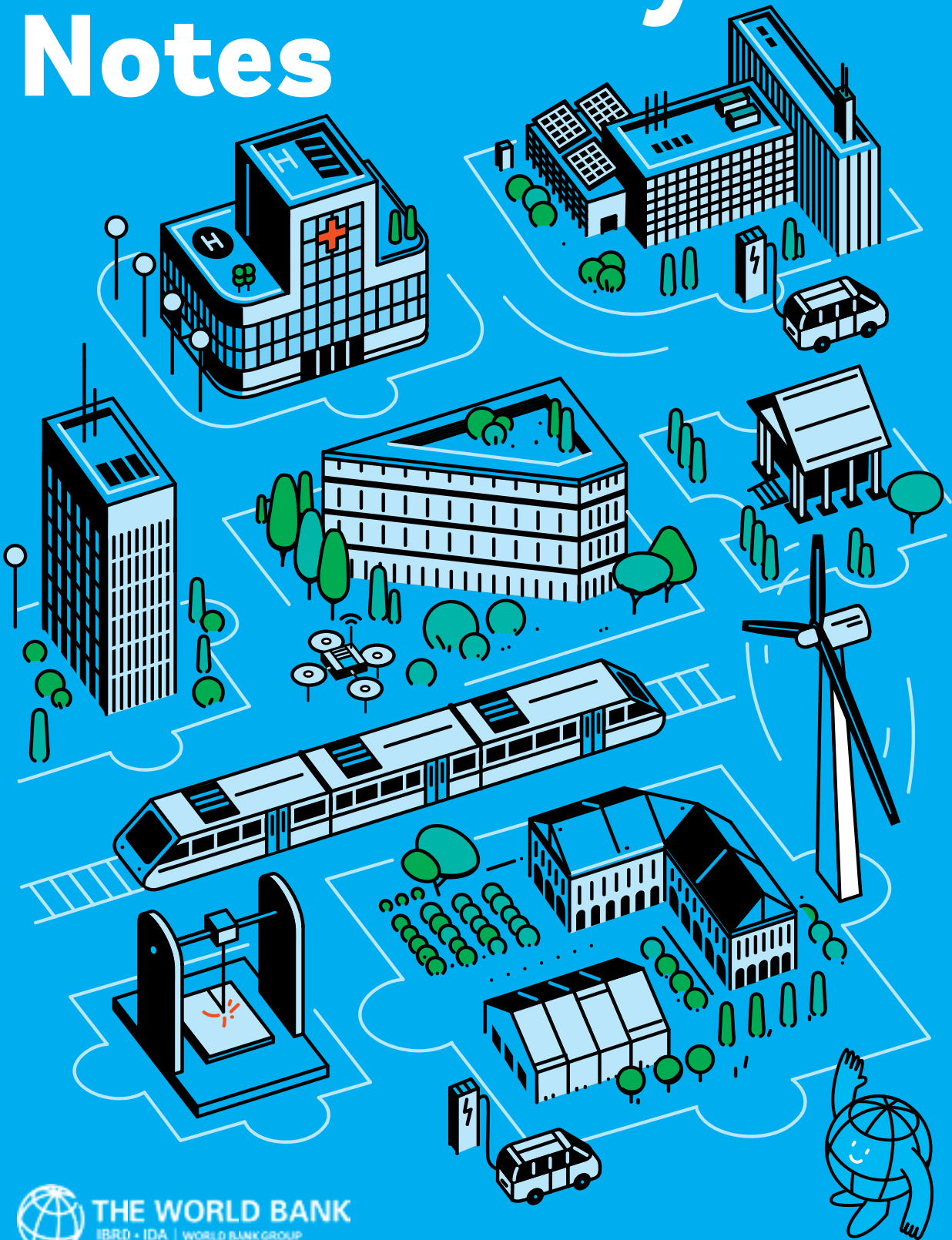


Serbia Policy Notes





© 2022 International Bank for Reconstruction and Development/ The World Bank Office, Serbia
Bulevar Kralja Aleksandra 8
11000 Beograd
Telephone: +381 11 30 23 700; Internet: <https://www.worldbank.org/en/country/serbia>

This report is a product of the staff of the World Bank Group with external contributions. The findings, interpretations, and conclusions expressed in this work do not necessarily reflect the views of The World Bank Group, its Board of Executive Directors, or the governments they represent.

The World Bank Group does not guarantee the accuracy of the data included in this work, which is drawn from multiple external sources. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgement on the part of the World Bank Group concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

Nothing herein shall constitute, or considered to be, a limitation upon or waiver of the privileges and immunities of The World Bank Group, all of which are specifically reserved.

