incentives for maintaining or restoring ecosystems on their land, effectively discouraging deforestation. This approach has expanded protected areas and fostered biodiversity conservation by creating biological corridors and engaging local communities in sustainable land management practices. The programme's success is attributed to a robust institutional framework, effective governance, and collaboration between the government, non-governmental organisations, and communities. Currently, Costa Rica has expanded its officially protected areas to cover 25% of land and 30% of marine areas, well above the respective OECD averages (OECD, 2023[21]).
- **Adopt the Spatial Plan and strengthen institutional co-ordination among different ministries responsible for land use issues** related to climate, biodiversity, and agriculture, both horizontally (at national level) and vertically (between different levels of government) to achieve a more holistic governance of land use. The land use nexus involves multiple issues, affects multiple actors from both the public and private sectors, and requires a whole-of-government approach to co-ordinate policies across all relevant stakeholders, which Serbia currently lacks. One good practice example that provides such co-ordination is the Austrian Conference on Spatial Planning (Box 14.3).

Box 14.2. Guidance on implementing extended producer responsibility take-back schemes

OECD EPR Guidance

To effectively implement extended producer responsibility (EPR) take-back schemes to shift end-of-life management costs of products from the public sector to producers and consumers and to increase the collection and recycling rates of these waste streams, economies should ensure the application of the following principles (a selection based on the OECD EPR Guidance):

- *Clear legal framework* – The legislation must clearly define and define the responsibilities of all actors involved in EPR. There needs to be a legal framework for producer responsibility organisations to operate. The EPR targets need to be periodically reviewed.
- *Transparency* – The governance of EPR systems needs to be transparent to provide more effective means for assessing the performance of the actors involved and holding them accountable for their activities. This will require collecting both technical and financial data and setting up registers of producers, accreditation of producer responsibility organisations, and appropriate sanctions.
- *Sufficient existing waste management capacity* – For EPRs to work effectively, adequate waste infrastructure must be in place across the country, including infrastructure for waste separation at source, collection and treatment (ideally recycling).
- *Administrative oversight capacity for better enforcement* – This concerns enforcement capacity to prevent unauthorised facilities and collection points from operating. This should also minimise free-riding and non-compliance.
- *Stakeholder engagement* – Platforms for dialogue among stakeholders need to be established.

Prevent Waste Alliance EPR Toolbox

To facilitate the adoption of general good practices and OECD guidance on EPR, authorities and other relevant actors could make use of the EPR Toolbox developed by Prevent Waste Alliance, to consult other international practices and participate in knowledge exchange to enhance the functioning of the domestic EPR system. The EPR Toolbox contains three modules that span more general aspects of an EPR, including the monitoring of financial flows, but also focus on concrete actions, such as the integration of the informal sector or the creation of a market for recycled plastics.

Data collection and processing for EPR schemes – Example of the Czech Republic

While certain technical requirements must be met, the first step towards ensuring transparency of EPR schemes is effective co-ordination and compliance with reporting obligations under applicable legislation. The Czech Republic's electronic registry for waste is an exemplary model for a successful national waste information database. Recently rated as the best European system for waste data management and evaluation by the European Topic Centre for Circular, it employs two distinct systems. One handles the mandatory data reported by entities subject to relevant legal acts (Information System for Reporting Obligations), while the other manages the subsequent verification, processing and evaluation of the reported data (Information System for Waste Management). This streamlined process is further enhanced by extending verification authority to municipal and regional authorities, with the Environmental Information Agency functioning as the central data hub. By engaging a diverse array of stakeholders, including the statistical office, the information system becomes a catalyst for the development and implementation of evidence-based waste management policies.

Sources: Prevent Waste Alliance (2023[22]); Tuscano et al. (2022[23]).

Box 14.3. Enhancing land use co-ordination with the Austrian Conference on Spatial Planning

The Austrian Conference on Spatial Planning (ÖROK, Österreichische Raumordnungskonferenz) is an organisation dedicated to co-ordinating spatial planning policies between the three levels of government in Austria (the national level, the states and the municipalities). Its decision-making body is chaired by the federal chancellor, and its members include all federal ministers, the heads of all federated states, and representatives of local government associations. Furthermore, business and labour organisations are represented in the body as consulting members. The work of the decision-making body is supported by a permanent secretariat with a staff of approximately 25-30.

One of the central tasks of the ÖROK is the preparation of the Austrian Spatial Development Concept (ÖREK, Österreichisches Raumentwicklungskonzept). The current Austrian Spatial Development Concept (ÖREK 2030) was published in 2021 and covers a planning period of around ten years. Guided by the key theme of "Need for Transformation", it is a strategic instrument for overall spatial development in Austria. Beyond the preparation of the Spatial Development Concept, the ÖROK also monitors spatial development across Austria. It has developed an online tool that provides a mapping function of a variety of important indicators at the municipal and regional level and releases a report on the state of spatial development every three years.

The ÖROK is also the co-ordinating body for structural funds provided by the European Union. It managed the integration of structural funds into broader spatial strategies and was directly responsible for the programming work related to 1 of the 11 Thematic Objectives of the programming period 2014-20. The ÖROK also serves as a National Contact Point within the framework of European Territorial Cooperation.

Sources: OECD (2017[24]); ÖROK (2024[25]).

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Notes

[1] The Strategic Environment Impact Assessment Report was developed to examine and mitigate negative impacts of the measures planned on communities, regions, industries and workers.

[2] The feed-in tariff system established by the Law on Renewable Energy Sources. Moreover, the Plan for the incentive system for the use of renewable energy sources (2023-25) was adopted, focusing on electricity generation from wind farms and solar power plants. More information on renewables investment incentives is available in the Energy Policy Chapter.

[3] The revised NDC integrates adaptation measures in the water, agriculture and forestry sectors, including the assessment of loss and damage. However, it does not include adaptation targets.

[4] The strategy was originally scheduled for adoption covering the period from 2022 to 2027, but there are current plans to extend it to encompass the years up to 2030.

[5] The Sendai Framework for Disaster Risk Reduction (2015-30) is an international agreement adopted in 2015 during the Third UN World Conference on Disaster Risk Reduction. It sets out a roadmap for countries and other stakeholders to reduce disaster risk and build resilience. The framework focuses on various aspects of disaster risk reduction, including understanding risk, strengthening governance, investing in resilience, and enhancing disaster preparedness.

[6] The programme "Making Cities Resilient 2030" started in 2021 by a consortium of international organisations involved in disaster resilience and the Public Investment Management Office, the Ministry of Interior and the Standing Conference of Towns and Municipalities. Its objectives are to 1) improve cities'

understanding of risk and secure their commitment to local disaster risk reduction and resilience; 2) strengthen cities' capacity to develop local strategies/plans to enhance resilience; and 3) support cities in implementing local strategies/plans to enhance resilience. It also aims to improve vertical and horizontal co-ordination among relevant institutions, as well as among cities.

[7] With the support of the Organization for Security and Cooperation in Europe (OSCE) Mission to Serbia, "The Family Guide for Emergency Preparedness and Response" was produced, enabling continuous education of the population. In co-operation with Caritas Serbia, posters and family manuals were produced in the area of disaster risk reduction, as well as colouring books and videos for children on the topic of behaviour during emergencies such as fires, floods and earthquakes. Within the campaigns "Firefighters at School" and "Fundamentals of Child Safety", members of the Fire and Rescue Units raised the safety culture of students, covering fire protection and protection against technical and technological hazards and natural disasters.

[8] The Department for Circular and Green Economy is comprised of a group for sustainable development (5 employees) and a group for the implementation of voluntary instruments in environmental protection (3 employees).

[9] Some of these objectives involve promoting sustainable land management to contribute to achieving land degradation neutrality in affected ecosystems. Additionally, the goals involve enhancing the living conditions of affected populations and effectively mitigating, adapting to, and managing the effects of drought.

[10] Such activities include training organised within the Food and Agriculture Organization (FAO) project "Strengthening national capacities for risk assessment of diffuse pollution of agricultural land"; the organisation of a congress on the study of soil where the Environmental Protection Agency presented its work on the topic, "Enhancing management of contaminated sites using environmental monitoring data and preliminary risk assessment methodology in Serbia"; and the participation at a regional event for the World Soil Day, organised by the FAO.

[11] In 2021, all eight agglomerations experienced air quality classified as category III, indicating excessive pollution. This marked an increase from the previous year, where seven out of eight agglomerations fell into this category, with the addition of the Novi Sad agglomeration to the list. When the air quality reaches category III in agglomerations, it necessitates the development of an air quality plan, as mandated by the Law on Air Protection. The Ministry of Environmental Protection approved the air quality plans for the Belgrade and Kragujevac agglomerations in 2021, and for the Kosjerić and Novi Sad agglomerations in 2022. Additionally, approval for short-term action plans was granted to the cities of Bor, Kragujevac, Kruševac, Leskovac, Sremska Mitrovica, and the Municipality of Trstenik.

[12] Directive (EU) 2016/2284 on the reduction of national emissions of certain atmospheric pollutants.

[13] Systematic statistics are only available up to 2017. According to SORS, losses increased from 32% in 2011 to 35.5% in 2017. In the South Serbia region, these losses exceed 45%, with some districts like Bor and Branicevo experiencing losses greater than 50%.

[14] The Ministry of Agriculture, Forestry and Water Management, and the Ministry of Construction, Transport and Infrastructure, as well as local enterprises established by municipalities, are the key bodies responsible for water supply and sanitation management in Serbia.

[15] Projects in Leskovac, Vranje, Niš, Brus and Blace, Kraljevo, Loznica, Sokobanja, Čačak, Belgrade, and Zlatibor are currently in various stages of preparation or construction, specifically focusing on water treatment and/or sludge treatment facilities. On the other hand, projects in Kruševac and Raška have already been completed. Ongoing projects, supported by the German Development Bank KfW, involve the construction and reconstruction of wastewater treatment plants (WWTPs) in Smederevo, Pančevo, Kikinda, Požarevac, Trstenik, Pirot, Jagodina, and Vršac. Additionally, these projects include the reconstruction and extension of the sewage network.

[16] The "European Union support to reforms in water sector services" project, initiated on 27 January 2022, aims to analyse the existing organisation and operations of public utility companies handling water supply and sewerage. It seeks to assist in drafting reorganisation plans and proposing regulatory functions to ensure these entities attain requisite technical, technological, and organisational standards, thereby enhancing service provision within the water sector.