Rights and Permissions

The material in this work is subject to copyright. Because The World Bank encourages dissemination of this knowledge, this work may be reproduced, in whole or in part for noncommercial purposes as long as full attribution to this work is given. Any queries on rights and licenses, including subsidiary rights, should be addressed to World Bank Publications, The World Bank Group, 1818 H Street NW, Washington, DC 20433, USA; fax: 202-522-2625; e-mail: pubrights@worldbank.org.

Serbia Policy Notes

International Bank for
Reconstruction and Development
International Finance Corporation

February 2023



The World Bank Group

Table of contents

Executive Summary	1
1. Macroeconomics and Public Financial Management	6
2. Financial Sector	9
3. Energy and Mining	12
4. The Environment and Green Transition	15
5. Poverty and Inclusion	18
6. Health Systems	21
7. Education	25
8. Social Protection and Employment	29
9. Private Sector and Innovation	32
10. Urban Development and DRM	35
11. Transport	38
12. Agriculture	41

Acknowledgments: These policy notes were prepared by a World Bank Team led by Nicola Pontara (Country Manager), Jasna Vukoje (Portfolio Analyst), Richard Record (Lead Country Economist), Ramon Munoz-Ruskin (Program Leader) and Indhira Vanessa Santos (Program Leader), with overall guidance from Xiaoqing Yu, Country Director for the Western Balkans. The Core Team was composed of: Sameer Akbar, Maja Andjelkovic, Zoran Anusic, Axel E. N. Baeumler, Gunhild Berg, Aleksandar Crnomarkovic, Predrag Djukic, Kornel Drazilov, Svetlana Edmeades, Verena Fritz, Augusto Garcia, Katharina Gassner, Gregoire F. Gauthier, James Gresham, Gonzalo Javier Reyes Hartley, Joern Huenteler, Marijana Jasarevic, Erik Caldwell Johnson, Olivera Jordanovic, Darko Milutin, Maja Murisic, Bojana Naceva, Ha Thi Hong Nguyen, Trang Van Nguyen, Tamara Nikolic, Ivana Novakovic, Claudio Protano, Zurab Sajaia, Lazar Sestovic, Michael Stanley, Dusko Vasiljevic, Svetlana Vukanovic, and Jane C. Hwang.

Executive Summary

1. Key Messages

Serbia has achieved macroeconomic stability and dealt effectively with the COVID-19 pandemic...

Serbia strengthened its macroeconomic framework in the years leading to the pandemic. In 2014, the country embarked on a comprehensive fiscal consolidation effort that turned deficits into surpluses as of 2017 and reduced public debt significantly. The fiscal buffers that were built allowed policy makers to deploy a robust and well-timed fiscal stimulus in 2020, which avoided a hard landing for the economy during COVID-19. The economy posted only a minor recession in 2020, followed by a healthy rebound in 2021, with growth reaching 7.5 percent before moderating to 2.5 in 2022.

...but the country is facing complex short- and medium-term economic challenges.

Serbia's priority in the short-term is to preserve hard-won macroeconomic stability. Pressures to increase budgetary expenditures are mounting, in light of the energy crisis that started in 2021 and persistently high inflation. Keeping public debt on a declining path requires containing fiscal financing needs as much as possible in 2023 and consolidating them over the medium-term. The costs resulting from a lapse of fiscal discipline would be significant, as international markets are increasingly volatile, interest rates are rising, and important SOEs – such as EPS and Srbijagas – are under financial stress.

Structural reforms are needed to accelerate growth.

In the medium term, structural reforms can increase potential growth. Economic growth in the 3 years prior to COVID-19 averaged 3.6 percent, an insufficient rate for Serbia to converge rapidly with EU living standards. Serbia's growth could be as much as 7 percent annually, if structural reforms are done to boost (domestic and foreign) private investment, upskill workers to raise productivity, unleash competition, and achieve stronger governance practices. This new growth model also requires 'going green' and strengthening environmental resilience, while boosting internal connectivity and regional integration.

The energy crisis is putting pressure on public finance...

Imports of electricity and gas have cost Serbia dearly in 2021 and 2022. Elektroprivreda Srbije (EPS) experienced a sharp drop in domestic electricity generation in 2021 and early 2022, forcing it to import electricity (and coal) at record-high prices, with repercussions on the country's fiscal position. The full-year losses for EPS for 2022 have been reported at EUR 630 m requiring the swift resolution of production problems and additional tariff adjustments – some of these measures are being implemented. Meanwhile, increased imports by Srbijagas have cost around US\$1 bn over the first three quarters of 2022.

...highlighting the need to urgently transition to clean energy...