[17] The Seveso III Directive (Directive 2012/18/EU) on the control of major-accident hazards involving dangerous substances provides the relevant framework on risk management measures to prevent major accidents and to limit their consequences.

[18] Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) (recast).

[19] Support is provided through the project "Green Transition – Implementing Industrial Emissions Directive in Serbia 2021-25" (Phase 3), implemented by the Cleaner Production Centre of the Faculty of Technology and Metallurgy, University of Belgrade, and financed by the Swedish International Development Cooperation Agency, Sida, spanning August 2021 to December 2024.

15 Agriculture policy

Agricultural development remains a priority for all economies, not only in response to the essential resource needs of a growing population but also due to its substantial contributions to total employment and GDP. The chapter analyses the performance and trends of agriculture policies across three sub-dimensions. The first sub-dimension, rural development and infrastructure, assesses strategies and programs related to rural infrastructure, livelihood support, and irrigation systems. The second sub-dimension, agricultural support systems, covers the policy, governance and instruments in the agricultural sector. The third sub-dimension, food safety and quality, focuses on the policy framework regulating food safety and on the food quality legislation and agencies, which are key tools in an economy's path towards productive and sustainable agriculture.

Key findings

Serbia has increased its overall agriculture policy score since the previous *Competitiveness Outlook*, positioning itself as the regional leader in this dimension (Table 15.1). The economy's most notable area of progress was in strengthening its rural development and infrastructure due to ongoing efforts to enhance the rural and irrigation infrastructure systems. Serbia has also made strong advances in enhancing its research, innovation, technology transfer, and digitalisation (RITTD) framework.

Table 15.1. Serbia's scores for agriculture policy

Dimension	Sub-dimension	2018 score	2021 score	2024 score	2024 WB6 average
Agriculture	14.1: Rural development and infrastructure			3.8	3.2
	14.2: Agriculture support system			3.7	3.3
	14.3: Food safety and quality			3.5	3.4
Serbia's overall score		**3.3**	**3.1**	**3.7**	**3.3**

The **key findings** are:

- Despite recent government initiatives to enhance harmonisation between national agricultural policies and the EU *acquis*, including formulating a new action plan, Serbia's current policy framework still exhibits significant misalignment, covering only half of the EU Common Agricultural Policy's (CAP) objectives.
- Progress has been achieved in expanding the economy's irrigation and drainage infrastructure, but it remains inconsistent. However, the Serbian Government's ongoing efforts – such as developing a new irrigation strategy – along with donor projects aimed at constructing new systems and rehabilitating existing ones underscore the priority allocated to improving this infrastructure.
- The introduction of the new platform e-Agrar in 2023 marked a significant step forward in Serbia's efforts to establish an integrated administrative and control system, although this progress was offset by the lack of headway in procuring the software for a Land Parcel Identification System. Consequently, there is a sustained need for the economy to continue developing its data management platforms.
- Although Serbia is set to receive substantial EU funding through the IPARD III programme, totalling an estimated EUR 288 million from 2021 to 2027, delays in payments have hindered the efficient use of these funds. This challenge highlights the importance of strengthening government capacities, particularly those of the national IPARD (Instrument for Pre-Accession Assistance for Rural Development) Agency.
- Continuous efforts to strengthen the research, innovation, technology transfer, and digitisation (RITTD) framework, namely through the Competitive Agriculture Project 2021-24 and ongoing co-operation between the BioSense Institute and the EU, have positioned Serbia as the regional leader in this domain.
- Although Serbia made some recent improvements to its food quality policy framework, such as a new draft law aligning its policy on genetically modified organisms (GMOs) with EU regulations, the economy's standards are still only partially aligned with the relevant EU legal bases.

State of play and key developments

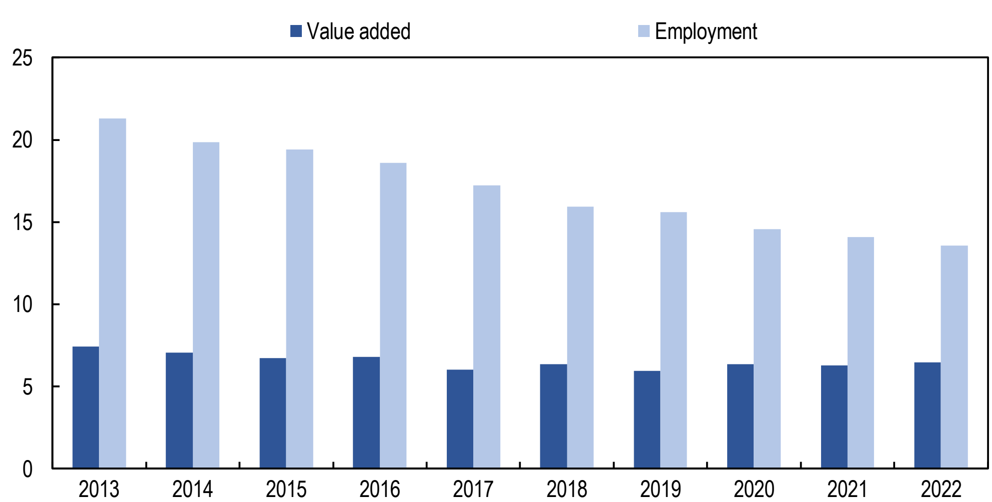
Given that Serbia is the largest agricultural market in the Western Balkans, agriculture serves as an important sector of the economy, benefiting from favourable climatic conditions, fertile soil, and a relative abundance of arable land (FAO, 2023[1]). Over the past several years, the contribution of the agricultural sector to national GDP has been steadily rising, reaching EUR 3.80 billion in 2022 in nominal value,[1] while agriculture's share of national GDP has remained constant, hovering around 6.5% (World Bank, 2024[2]). However, there are strong differences from year to year. After experiencing significant growth in 2018 and 2020, there was a notable downturn in the subsequent two years. This decline, -5.5% in 2021 and -8.3% in 2022, was primarily due to the cumulative impact of external shocks, including the COVID-19 pandemic and the Russian war of aggression against Ukraine, along with adverse weather conditions, namely the recent drought.

Notably, the long-term growth trends of the agricultural sector mirror that of the broader economy, signalling a robust strengthening of the sector. Enhanced efficiency, attributed to increased investments (including foreign direct investment), has been a significant driver of the sector's positive performance in Serbia (Vojteški and Lukić, 2022[3]) (Vukmirović et al., 2021[4]).

However, while the agricultural sector's value added to GDP has remained steady, the proportion of total employment within the sector has seen a decline over the past decade, falling from 21.2% in 2011 to 13.9% in 2021. As evidenced in Figure 15.1, the noticeable gap between agriculture's contributions to GDP and employment indicates that a relatively large portion of the workforce is producing a relatively minor share of overall economic output, signalling lower levels of labour productivity. However, this gap has been narrowing, likely attributed to the sector's ongoing modernisation, which is supported by Serbia's strategic investments. Additionally, this decrease in the proportion of employment is partially due to demographic shifts, such as the growing trend of migration from rural areas and the ageing workforce (with more than 20% of those engaged in agriculture being 65 years of age or older) (Ćirić et al., 2021[5]).

Figure 15.1. Agriculture's contribution to gross domestic product and total employment in Serbia (2013-22)

Agriculture's share in value added and employment are denoted in percentages



Source: World Bank (2024[2]).

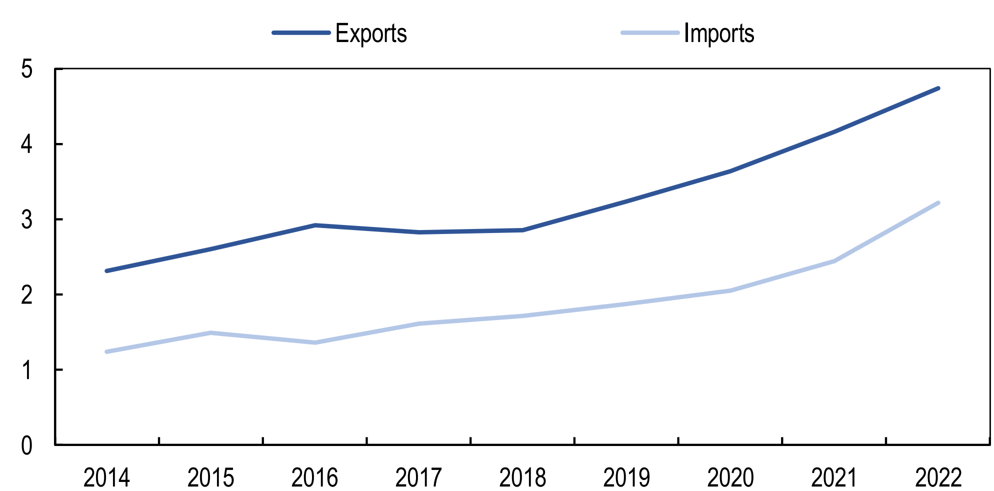
StatLink https://stat.link/2oqrxs

Serbia's agricultural sector is characterised by a high level of farm fragmentation, which can limit productivity gains. According to the 2023 Agriculture Census, 99.6% of registered farms were family farms, and the average agricultural holding was only 6.4 hectares (ha) (Government of the Republic of Serbia, 2024[6]). In comparison, the average mean size of farms in the EU is 17.4 ha, nearly three times that of Serbia (Eurostat, 2023[7]). Yet despite this prevalence of small family farms, there has been a concurrent rise in the establishment of large, modern farms characterised by fewer employees, higher productivity, and strong market orientation – leading to the economy's current dual farm structure.

International trade data indicate a strengthening of the Serbian agrifood sector, with exports surpassing EUR 4.7 billion and constituting nearly one-fifth of total exports in 2022 (Figure 15.2). This reflects a notable increase of more than 21% compared to the yearly averages in 2020 and 2021. However, this rise in value is partially attributable to inflation, as the quantity of certain exports actually fell during this period due to the aforementioned drought. Imports grew faster than exports during this period, leading to a modest reduction in the trade balance of agrifood products in 2022. Despite this decline, Serbia maintains a significant trade surplus, distinguishing it from other Western Balkan economies that are characterised by trade deficits in agrifood products. Indeed, the economy remains the largest (and only net) exporter of food products among the Central European Free Trade Agreement (CEFTA) parties (Development Agency of Serbia, 2023[8]).

Figure 15.2. Serbia's international trade of agrifood products (2014-22)

Billions of EUR



Source: SWG (2023[9]).

StatLink https://stat.link/6bdlhx

Sub-dimension 14.1: Rural development and infrastructure

Serbia has continued to bolster its **rural infrastructure policy framework** since the last assessment cycle, primarily through the passage of several new policy measures. In July 2021, the Ministry of Agriculture, Forestry and Water Management (MAFWM) adopted the Regulation on Investment Incentives for the Improvement and Development of Rural Public Infrastructure,[2] outlining the various incentives to enhance and develop rural public infrastructure. These incentives target a wide variety of infrastructure, ranging from roads to water supply channels to the processing of agricultural products. Moreover, at the start of 2022, the MAFWM launched public consultations for the draft National Rural Development Programme

(2022-24), which defines measures for improving and developing this rural infrastructure. However, the draft national programme remains outstanding, and its complementarity with the EU's Instrument for Pre-Accession Assistance for Rural Development (IPARD) III programme has yet to be formalised.

The IPARD programme plays a notable role in supporting Serbia's ongoing efforts to enhance its rural infrastructure. Under IPARD III, there is a specific measure focused on investments in rural public infrastructure to support economic, social and territorial development that will promote sustainable and inclusive growth. Between 2021 and 2027, Serbia is set to receive EUR 288 million in EU funds, of which approximately EUR 51.8 million will be used to finance rural infrastructure projects (European Commission, 2022[10]). Of note, under the IPARD programme, "rural areas" encompass all territory in Serbia with a population density below 150 inhabitants per km^2. An estimated 40% of the Serbian population lives in rural areas (Parausic, Kostic and Subic, 2023[11]).

Despite Serbia's well-developed policy framework, the economy's rural infrastructure still does not fully address the needs of rural populations. Many rural areas have limited road infrastructure and are frequently far from the main roads and highways (Veličković and Jovanović, 2021[12]). With respect to ICT infrastructure, a significant disparity exists between urban and rural areas: while 85% of households in urban areas are connected to fixed broadband, only 69% of those in rural areas share the same access (EBRD, 2021[13]). However, several new projects aim to address this gap between infrastructure and needs. For example, in the spring of 2022, the European Bank for Reconstruction and Development (EBRD) launched the second phase of the Rural Broadband Rollout project, which aims to connect an additional 305 schools and 128 000 households in rural areas to a broadband network.[3]

There are several online platforms available to farmers that provide regular, up-to-date information on prices and weather conditions. One example is AGROPONUDA,[4] a free online service provided by the MAFWM where agricultural producers (who constitute the "register of bidders") connect with buyers through the "register of offers". This service is widely used: an average of 25 offers are placed daily, and over the past decade around 14 200 producers have entered offers. Another platform is STIPS or the Serbian Agriculture Marketing Information System Network. This online database provides data on the prices of agricultural and food products and inputs on both a weekly and monthly basis.[5] Using price data, reports are generated and included in the weekly newsletter. These reports depict the status of supply and demand, quality assessments, and price trends over the preceding seven days.

Serbia's approach to **rural livelihoods** is characterised by a strong policy focus but lacks comprehensive programming. The National Strategy of Agricultural and Rural Development defines the economy's long-term rural development goals, while the Law on Incentives in Agriculture and Rural Development regulates the policy instruments used to support rural communities. Some of these instruments aim to improve rural livelihoods and developments through measures to strengthen economic development, rural diversification, and agritourism. However, no programmes explicitly target other key components of rural livelihoods, such as education, health or social security protections.

Apart from households and farms, Local Action Groups (LAGs) are key in empowering rural populations and fostering community development. Since 2007, the Serbian Government has been implementing the LEADER approach, although these efforts have primarily been supported through funding from external donors. Moreover, in 2019, the national LEADER measure was adopted; since then, 21 partnerships have received LAG status. Representing a relatively new approach to rural development in Serbia, the ongoing LEADER process involves the capacity building, learning, animation, education, and networking of stakeholders. Existing partnerships (potential LAGs) with approved Local Development Strategies (LDS) established through the implementation of the national "LEADER-like" measure will be acknowledged as LAGs under the IPARD III programme. These LAGs must prepare and adopt the LDS for the IPARD III programming period.

Despite a relatively robust **irrigation policy framework**, Serbia's observed progress in expanding its irrigation systems has fluctuated recently. Between 2021 and 2022, the economy increased its total volume of water extracted for irrigation by 7.3% and the area of agricultural land irrigated by 4.6% (Statistical Office of the Republic of Serbia, 2023[14]). However, from 2022 to 2023, the amount of irrigated agriculture land dropped by 12.9%, falling from 54 639 ha to 47 579 ha and accounting for less than 2% of total arable land largely attributed to underdeveloped irrigation infrastructure (Statistical Office of the Republic of Serbia, 2024[15]). However, efforts are under way with numerous projects aimed at addressing and improving this issue. The irrigation policy framework is formed by several key programmes and strategies. In April 2023, the River Basin Management Plan (RBMP) by 2027 was adopted. RBMP was prepared in accordance with the principles of the EU water-related directives. The RBMP establishes guidelines and measures to achieve good hydrological, chemical, and ecological status for all water resources. Its focus is on sustainable water use to safeguard the environment while ensuring an adequate supply of high-quality water for all essential users, without necessarily restoring water to its original natural state. Other key policies include the longstanding Law on Water and the national irrigation strategy (still being drafted with the support of the European Bank for Reconstruction and Development (EBRD) and the Food and Agriculture Organization (FAO). These strategies delineate plans for modernising and expanding the irrigation system, encompassing measures for open canal and gravity irrigation systems, pipeline distribution networks, pressurised systems, and surface irrigation. The two primary actors in charge of irrigation in Serbia are the MAFWM's Water Directorate and the public water management companies, Srbijavode and Vode Vojvodine.

External donors have played a large role in the ongoing efforts to expand Serbia's national irrigation system. In December 2021, the EBRD granted the Serbian Government a EUR 15 million loan to build a new irrigation system in the northern region of Vojvodina. Another project commenced in June 2022, when Agence Française de Développement gave the public water management company Srbijavode EUR 250 000 to work with the company Suez Consulting and conduct a feasibility study on how to approach best rehabilitating and extending the current irrigation network.

Sub-dimension 14.2: Agriculture support system

Serbia's **agricultural policy framework** is largely guided by the Strategy of Agriculture and Rural Development (SARD) 2014-24, which defines the economy's strategic long-term goals of agriculture and rural development.[6] However, this policy's ten-year period introduces several challenges. Firstly, the absence of an annual updated action plan accompanying this strategy restricts the adaptability of priorities to evolving or unforeseen developments. Secondly, this timeframe means the strategy does not comply with the EU's Common Agricultural Policy (CAP) strategic programme period. However, despite this misalignment, the SARD is aligned with five of the ten EU CAP objectives.[7] Achieving a higher degree of alignment is the focus of the national action plan centred on the transposition, implementation and enforcement of the EU *acquis* in agriculture and rural development. This action plan is currently being revised by the government.

As mentioned previously, Serbia benefits from funding through the IPARD programme. This initiative supports agricultural producers, processors, and rural communities in enhancing their capacities to meet the EU standards in agriculture, the agrifood industry and environmental protection. After successfully executing four measures in the previous IPARD cycle, the relevant government institutions obtained entrustment for implementing the IPARD III programme. However, payment delays in 2022 led to a loss of EUR 12.8 million in IPARD funds. The risk of additional losses persists unless Serbia addresses the staffing shortages in its IPARD Agency and fully implements its EU *acquis* alignment action plan to absorb these funds better (European Commission, 2023[16]).

Effective agricultural policies are often accompanied by well-developed information platforms, allowing the government (namely the Statistical Office of the Republic of Serbia) to track and analyse agricultural data. Serbia has established both a farm register and a Farm Accountancy Data Network (FADN).[8] This FADN uses EU FADN methodology to collect data on a sample of agricultural holdings; the sample size has grown from 1 420 farms in 2017 to 1 729 farms in 2022. However, there is still room to further improve the FADN's sample size and quality of data collected (European Commission, 2023[16]). One recent development was the introduction of the software platform e-Agrar, which allows farmers to submit subsidy applications and process them online electronically. By March 2023, approximately 187 000 farmers had registered on the platform. However, Serbia has not established a Land Parcel Identification System (LPIS) due to delays in procuring the appropriate software. Until the LPIS is created and made functional, Serbia cannot launch the IPA project to establish an integrated administration and control system (IACS), which would help to facilitate the accuracy, transparency and compliance of subsidy payments.

Given the agriculture sector's vulnerability to the future adverse impacts of climate change, the economy has already developed specific policies related to climate change mitigation and adaptation in the sector. Serbia committed to an unconditional emissions reduction target of 13.2% compared to 2010 levels, or 33.3% compared to 1990 levels, by 2030 (UNDP, 2022[17]). The government recently completed the drafting of the Low Carbon Development Strategy of the Republic of Serbia and is now in the process of adopting it. Moreover, under the IPARD III programme, one measure ("agri-environment-climate and organic farming") encourages farmers to protect and enhance the environment of the land that they manage. The four chief priorities are improving cultivation methods, boosting biodiversity and ecosystem services, improving water conservation and quality, and encouraging sustainable input use and optimised soil management. Additionally, the government has carried out an assessment of climate change's impact on the agriculture sector under the project, "Advancing medium and long-term adaptation planning in the Republic of Serbia". Yet despite these efforts, there are still no mitigation targets related to agriculture in any major policy documents or strategies.

The Serbian Government offers a wide array of generous **producer support instruments**, including subsidies, credit support, and funding through the IPARD programme. Subsidies are by far the most common tool used to support farmers and other agricultural producers. Indeed, the 2024 budget included approximately RSD 100 billion (EUR 853 million) in total agricultural subsidies (Reuters, 2023[18]). Annual subsidies for agriculture and rural development follow the Law on Subsidies in Agriculture and Rural Development guidelines. The financial allocation of budgetary funds is governed by the annual Regulation on Subsidy Allocation in Agriculture and Rural Development for a given calendar year. This regulation is subject to adjustments throughout the year, incorporating new measures, replacing existing ones, altering the support level per unit, and reallocating funds among subsidies.