The time to invest in renewable energy is now. A gradual replacement of existing lignite-fueled plants with renewable energy (higher hydropower, solar and wind) and natural gas represents a 'no regret' policy since coal is increasingly uncompetitive. The government could start with the closure of the loss-making Resavica mines according to the principles of the Just Transition for All. Serbia has endowments of new minerals that are key to the green energy transition, which should be exploited with transparent environmental and social impact management and best-practice regulation and consultation.

...while continuing to reform key SOEs to put them on a sustainable financial path.

EPS and Srbijagas need to reform. EPS operations are burdened by overstaffing, low capacity, cumbersome management practices, and delayed investment in maintenance and capacity renewal, and modernization. Restoring the financial viability of EPS will hinge upon: (i) increasing significantly regulated tariffs; (ii) keeping costs under control; and (iii) investing to maintain and modernize the existing generation capacities, including from renewables. Srbijagas has incurred financial losses due to the wide gap between the high gas import prices and the low regulated tariffs, highlighting the need to adjust prices and shift to renewables. Broader reforms are needed to improve oversight and transparency across SOEs.

Environmental challenges are mounting and are a concern for Serbian citizens...

Environmental pollution lowers the quality of living conditions and adversely affects productivity. Cities face challenges with air pollution and poor solid waste management. Serbia has some of the poorest air quality in Europe, given the reliance on coal-fired power plants, the burning of solid fuels to heat private homes, increased congestion and a fleet based on highly-polluting second-hand, imported vehicles. Most municipal solid waste is disposed of unsorted in unsanitary landfills. Wastewaters are discharged into rivers. Public discontent with the environment is a growing phenomenon in Serbia.

...requiring urgent action on decarbonizing the economy.

Promoting green and resilient development needs to happen across all sectors. Serbia has an opportunity to align its domestic policies with the EU's energy, environment, and climate legislation. However, several key strategies need to be completed and adopted, including the National Energy and Climate Plan and Energy Sector Development Strategy. The implementation of carbon pricing and strategies to decarbonize the energy and transport sectors would help reduce greenhouse gas emissions, generate fiscal revenues and prepare Serbia for the planned introduction of the EU's Carbon Border Adjustment Mechanism.

Progress on the human development front has been good...

Serbia achieved notable progress in reducing poverty and improving health and education systems. Poverty (income under US\$6.85/day in 2017 PPP) fell from 28.3 to 12.1 percent between 2013 and 2019 and is estimated to have further declined to 10.5 percent in 2021. The fiscal stimulus package deployed during the COVID-19 pandemic helped to avert a spike in poverty. Coverage of health insurance and basic health care is nearly universal and the primary health care system is well-developed. In education, Serbia's overall performance on international learning assessments is strong, mainly at the primary level.

...but Serbia needs to improve outcomes in health and education...

Serbia's social indicators lag behind those of its peers. Maternal mortality is twice the EU average. Deaths from cancer are higher than in comparator countries with similar incidence levels. Significant differences exist in health outcomes across districts and population groups. Serbia does well in international learning assessments for primary education, but performance in later grades markedly declines. Inequity characterizes access to early childhood education, learning outcomes, and the transition to tertiary education. Government spending in both sectors has declined in recent years.

...in order to strengthen human capital.

Serbia's future depends on the quality of its human capital. Health priorities include tackling noncommunicable diseases focusing on health promotion, prevention, early detection and case management. Foundational learning in basic education needs to accelerate. Employability and entrepreneurship can be boosted by enhancing skills development and lifelong learning opportunities in ways that respond to labor market needs. Higher education can contribute more to innovation and social mobility – but it needs better funding, quality assurance, and labor market relevance.

Faster job creation and better targeted social protection policies are key for inclusivity.

Exclusion continues to affect specific groups including Roma communities, women and young adults. Youth unemployment and the share of youth not in education or training (NEET) are particularly high. Spending on social assistance is inefficient and coverage of the poor is low. Categorical benefits could be gradually replaced by means-tested programs. Social services remain uneven across the country. An aging population and the large share of employees uncovered by the pension system seriously affect its sustainability. Labor market programs continue to have limited reach.

Better quality investment and innovation are key for boosting Serbia's economic growth potential.

Serbia needs to become more competitive to converge faster with the EU. Serbia's cost competitiveness, based on cheap energy and labor in low value-added sectors, is eroding. Raising productivity and skills will require a shift in policies to attract higher-quality foreign and domestic investment, beside greater investments in health and education. This will depend on providing a predictable business environment, improving municipal and national level infrastructure, and ensuring that research and development and innovation are more relevant to Serbia's economic structure and ambitions.