Direct payment to support livestock and plant production is one of the most utilised subsidies. These payments are usually linked to farm size, measured by the number of livestock heads or cultivated land area (in hectares). However, conditioning this support on farm size can have a detrimental impact on sector productivity and efficiency, as it encourages farmers to continue their existing production patterns (World Bank, 2019[19]). Since 2021, there have been several notable changes to direct payments available to farmers. Firstly, the minimum number of heads required for eligibility to receive support was eliminated or reduced for certain kinds of livestock (although a maximum number was also inaugurated). Additionally, in 2023, the level of direct payments per hectare was doubled. Other new subsidies include subsidising fuel in response to rising prices in 2022 and subsidising insurance and support in the aftermath of any catastrophic events affecting rural areas or the agriculture sector.

Serbia's wide availability of producer support instruments reflects the government's commitment to supporting the agricultural sector. Many of the changes were in response to external shocks, such as market disruptions stemming from the Russian war of aggression against Ukraine or the occurrence of natural disasters. Considering the significant price fluctuations that impeded the implementation of the

IPARD programme, the IPARD Managing Authority introduced tools to enhance project support. Specifically, it developed a price index for specific and justified cost categories to amend the regulations for the IPARD II programme (under which calls for proposals were extended until 2022).

Table 15.2 shows how the yearly support has continued to grow over the past few years. Moreover, this upward trend is also evident when the data are expressed relative to the population and agriculture area. Support reached EUR 100/ha in 2020-21 and has since increased to EUR 107/ha in 2022. However, this figure remains below the regional average (EUR 113/ha) and is only half of the equivalent values in the EU (at least EUR 200/ha in 2023) (European Commission, 2023[20]).

Many of the aforementioned changes were in response to external shocks, such as market disruptions stemming from the Russian war of aggression against Ukraine or the occurrence of natural disasters. In light of the significant price fluctuations that impeded the implementation of the IPARD programme, the IPARD Managing Authority introduced tools to enhance project support. Specifically, it developed a price index for specific and justified cost categories to amend the regulations for the IPARD II programme (under which calls for proposals were extended until 2022).

Table 15.2. Serbia's budgetary support for the agricultural sector (2019-22)

Millions of EUR

	2019	2020	2021	2022
Budgetary support	321.4	378.1	373.7	525.7

Source: SWG (2023[9]).

Of note, eligibility for all these producer support instruments is not conditional on compliance with other standards, such as environmental, food safety, or animal and plant health regulations. Thus, while the Serbian Government has adjusted its instruments in recent years to improve harmonisation with the EU CAP, the implementation of conditionality is a prerequisite for fully aligning with EU standards on agriculture and rural development.

Serbia maintains a relatively open **trade policy**, although this classification is contingent on the removal of tariffs and barriers. Import tariffs apply to all agricultural products, including inputs and agricultural machinery. Sensitive agricultural products incur both *ad valorem* and specific customs duties; moreover, certain categories of products, such as flowers and fresh fruits and vegetables, are subject to any additional seasonal customs duty (expressed as a percentage rather than as a function of weight). Customs duties vary for imports from third countries and those covered by existing free trade agreements.

Serbia's trade with the EU, its largest trading partner, is regulated by a Stabilisation and Association Agreement (SAA). Under this agreement, tariff quotas are defined. The model used for these quotas is "first come, first served", meaning that import opportunities are allocated based on the order of application submissions, with earlier applicants receiving the benefits until the quota is fully utilised. The administration of tariff quotas is carried out by the Customs Administration of the Ministry of Finance, which updates its website with the availability of quotas according to individual agreements and products every morning. Moreover, under the SAA, Serbia implements export quotas exclusively for sugar exports destined for the EU market. The economy has abolished all other export quotas, duties, and subsidies.

However, the Russian war of aggression against Ukraine catalysed the Serbian Government to make several changes to its trade policy. Specifically, it enacted a five-month export ban in 2022 on certain agricultural products, including cereals, wheat, sunflower oil and milk, as a response to market disruptions and increased domestic and international demand. Additionally, in early 2022, the government decided to include certain ammonia-based mineral fertilisers in the Decision on the Exemption of Certain Agricultural Products from Import Customs, to ensure that farmers could procure adequate quantities for their crops.

With respect to the **agricultural tax regime**, Serbia currently lacks a fiscal policy dedicated to agricultural and rural development. Agricultural holdings are treated the same as other legal entities and subsequently fall under the CIT (corporate income tax) system. Meanwhile individual farmers, who are classified as natural persons, are subject to personal income tax. According to the Decision of the Ministry of Finance of the Republic of Serbia, a natural person earning income from agriculture and holding the status of an entrepreneur is required to maintain financial records. Generally, farmers in Serbia are not obligated to pay value added tax (VAT), even if their total turnover exceeds RSD 8 million (or around EUR 68 270) which is the national taxation threshold for VAT registration in Serbia. Instead, entrance into the VAT system is voluntary, as farmers can opt to pay this tax by submitting a registration application and assuming the two-year minimum payment obligation. However, specific tax provisions for farms or co-operatives, such as tax rebates on land transfers or income smoothing measures, are notably absent. Additionally, despite the existence of a definition for “small farms”, there are no corresponding provisions that would confer special benefits to these small-scale agricultural operations.

Serbia’s robust policies and instruments guiding **research, innovation, technology transfer and digitalisation** (RITTD) in its agriculture sector have positioned the economy as the regional leader in this domain. The national policy framework guiding RITTD is part of the National Rural Development Programme 2022-24, which has a pillar on the creation and transfer of knowledge and innovation. Moreover, the Law on Incentives in Agriculture and Rural Development defines support for programmes related to the improvement of the system of creation and transfer of knowledge. In addition to these frameworks, there are several government RITTD programmes that are regularly updated and promoted through the Annual Programme for the Development of Advisory Services in Agriculture.

Apart from these broader RITTD programmes, Serbia has established several programmes specifically aiming to promote the adoption of innovations and knowledge transfer by farms and agrifood firms. One such initiative is the Competitive Agriculture Project 2021-24, a collaborative effort between the MAFWM and the World Bank. It seeks to enhance the capacities and entrepreneurial knowledge of small and medium-sized agricultural producers and enterprises. The programme utilises a distinctive financing model known as 50:40:10. Beneficiaries can receive a grant covering 50% of a project’s total investment value and an additional 40% from commercial bank loans, meaning they only must contribute 10% of the funding by themselves. No specific programmes targeting the adoption of innovations related to climate change adaptation exist, although there are various activities – namely undertaken under IPARD III’s Measure 4 (“Agri-environment-climate and organic farming”) – that bolster the agricultural sector’s resilience to changing climatic conditions.

One of the primary actors in the agricultural research and innovation space in Serbia is the Institute for Research and Development of Information Technology in Biosystems, or the BioSense Institute. This public laboratory serves as a leading Digital Innovation Hub (DIH) in the economy and aims to introduce digital solutions across the entire farm-to-fork value chain.[9] Since its establishment in 2015, the BioSense Institute has contributed to the digital transformation of the agriculture sector in Serbia through its research and collaboration (Box 15.1).

Another central component of RITTD is the use of extension and advisory services to facilitate the transfer and adoption of innovation in the agriculture sector. In Serbia, extension services and experts are widely available and accessible to farmers. As of January 2024, the Serbian Agriculture Advisory Service (AAS) was composed of 34 agricultural advisory centres, with more than 250 advisors. The AAS collaborates with the Institute for Science Application in Agriculture to develop annual plans for the training of advisors. These services are provided for free by the public sector, as they are funded from the state agricultural budget as well as from the budget of the Autonomous Province of Vojvodina. Moreover, there are three private extension services that receive full funding from the MAFWM for advisory work, as stipulated by the Annual Programme for the Development of Advisory Services in Agriculture. This constellation of public and private services necessitates institutional co-ordination: indeed, while the MAFWM directly handles the provision of public services, the Ministry of Education, Culture, Sports, Science and Technology oversees the programming of activities and the work done by the MAFWM advisors.

Box 15.1. Serbia's BioSense Institute's agricultural innovations

The BioSense Institute is a public research institute in Serbia that both executes and co-ordinates research in several sectors, ranging from environmental health and protection to agriculture and water management. In 2017, the EU-funded ANTARES project was launched to support the Institute's transition into a European Centre of Excellence for advanced technologies in sustainable agriculture (European Commission, 2023[21]). With a substantial investment of EUR 14 million from the European Commission, complemented by an additional EUR 20 million from the European Investment Bank, ANTARES represents the largest research initiative ever funded by the EU in Serbia.

The project's overarching objective is to revolutionise Serbia's agricultural sector through digital innovation, positioning the economy as a leader in shaping the future of sustainable farming practices while also ensuring safe, ample food for future generations. In pursuit of this goal, the BioSense Institute has already developed several innovations that have empowered local farmers with data-driven insights. Examples of these tools include:

- *Agrosense:* a digital platform that gives farmers access to data on weather, satellite imagery of crops, and the availability of water and nutrients.
- *Plant-O-Meter:* a device that uses artificial intelligence algorithms to assess the physiological condition of plants, such as their capacity for photosynthesis or the need for fertiliser. The assessment generated by the device is shared via Bluetooth with the farmer's smartphone along with the GPS location of the sample.
- *Lala:* a robot that samples and analyses soil to help improve farmers' decision making regarding sowing, water, or applying fertilisers and pesticides to their crops.

As the ANTARES project approaches its conclusion in 2025, it stands as a strong example of successful EU collaboration, driving transformative change in Serbia's agricultural sector and setting an important precedent for agricultural research and innovation partnerships.

Sources: European Commission (2023[21]); Kovacevic (2023[22]).

Sub-dimension 14.3: Food safety and quality

Although Serbia's national policy framework covers all main areas of **food safety, animal health, and plant health**, it is still not entirely aligned with the EU *acquis*. This legal base is partially harmonised with the EU food safety legal base. In 2023, Serbia presented a draft strategy and action plan to further align its national legislation on food safety with the EU *acquis*, although they have not yet been adopted. Regulations related to animal health and welfare are almost fully aligned with those of the EU, although measures on several animal diseases must be harmonised in the future to comply with the most recent EU *acquis*. In the phytosanitary field, policies are generally compliant with World Trade Organisation (WTO) legislation, although the economy still lacks a legal framework guiding the sustainable use of pesticides.

The government agencies responsible for these policy areas include the MAFWM's Veterinary Directorate, Plant Protection Directorate and Sector for Agriculture Inspection as well as the Ministry of Health's Sector for Sanitary Inspection. The competencies and responsibilities of these several institutions are clearly delineated and defined in Article 12 of the Law on Food Safety. Moreover, institutional coordination in relation to policy design and implementation is achieved through ad hoc working groups and interministerial committees. However, human resource limitations – particularly regarding the longstanding vacancies in the Veterinary Directorate – stemming from slow hiring processes and non-competitive salaries complicate these agencies' ability to properly implement their mandates.

Risk assessment and risk management frameworks are in line with SPS (sanitary and phytosanitary) rules and use internationally established methodologies (such as OIE, IPPC, Codex and EFSA[10]). For risk analysis related to food safety, inspection is based on several factors, including the type of food, its production criteria, previous reports on safety, and the reliability of the food business operator. This risk-based assessment might also look at the concentration of pesticides or other contaminants in the food. Maximum residue levels (MRLs) are defined within national bylaws (such as ministerial orders) in line with the EU *acquis*.[11]

Laboratories specialising in food safety, veterinary services, and phytosanitary measures are pivotal in safeguarding the well-being and safety of agricultural and animal products. In Serbia, there is an established and accredited reference laboratory. The results of these laboratories are partially recognised among CEFTA parties in the area of food safety and phytosanitary health, although most of the laboratory tests conducted for official controls are limited to the latter. However, challenges persist in milk testing quality, as Serbia has yet to adopt a strategy aligning with EU *acquis* standards. Due to insufficient funding and resources, including specialist staff and analytical scope in its laboratories, the Directorate for National Reference Laboratories (DNRL) has yet to perform the required milk testing analysis (European Commission, 2023[16]).

As for **food quality**, while Serbia's national policies are relatively comprehensive, they still are only partially aligned with the relevant EU legal bases. Since the last assessment cycle, the economy has made some progress in further harmonising legislation on food marketing standards. For instance, in June 2021, the Law on Organisation of Agricultural Products Market (*Official Gazette of RS*, No. 67/21) was adopted. This law achieved partial harmonisation with the EU regulation on establishing a common market organisation (CMO) for agricultural products, with full harmonisation to be achieved by the date of Serbia's accession to the EU. While most marketing standards, aligned with EU regulations, are already integrated into quality regulations for products such as milk, meat, eggs, and fish, the pending enactment of the CMO legislation would primarily serve as a stamp of approval, marking a transition with a certain dynamism into regulations on market standards.

Moreover, Serbia's legislation on geographical indications (GIs), the Law on Geographical Indications, is only partially harmonised with EU standards due to gaps in terms of necessary procedures and controls. One notable difference is that in Serbia, any domestic individual or legal entity producing a product in a specific geographical area can apply to establish a GI; in the EU, that ability is limited to associations of producers and processors of agricultural or food products. Despite this, the economy encounters ongoing delays in amending its legislation on quality schemes for agricultural products, which could address and resolve inconsistencies with European legislation, including issues related to the eligibility of applicants.

The Intellectual Property Office (IPO) and the MAFWM are jointly responsible for the implementation of the Law on Geographical Indications. The IPO initiates the registration process for GIs of agricultural products and foodstuffs and maintains the National Register of Protected Designations of Origin (PDO) and Protected Geographical Indication (PGI); the MAFWM primarily oversees implementation. There are special procedures in place for the protection of GIs for wine and soft drinks.

With respect to organic food, limited progress was achieved, as Serbia has yet to harmonise its legislation concerning organic production with the EU *acquis*. Given the significant recent increase in both the production and export of organic products, aligning with EU regulations stands as a pressing need, making the adoption of a new law fully compliant with EU standards a top priority. Meanwhile, the MAFWM is tasked with authorising organic certification bodies; in 2023, it granted this authorisation to six bodies. Among these, three are local certification bodies, and two are included on the list of recognised control bodies and control authorities for equivalence purposes, meaning they have met the standards outlined by the regulation SRPS EN ISO/IEC 17065.[12] It is important to note that despite Serbia's minimal participation in global organic production and trade – with only 1% of its farms growing organic products – the economy is positioned to become one of the regional leaders in this area based on the growth rate. The sustained expansion of organic production in Serbia could confer numerous advantages, including generating employment in rural regions, safeguarding public health, reducing rural-to-urban migration, and bolstering the agricultural sector's competitiveness (Radović and Jeločnik, 2021[23]).

Similarly, Serbia still has not aligned its legislation on genetically modified organisms (GMOs) with the EU *acquis* or WTO standards (European Commission, 2023[16]). However, there is a newly drafted law aiming to bring Serbia's national policy on GMOs in line with EU regulations, although its adoption is pending.

Overview of implementation of Competitiveness Outlook 2021 recommendations

Serbia's efforts to implement *Competitiveness Outlook 2021* Recommendations have been steady, as it has made moderate progress in most of the priority areas, including investments in irrigation infrastructure and improving food safety policies. Less progress was achieved in the area of enhancing its agriculture land management policy. Table 15.3 shows the economy's progress in implementing past recommendations for agriculture policy.

Table 15.3. Serbia's progress on past recommendations on agriculture policy

Competitiveness Outlook 2021 recommendations	Progress status	Level of progress
Continue investment in irrigation infrastructure	There has been improvement in irrigation and drainage, but there is still significant scope to further advance this area. In 2021, Serbia adopted an action plan for implementing its water management strategy, with annual implementation reports publicly released.	Moderate
Enhance the agriculture land management policy	Serbia has made progress toward the establishment of the integrated administration and control system (IACS), but there should be a shift from manual to electronic processing of subsidy applications. The delays with the procurement of software for the land parcel identification system (LPIS) have been a problem that should be addressed.	Limited
Adopt a law on the common market organisation through secondary legislation in areas including marketing standards, public and private storage, and producer organisations	There has been progress related to CMOs. The implementation of legislation in the areas of marketing standards, public and private storage, and producer organisations is still pending. Moreover, there are regulations on producer organisations and the food in schools. More specifically, recent legislation now regulates marketing standards for fresh fruits and vegetables. A new law on wine has been prepared and should be adopted.	Moderate
Improve the performance of the Directorate for Agrarian Payments	There has been limited progress in the upgrading of IPARD-related agencies' capacities in terms of recruitment to the IPARD structures and the efficiency of processing IPARD applications and payment requests. Serbia was entrusted with budget implementation tasks for four measures under IPARD II. However, delays in payments in 2022 resulted in a loss of EUR 12.8 million of IPARD funds, and the risk of further losses is imminent.	Moderate
Improve food safety policies	Regarding food safety, a strategy and an action plan for alignment with the EU *acquis* have been drafted and should shortly be adopted. On the other hand, several policy frameworks have yet to be aligned with the EU *acquis*, particularly in the areas of animal health and welfare. Additionally, the Veterinary Directorate continues to struggle with a staff shortage of official veterinarians in both its inspection and policy departments, impeding the Directorate's efficacy.	Moderate

The way forward for agriculture policy

Considering the level of the previous recommendations' implementation, there are still areas in which Serbia could strengthen its rural development and infrastructure or its agriculture support system, or further enhance its food safety and quality policies. As such, policy makers may wish to:

- **Strengthen the institutional capacity to ensure the efficient use of IPARD III funds**. Given the significant loss of IPARD funds due to delays in payment, it is imperative for the Serbian Government to ensure that similar issues do not arise in the disbursement of IPARD III funds. One key step is to address longstanding recruitment challenges by filling vacant positions within the national IPARD Agency, enhancing the organisation's ability to absorb funds more effectively.
- **Continue to allocate national funding to support the expansion and modernisation of irrigation and drainage systems**. While Serbia receives significant funding from donors such as the EBRD and FAO, there is a persistent need to improve this infrastructure further. As such, boosting public investment to strengthen these systems would likely enhance agricultural productivity and promote the sustainable, effective management of water resources.
- **Sustain efforts to harmonise national legislation with EU standards**. Policy makers in Serbia should prioritise increasing alignment between the national agricultural policy and the EU CAP, specifically by incorporating the five excluded EU CAP objectives[13] into the existing framework. Moreover, in the fields of food safety and food quality, the Serbian Government should continue adopting measures that will further harmonise regulations with the EU *acquis*.
- **Incorporate conditionality into the provision of producer support instruments.** Linking eligibility for support to compliance with environmental or food safety standards could enhance agricultural outcomes and align with the new EU CAP 2023-27 (Box 15.2). To achieve this, Serbia could establish explicit guidelines defining the standards for farmers to qualify for financial support, accompanied by training and support services to facilitate understanding and ensure proper implementation.

Box 15.2. Enhanced conditionality under the EU Common Agricultural Policy 2023-27

The EU's Common Agricultural Policy for 2023-27 introduces substantial reforms to foster sustainability and equality within the agriculture sector. A noteworthy aspect of these reforms is enhanced conditionality, which refers to linking payments through the IPARD III programme to more stringent requirements of beneficiaries to promote environment- and climate-friendly farming practices. Examples of such conditionality measures include requiring farmers to devote at least 3% of their arable land to biodiversity or non-productive elements, or encouraging farms to protect wetlands and peatlands. Support is further increased when directed toward vulnerable sectors, disadvantaged areas, or specific demographics (such as young farmers).

Furthermore, this is the first CAP programming period to include social conditionality, meaning that payments are linked to demonstrated adherence to specific EU labour standards. This innovative approach aims to incentivise farms to enhance working conditions, necessitating compliance with minimum standards to qualify for full CAP subsidies. Failure to do so can, in fact, result in reduced (or even withdrawn) support.

Under the new programme, an estimated 90% of EU farmland is anticipated to be subject to conditionality. Moreover, approximately 50% of income support provided through CAP 2023-27 will be contingent on conditionality of environmental or climate considerations, underscoring the EU's commitment to advancing sustainable agricultural practices.

Sources: European Commission (2022[24]); EU Monitor (2023[25]).

- **Continue developing agriculture information systems**. Well-developed agricultural information systems are essential for evidence-based policy making and impact monitoring, aligning with EU best practices. As such, the Serbian government should prioritise acquiring the required software to establish an LPIS. A fully operational LPIS would complement existing platforms, namely the farm register and FADN, facilitating comprehensive data collection and analysis.

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Notes

[1] While the text refers to GDP in euros, it is important to note that the data used to calculate these figures were denominated in USD. The original data indicated a rise from USD 3.07 billion in 2019 to USD 4.11 billion in 2022. See World Bank (2024[2]).

[2] See: www.fao.org/faolex/results/details/en/c/LEX-FAOC203979.

[3] For more on the "Serbia, Rural Broadband Rollout Phase 2" project, see: https://wbif.eu/investmentgrants//WB-IG06E-SRB-DII-01.

[4] To access the AGROPONUDA platform, see: www.agroponuda.com/ponuda.

[5] To access the STIPS platform, see: www.stips.minpolj.gov.rs.

[6] The Strategy of Agriculture and Rural Development (SARD) had five main objectives: the growth and stability of producers' incomes; increasing competitiveness while adapting to the demands of domestic and foreign markets and the technical and technological progress of the agricultural sector; sustainable resource management and environmental protection; the improvement of the quality of life in rural areas and poverty reduction; and the effective management of public policies and improvement of the institutional framework for the development of agriculture and rural areas.

[7] These five objectives are as follows: ensuring a fair income for farmers; increasing competitiveness; environmental care; vibrant rural areas; and fostering knowledge and innovation.

[8] The Farm Accountancy Data Network (FADN) monitors farms' income and business activities (including production costs, yields, etc.) based on farm surveys. In the EU, it serves as an important source for understanding the impact of the measures taken under the EU CAP.

[9] The BioSense Institute's website can be accessed here: https://biosens.rs/en.

[10] The OIE methodology is from the World Organisation for Animal Health. The IPPC methodology comes from the International Plant Protection Convention. The Codex Alimentarius Commission methodology was jointly developed by FAO and the World Health Organization. Finally, the EFSA methodology was created by the European Food Safety Authority (EFSA), which provides independent scientific advice on food-related risks.

[11] Regulation No. 396/2005.

[12] To access this regulation, see: https://iss.rs/en/project/show/iss:proj:53254.

[13] These five objectives are: improving the position of farmers in the food chain, climate change action, preserving landscapes and biodiversity, supporting generational renewal, and protecting food and health quality.

16 Tourism policy

Sound and robust frameworks are essential for the tourism sector to drive positive economic development, enhance competitiveness, and strengthen resilience within economies, particularly those heavily reliant on tourism. This chapter assesses the comprehensiveness of the legislative structure and practices governing tourism across three sub-dimensions. The first sub-dimension, governance and enabling conditions, assesses the effectiveness of efforts aimed at strengthening strategic co-ordination and co-operation in tourism across governance, vertical co-operation, public-private dialogue, and data collection. The second sub-dimension centred on accessibility, tourism offer and human resources, examines progress and challenges in addressing the sector's connectivity framework and infrastructure, accommodation capacity and quality, and availability of qualified workforce. The third sub-dimension, sustainable and competitive tourism, explores the impact of tourism branding and marketing strategies, natural and cultural heritage valorisation frameworks, and operations promoting sustainable development.

Key findings

Serbia has increased its overall score in tourism policy since the last *Competitiveness Outlook*, from 2.3 to 2.8. In 2024, the Serbian tourism sector developed positively compared to 2021. Vertical co-operation, information exchange, and public-private partnerships are particularly noteworthy. Improvements in data collection and progress in accommodation standards were observed. Progress was also observed in tourism marketing. However, governance, connectivity, labour availability, sustainable tourism promotion, and heritage enhancement remain.

Table 16.1. Serbia's scores for tourism policy

Dimension	Sub-dimension	2018 score	2021 score	2024 score	2024 WB6 average
Tourism	15.1: Governance and enabling conditions			3.0	2.8
	15.2: Accessibility, tourism offer and human resources			3.0	2.7
	15.3: Sustainable and competitive tourism			2.3	1.9
Serbia's overall score		**2.1**	**2.3**	**2.8**	**2.5**

The **key findings** are:

- Serbia's strategic framework for tourism development has progressed through adopting the Tourism Development Strategy for 2024-33, which focuses on climate change, competitiveness, and green initiatives. However, effective implementation could be hindered by constraints posed by inadequate resources and the absence of a designated department.
- Growing international collaboration drives momentum towards advancing sustainable development in tourism, as evidenced by the Ministry of Tourism and Youth's partnership with the Global Sustainable Tourism Council. However, a clear set of targeted guidelines, regulations, and strategies for sustainable development will be essential to driving meaningful progress.
- Tourism data collection is guided by comprehensive engagement with diverse stakeholders and the use of existing information systems. However, establishing a Tourism Satellite Account (TSA) would strengthen tourism statistics and accurately measure the sector's economic impact.
- Serbia has taken a leading role in digitisation by introducing a Central Information System called eTurista. Moreover, a new project, "Digitalisation of the Serbian Tourism Offer" aims to modernise access to tourism-related information.
- Heightened emphasis on fostering regional co-operation has been underscored by initiatives aiming to improve regional connectivity and reduce transport emissions.

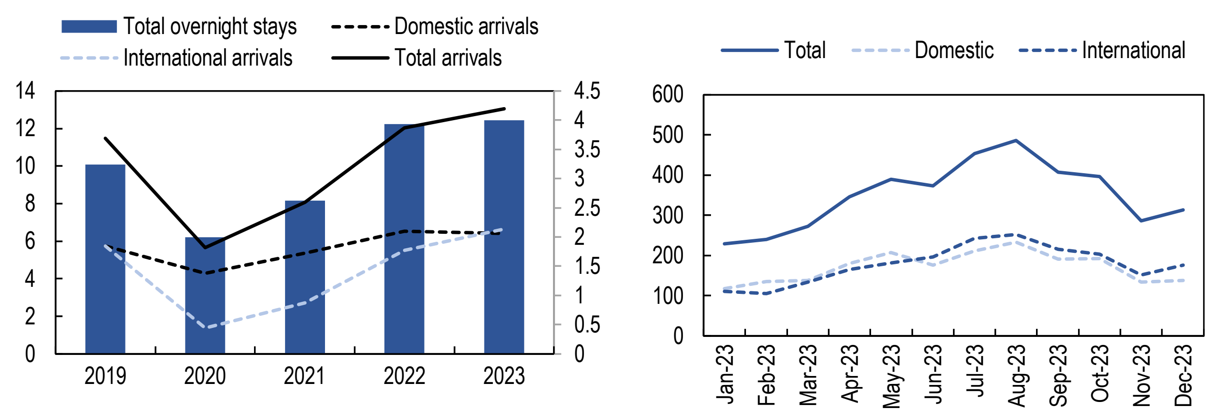
State of play and key developments

Tourism in Serbia remains an important sector for economic and social growth, contributing approximately 6.9% to GDP in 2022, totalling RSD 444.3 billion (EUR 3.79 billion), and employing around 167 800 individuals, representing about 7.3% of total employment (Statistical Office of the Republic of Serbia, 2023[1]). Projections for 2023 suggest an increase in the sector's contribution to the economy's employment.

In 2022, Serbia experienced a surge in arrivals with spending reaching RSD 346.6 billion (EUR 2.9 billion), primarily driven by foreign tourists. The economy attracted visitors from around fifty countries and achieved the highest occupancy rate among the WB6 economies, reaching 46.26% (UN Tourism, 2023[2]). Figure 16.1 provides insights into the development of arrivals and overnight stays by international and domestic tourists from 2019 to 2023 and the seasonal distribution of arrivals in 2023.

Figure 16.1. Arrivals and overnight stays in accommodation establishments by international and domestic tourists (2019-2023) and seasonal distribution of arrivals (2023) in Serbia

Stays and arrivals are expressed in millions (left); seasonal arrivals are expressed in thousands (right)



Source: Statistical Office of the Republic of Serbia (2023[1]).

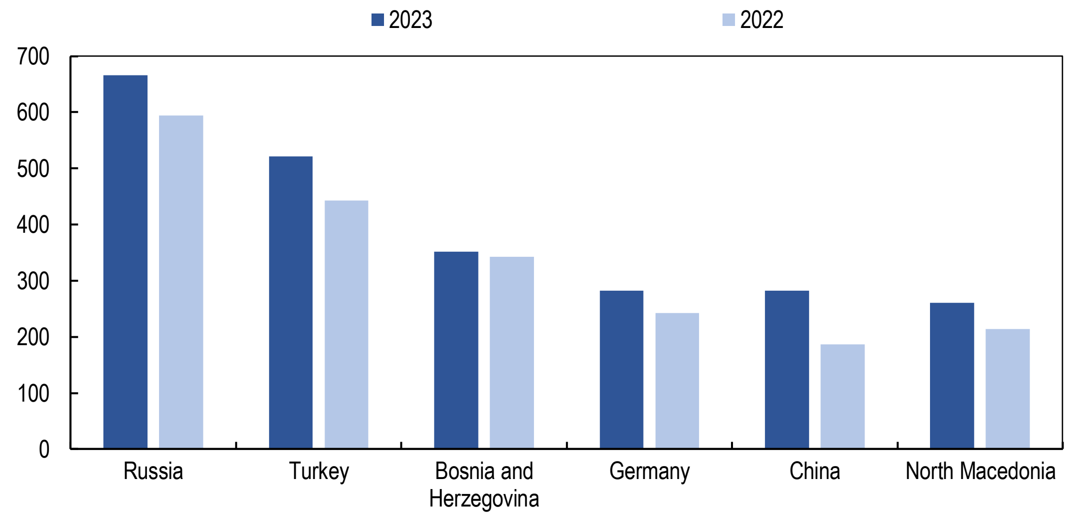
StatLink https://stat.link/g280yu

The highest numbers to visit Serbia came from the Russian Federation, Turkey and Bosnia and Herzegovina (Statistical Office of the Republic of Serbia, 2023[1]), as shown in Figure 16.2.

Serbia is preparing for the Specialised Expo 2027[1] in Belgrade and expects the participation of over 100 countries. This event is of political, economic, and cultural importance for the region and provides an opportunity to showcase Serbia's potential on a global scale. With millions of estimated visitors, the Expo is expected to have an economic impact of EUR 1.1 billion, of which EUR 600 million will be direct and EUR 500 million indirect, driving investment in tourism and event infrastructure (2027 Expo, 2023[3]).

Figure 16.2. Foreign tourist overnight stays in Serbia by country of origin (2022-2023)

Overnight stays are expressed in thousands



Source: Statistical Office of the Republic of Serbia (2023[1]).

StatLink https://stat.link/ka89go

Sub-dimension 15.1: Governance and enabling conditions

Serbia's **tourism governance** is being strengthened through the Tourism Development Strategy 2024-33 development. The strategy is expected to align with the nation's overarching policies, including those related to climate change and competitiveness. It also aims to incorporate a monitoring system into the governance framework that is currently absent from the ongoing strategy, posing challenges to accurately tracking progress towards its primary objectives. Developing the new tourism strategy in Serbia has emphasised multi-stakeholder consultations: local communities and regional authorities are involved in its formulation and implementation, fostering co-operation across various levels for enhanced effectiveness and impact. Similarly, other economies in the region are currently formulating and implementing their national strategies (Box 16.1).

In 2022, governmental restructuring led to establishing a new ministry focused on tourism and youth,[2] a change from the previous arrangement where tourism was grouped with telecommunications and trade. The change sparked controversy due to a perceived lack of synergy between youth affairs and tourism. The governance structure, hampered by financial and human resource constraints, notably lacks a dedicated department for tourism governance strategy within the responsible ministry, despite efforts to enhance efficiency by establishing internal units to streamline processes and improve effectiveness.[3]

Serbia's approach to **vertical co-operation and information sharing** in the tourism sector demonstrates promise in certain areas while revealing clear challenges, namely in implementation. Established in 2017, the National Council for Tourism Development[4] comprises 33 members from various ministries, associations and universities. Chaired by the Minister of Tourism and Youth, the Council has laid the foundation for national, regional, and local destination management structures by co-ordinating stakeholders involved in the tourism sector's development. Destination management organisations (DMO) can mobilise stakeholders to work together, creating co-ordinated action in destinations and producing better outcomes for the tourism sector. Actions have been taken by many OECD and partner countries to support destination management by implementing new DMO structures, reviewing existing operating models and providing capacity-building activities for the regions as is the case for Bulgaria (Box 16.2). The lack of publicly available data on the operations of the Council hampers progress and transparency in co-ordinating tourism administrations across different levels. Concurrently, tensions arise from inadequate inter-sectoral collaboration and the inconsistent use of EU funds in implementing local or regional tourism strategies, which underscores challenges related to policy alignment and resource allocation.

Box 16.1. Development of the National Tourism Strategy, Montenegro

Montenegro's National Tourism Strategy, adopted in March 2022, aims to position the economy as a sustainable, green, smart and inclusive global destination. The strategy focuses on reducing seasonality, improving regional balance, and prioritising tourism in development policy. The plan's key operational objectives include improving the regulatory framework, developing infrastructure, improving accommodation capacity, diversifying tourism products, improving human resources, and integrating digital solutions. To achieve year-round attractiveness, the strategy emphasises the development of rural, cultural, health, manifestation, and nature-based tourism. Collaboration with various stakeholders, including the UNWTO, played a crucial role in adapting the strategy to global tourism trends. A wide range of stakeholders at the state and local levels were involved in the preparation of the document, including public and private sector partners, relevant ministries, academic institutions, the National Tourism Organisation of Montenegro, local tourism organisations, business and tourism associations and non-governmental organisations. International organisations such as the World Bank, the European Bank for Reconstruction and Development (EBRD), the German Corporation for International Cooperation (GIZ) and the United Nations Development Programme (UNDP) were also actively involved. The process considered the integration of specific activities from related ministries (transport, energy, utilities, etc.) into the Action Plan to ensure a co-ordinated approach, minimise overlaps between ministries, and take into account crosscutting documents to improve efficiency and co-operation. Partnerships at all levels, especially between the public and private sectors, are crucial for successful implementation. The strategy recognises that tourism can only make a significant contribution to Montenegro's economic prosperity through comprehensive networking and synergies among stakeholders.

Source: Information based on responses to questionnaires of the *Competitiveness Outlook* framework completed by national authorities.

The eTurista platform (Box 16.3), a primary information source for tourist destinations which combines all data on caterers and catering facilities for accommodation provided by national, regional, and local tourism organisations and businesses, will soon be complemented by a new platform currently under development to digitalise Serbia's tourism offer.

Serbia demonstrates a constructive **public-private dialogue** within its tourism sector, involving various representative bodies from the private sector. Bodies like YUTA (Association of travel agencies of Serbia), HORES (Association of hotel and restaurant companies), and others are actively participating in the design and implementation of the national tourism strategy, enabling a collaborative approach. Furthermore, the existence of the National Council for Tourism Development, which comprises representatives from both the public and private sectors, including academia and NGOs, sets a solid framework for public-private partnership and co-operation in the economy's tourism development. The introduction of a monitoring and evaluation mechanism for public-private co-operation in tourism at the national level is already in the pipeline and will be instrumental in strengthening collaboration. Once implemented, this mechanism is expected to enable the economy to assess the efficiency of such co-operation, identify areas for improvement, and foster more effective partnerships between the public and private sectors but precisions have not been provided. Overall, Serbia's public-private dialogue in tourism seems well established, and further enhancements and monitoring systems will ensure that this partnership remains strong and productive.

Box 16.2. New approaches to regional and destination management - Bulgaria

Bulgaria established nine Regional Tourism Management Organisations' established in 2018-19. New projects were launched for 2019-22 to support the organisations' functioning and capacity building for effective tourism management at the destination level. These focus on providing support for the creation and functioning of the management organisations and improving the quality of services of SMEs in tourism through ICT and web-based marketing.

Source: OECD (2022[4]).

Box 16.3. Central Information System - eTurista

The introduction of eTurista fulfils several objectives in the Hospitality Industry Act, as the platform combines all data on caterers and catering facilities for accommodation in the Republic of Serbia. These include combating the grey economy and increasing Serbia's competitiveness as a tourist destination. The centralised information system eTurista consolidates the data of restaurateurs and accommodation providers throughout Serbia and provides a mandatory and free online platform. Benefits for accommodation providers include online categorisation requests, accurate records of accommodation taxes paid and reduced administrative burden. Tourists benefit from greater security, higher quality of service and the certainty that they stay in legal establishments. State institutions and tourism organisations benefit from improved real-time statistical monitoring of tourist traffic, efficient tax collection and active marketing strategies to increase the competitiveness of Serbian tourism. Overall, eTurista streamlines processes, increases transparency, and contributes to the growth and regulation of the tourism sector in the Republic of Serbia.

Source: Ministry of Tourism and Youth (2024[5]).

Serbia has embraced a proactive stance in gathering tourism **data collection**, engaging various institutions like the National Bank of Serbia and the City Administration of Belgrade; these efforts are facilitated by the central information system (eTurista) transforming the data collection process. Yet challenges remain, including resource constraints and the absence of an established Tourism Satellite Account, representing a significant gap in accurately measure the sector's economic impact (OECD, European Union, United Nations and WTO, 2010[6]).

Sub-dimension 15.2: Accessibility, tourism offer and human resources

Serbia is actively advancing **sustainable connectivity** efforts by developing its new Tourism strategy to promote low-emission travel, complemented by active participation in initiatives like Via Dinarica[5] and the Open Balkan Initiative (Box 16.4) to enhance cross-border access. While promising, the Open Balkan initiative has yet to reach its full potential and has not garnered full endorsement from the EU.

Box 16.4. The Open Balkan initiative

The Open Balkan initiative, launched in 2021 and including Albania, North Macedonia and Serbia, is a collaborative effort to foster regional political and economic integration within the Western Balkans. This initiative seeks to enhance the region's capabilities and remove barriers to economic growth by promoting the freedom of movement of people and goods. The primary objective of Open Balkan is to overcome social, economic, and trade barriers hindering regional economic growth by implementing the four fundamental freedoms of European integration: the freedom of movement of goods, workers, capital, and services.

Source: Chamber of Commerce and Industry of Serbia (2024[7]).

Serbia has established a solid foundation for **accommodation capacity and quality** through adherence to European standards, maintenance of a register of accommodation facilities, and mandatory categorisation overseen by a commission appointed by the minister responsible for hotels. Accredited experts at the local level oversee compliance with other accommodation establishments, while the government supports companies in establishing standards and implementing energy efficiency programmes. The government also supports and subsidises direct investments in the hotel and accommodation sector, such as investment projects in the hotel services sector in spa and climatic resorts, with a minimum value of EUR 2 million (Chamber of Commerce, 2022[8]). Despite these efforts, challenges persist due to insufficient budget and human resources, including the lack of available training courses for the categorisation process and quality standards; this necessitates improvements in monitoring and adjustments based on monitoring results.

Concerning the **availability of qualified workforce,** important aspects such as skills development and the promotion of tourism among the youth are covered in the national strategy but require attention and improvement, namely in the implementation. The absence of consultation and dialogue with all tourism stakeholders in human resources (HR) planning, coupled with a lack of sufficient budget for implementing HR development measures, presents challenges for the long-term development of this policy area. Additionally, an evaluation of the HR policy has yet to be implemented, which is crucial to ensure the strategy's effectiveness and relevance. As the tourism sector grows, the demand for a structured skills framework becomes increasingly critical. An important part of workforce transformation will be the availability of sufficient and appropriate workforce skills to enable (or constrain) digital transformations of the sector. While the evidence is sparse, it appears that the current levels of digitalisation in tourism have yet to create significant skills disturbance or job displacement in some sub-sectors. However, this situation is likely to change as the take up of current technologies intensifies, and as more firms take advantage of opportunities from emerging digitalisation systems and tools, including the scope for greater levels of automation (OECD, 2021[9]). In light of this and despite some existing efforts, Serbia has yet to fully promote career opportunities and training in tourism to strengthen its workforce and ensure competitiveness in the sector.

Sub-dimension 15.3: Sustainable and competitive tourism

Serbia has made significant progress in **tourism marketing and branding** by establishing a tourism brand identity and implementing a tourism marketing and digital strategy targeting international markets. However, the effectiveness of the Strategic Marketing Plan for Tourism is hampered by partial implementation, mainly due to resource constraints. The challenge of limited financial and human resources for effective digital marketing underscores the critical role of digitalisation in the tourism sector. Digitalisation not only improves customer experiences and operational efficiency but also empowers all stakeholders in the sector through data-supported decision-making, and increases added value, competitiveness, and resilience.

Serbia has taken steps to integrate its **natural and cultural heritage valorisation framework** into its national tourism strategy, as demonstrated by including 20 cultural policy points in the Ministry of Culture's Strategic Priorities.[6] However, there is still room for improvement in policy development, particularly concerning the absence of adopted strategies or frameworks for heritage management since 2021. Although initiatives like the memorandum of understanding with the German Corporation for International Cooperation show intent, resource constraints have limited the prioritisation of dedicated heritage strategies.

In Serbia, significant strides in the **promotion of sustainable development and operations** have been made since 2023 through heightened collaboration between the Ministry of Tourism and Youth and the Global Sustainable Tourism Council (Global Sustainable Tourism Council, 2023[10]), fostering co-operation and synergies for sustainable tourism initiatives. While the economy has articulated principles of sustainable tourism development in its Tourism Development Strategy and Law on Tourism, challenges persist, notably the lack of a dedicated policy framework and budget for sustainable tourism. However, plans to introduce new economic instruments through the strategy signal progress toward a structured approach and dedicated resources for sustainable tourism operations. The absence of a Sustainable Tourism Observatory remains a notable gap in monitoring and continuous improvement efforts. Montenegro serves as a positive example of climate change adaptation for Serbia and is actively developing a National Adaptation Plan (NAP) (Box 16.5) that includes specific measures for the tourism sector.

Box 16.5. National Adaptation Plan for Climate Change (in preparatory phase), Montenegro

Introduced by the Conference of the Parties (COP) to the UN Framework Convention on Climate Change (UNFCCC) in 2010, the National Adaptation Plan (NAP) process serves as a mechanism for countries to identify and align medium- and long-term adaptation needs and priorities. This alignment is with the adaptation component of their Nationally Determined Contributions (NDCs) while facilitating the integration of climate change adaptation into development planning across sectors and levels.

The guiding principles of the NAP process underscore the importance of a responsive, gender-sensitive, participatory and transparent approach. This approach considers vulnerable groups, communities, and ecosystems. The process is rooted in the best available science, traditional culture, local context and knowledge, and employs gender-sensitive approaches. Additionally, it emphasises avoiding duplicating efforts undertaken by the economy and aligning with Convention guidelines.

Montenegro, in its commitment to global climate change mitigation, regularly submits reports to the UNFCCC. At the national level, institutions responsible for climate change are establishing a legal and strategic framework to fulfil international commitments. Notably, there is a specific focus on integrating climate considerations into various aspects of the tourism sector. Future initiatives include further development of the National Adaptation Plan (NAP) and a dedicated plan for adapting the tourism sector to climate change impacts.

Source: Information based on responses to questionnaires of the *Competitiveness Outlook* framework completed by national authorities.

Overview of implementation of Competitiveness Outlook 2021 recommendations

Serbia's progress on the *Competitiveness Outlook 2021* Recommendations has been moderate (Table 16.2). Some progress was achieved in upgrading the tourism investment policy framework with a focus on innovation. Nevertheless, room for improvement remains on many other fronts, such as strengthening dialogue and co-operation with private sector stakeholders and strengthening data collection through developing the Tourism Satellite Accounts (TSA).

Table 16.2. Serbia's progress on past recommendations for tourism policy

Competitiveness Outlook 2021 recommendations	Progress status	Level of progress
Empower municipalities and local tourist organisations to manage tourism development	Tourism development programmes at the local level are aligned with the national Tourism Development Strategy The national level supports investments in public, private, and civil projects related to the strategy's objectives and measures at the local and regional levels	Limited
Strengthen dialogue and co-operation with private sector stakeholders, educational institutions and NGOs from the national to the local level	The framework for the public-private partnership at the national level continues to be created by the National Tourism Council, which, in addition to the ministries, includes representatives of YUTA - Association of Serbian Travel Agencies, HORES – Association of Hotel and Restaurant Enterprises, Association of Tourist Guides, Serbian Baths Associations, the Serbian airline Air Serbia, NGOs and universities	Limited
Upgrade the tourism investment policy framework with a focus on innovation	Efforts have been made to promote innovation in tourism through the "Digitalization of tourism offer of Serbia" project, which is in its final phase. This project aims to enhance the attractiveness of the tourism offer by introducing digital innovations	Moderate
Establish regular monitoring and introduce independent evaluation of implemented policy measures	The upcoming Tourism Development Strategy for the period 2024-33 includes plans to introduce a monitoring system. This system will assess the governance structure's efficiency regarding the outputs and outcomes of the implemented policy measures and actions	Limited
Further improve tourism data collection and sharing by introducing Tourism Satellite Accounts	None.	None
Develop a sector-specific human resource policy for tourism	The human resource policy for tourism is part of the overall National Tourism Strategy, demonstrating a co-ordinated and strategic approach to addressing the specific needs of the tourism industry The HR development plan encompasses skill enhancement and educational courses covering subjects such as design thinking and strategic management in tourism development	Limited
Tailor the marketing and branding strategy to the new circumstances in the market and new trends in tourism demands	There is a tourism marketing strategy and plan in place that identifies target markets and provides a framework for promotion. It is based on marketing research, including aspects like market size, segmentation, trends, and channels Digital marketing activities are included in the overall tourism marketing strategy	Moderate
Maintain and enhance local community prosperity and quality of life	Sustainable tourism development principles have been defined and are present in both the Tourism Development Strategy and the Law on Tourism. These principles provide a foundation for ensuring that tourism activities support the prosperity and quality of life for local communities The Ministry of Tourism and Youth of the Republic of Serbia has signed a Membership Agreement with the Global Sustainable Tourism Council (GSTC) to promote the application of GSTC criteria for sustainable tourism in Serbia	Moderate

The way forward for tourism

To ensure the further successful development of tourism, policy makers in Serbia should:

- **Establish and strengthen destination management and co-ordination structures among national, regional, and local entities to create a more integrated approach to tourism development.** Serbia should establish destination management and co-ordination structures with the private sector at the local and regional levels to enable decentralised destination management organisations and encourage private sector and stakeholder engagement. This initiative can enhance the effectiveness of local and regional tourism strategies. It will also help empower municipalities and local tourism organisations to manage tourism development by providing co-ordinated technical support, designing tourism master plans, improving capacity building and allocating sufficient budgetary resources for policy implementation at destination level. Consistent destination management requires adequate funding.

- **Allocate additional funds to all tourism policy areas.** Serbia's tourism is growing, but its sound and effective development relies on allocating more resources and support to enhance data collection, digital efforts and brand management, among others. Serbia can explore partnerships and collaborations with private sector stakeholders to access additional resources and expertise. Such initiatives will further enhance its tourism marketing and branding efforts, and Serbia can continue to strengthen its position in the global tourism market.
- **Establish an Observatory for Sustainable Tourism to enhance monitoring systems.** Serbia should develop and adopt a policy framework with clear measures and budgetary allocations to promote sustainability in tourism. This framework can be strengthened by establishing a Sustainable Tourism Observatory. It should be further systematised through regular assessments of tourism impacts and visitor satisfaction to improve economic sustainability and increase attractiveness.
- **Introduce the calculation of the TSA to strengthen economic data**. While Serbia's data collection efforts are advanced, addressing challenges, particularly limited human and financial resources, is essential. The TSA is a standardised international statistical framework that provides detailed insights into tourism's contributions to GDP, employment, and other key economic indicators; these will provide policy makers with reliable information crucial for evidence-based policy. Serbia should continue to invest in resources, streamline co-ordination among institutions, and explore partnerships with international organisations for capacity building. Moreover, the tourism sector's significant economic contribution should be consistently monitored, with annual reports and clear schedules for data collection and sharing to provide valuable insights and transparency in the sector.
- **Promote career opportunities and talent development in the tourism sector.** Serbia should prioritise dialogue and consultation with all tourism stakeholders in HR planning to move forward and enhance HR development. This inclusive approach will help align the strategy with the sector's needs and expectations and ensure its practicality and effectiveness. Furthermore, Serbia should consider creating national, regional, and local skills partnerships, fostering collaboration among various stakeholders to bridge the skills gap in major tourism regions.

Box 16.6. Initiatives to enhance workforce skills and recruitment – selected country approaches

Malta: A EUR 5 million online training programme aims to develop the skills of the tourism workforce and the tourism product. It seeks to ensure that tourism employees have the skills to deliver a high-quality experience to Malta's visitors.

Portugal: The Programme "Training + Next" was implemented in January 2022 and aims to train 75 000 professionals over three years, free of charge and adapted to the local needs of each municipality throughout the territory. The programme will implement upskilling and reskilling processes that add value to the local business fabric and their respective territories and functions to attract talent, including qualifying people from other sectors or unemployed people. Content will be adapted to the diversity of tourism companies and the sector's future needs.

Source: OECD (2022[4]).

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Notes

[1] Detailed information on the 2027 Expo is available at: https://www.bie-paris.org/site/en/2027-belgrade

[2] https://mto.gov.rs/tekst/308/sektor-za-turizam.php.

[3] These internal units include the Department for Quality Management in Tourism, Department for Infrastructure Projects in Tourism, Department for Improving the Quality of Tourist Offer, Department for Development of Tourism Products, Tourist Destination Management Group, Department for Legal Affairs and Second Instance Procedure, and the Group for Central Information System in Tourism and Catering.

[4] In 2014, the National Council for the Development of Tourism in the Republic of Serbia was established with the aim of co-ordinating all stakeholders involved in the development of the tourism industry.

[5] The Via Dinarica hiking trail spans 1 200 miles and the Western Balkans together with Slovenia and Croatia. In Serbia it passes through three major conservation areas: Tara, Kopaonik National Park and Zlatibor Nature Park, which cover a large portion of Serbia's mountainous southwestern region: www.viadinarica.com and https://trail.viadinarica.com.

[6] Strategic Priorities for the Cultural Development of the Republic of Serbia 2021-25, www.kultura.gov.rs/extfile/sr/6132/Strate%C5%A1ki%20prioriteti%20razvoja%20kulture.pdf.

Competitiveness and Private Sector Development

Western Balkans Competitiveness Outlook 2024: Serbia

Inclusive and sustainable economic growth in the six Western Balkan (WB6) economies depends on greater economic competitiveness. Although the gap is closing gradually, the standards of living in WB6 are well below those of the OECD and EU. Accelerating the rate of socio-economic convergence will require a holistic and growth oriented approach to policy making.

This is the fourth study of the region (formerly under the title 'Competitiveness in South East Europe') and it comprehensively assesses policy reforms in the WB6 economies across 15 policy areas key to strengthening their competitiveness. It enables WB6 economies to compare economic performance against regional peers, as well as EU-OECD good practices and standards, and to design future policies based on rich evidence and actionable policy recommendations.

The regional profile presents assessment findings across five policy clusters crucial to accelerating socio-economic convergence of the WB6 by fostering regional co-operation: business environment, skills, infrastructure and connectivity, digital transformation and greening. Economy-specific profiles complement the regional assessment, offering each WB6 economy an in-depth analysis of their policies supporting competitiveness. They also track the implementation of the previous 2021 study's recommendations and provide additional ones tailored to the economies' evolving challenges. These recommendations aim to inform structural economic reforms and facilitate the region's socio-economic convergence towards the standards of the EU and OECD.

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