The transport sector is key for greater connectivity, regional integration and decarbonization.

The large volume of investments in transport needs to be sustainable. This will depend on strengthening the commercial orientation of transport SOEs, addressing a large backlog in maintenance, focusing on climate resilience and safety, and developing a multimodal national transport strategy. The sector is one of the main causes of air and noise pollution and GHG emissions. It needs to be decarbonized, focusing on rail and a cleaner road vehicle fleet, while accelerating e-mobility penetration. Facilitating cross-border exchanges and regional integration can boost competition, market development, and jobs.

The agri-food sector punches below its weight but has significant potential to drive productivity growth and competitiveness.

The agri-food sector needs a long-term vision. Farmers and agribusiness seek predictability in policy making, focusing on competitiveness based on clearly articulated incentives, improved public services, and innovation. Greater efforts will be needed to: support agribusinesses and inclusion of small farmers along value chains; enhance competitiveness by spurring capital investment, entrepreneurial capacity, financial services, aggregation capacity, and climate smart agriculture innovation; and enable cross-border transactions and digital tools to reduce costs and boost flows.

2. Selected Policy Reforms

Policy Measure	ST	MT
Macro-fiscal Framework, PFM and Financial Sector (Briefs 1, 2)		
• Limit increases in budgetary expenditures (goods and services, wage bill, subsidies)	x	
• Prioritize (green) capital expenditures to create fiscal space without impacting growth	x	
• Protect budgetary allocations for the most vulnerable (e.g., energy-vulnerable consumers)	x	
• Monitor corporate vulnerabilities	x	
• Improve the performance of SOEs (e.g., EPS, Srbijagas)		x
• Deepen capital markets through implementation of the Capital Markets Development Strategy		x
Energy and the Environment (Briefs 3, 4)		
• Strengthen the policy/regulatory framework for renewable energy	x	
• Increase electricity and natural gas tariffs, ensuring affordability for the most vulnerable	x	
• Approve the NECP and ESDS, with the endorsement of a low-carbon scenario	x	
• Adopt carbon pricing as revenue generator for the Just Transition for All and energy transition		x
• Prioritize plans for gradual thermal capacity retirement and utilities financial sustainability		x
Poverty and Human Development (Briefs 5, 6, 7, 8)		
Health		
• Develop a strategy to tackle noncommunicable diseases (prevention, early detection, case mgmt.)	x	
• Reform the service delivery network (e.g., inpatient care versus primary and new models of care)		x
• Continue provider payment reforms in primary health care and hospitals		x
Education		
• Boost skills development and lifelong learning opportunities for employability and entrepreneurship	x	
• Accelerate foundational learning in basic education		x
• Provide strategic support for higher education (quality, funding, labor market relevance)		x
Poverty, Inclusion, and Social Protection		
• Protect the vulnerable from food and energy price increases (e.g., cash transfers)	x	
• Improve social protection information systems and coverage of poverty-targeted programs	x	
• Revise the parameters of the pension system to improve its financial viability		x
Private Sector Development and Innovation (Brief 9)		
• Prepare new investment strategy, and update legislation (align investment incentives with priorities)	x	
• Boost the uptake of green energy solutions (simplify processes, provide tax incentives)	x	
• Improve the ecosystem for innovation (public-private collaboration in R&D, technology transfer)	x	
• Better support SME productivity and growth (SME targeting, market linkages, digitalization)		x
Urban, Land, and DRM (Brief 10)		
• Implement the Sustainable Urban Development Strategy, focusing on local urban planning	x	
• Finalize and adopt the Spatial Plan of the Republic of Serbia	x	
• Revise the Law on Planning and Construction and bylaws to include climate change/resilience		x
• Upgrade national/local capacity to plan for and reduce natural hazards and climate change risks		x
Transport (Brief 11)		
• Adopt the new Road Safety Strategy	x	
• Adopt the Service Level Agreement and make it conditional for the next year budget	x	
• Adopt a Multimodal Transport Strategy including plans for decarbonizing the sector		x
• Introduce mandatory use of road and rail asset management in SOEs to sustain investments		x
• Foster sustainable mobility solutions at the local level		x
Agriculture (Brief 12)		
• Revamp the agriculture and rural development strategy focusing on technical change and innovation	x	
• Converge with the EU acquis on agriculture and rural development		x
• Strengthen Serbia's Agriculture Knowledge and Information Innovation System		x

3. World Bank Portfolio in Serbia

Project name	Amount (US\$m)	Focus	Closing Date
Macro-Fiscal Framework and PFM			
Tax Administration Modernization Project (TAMP)	52	Improve the effectiveness of tax collection and lower the compliance burden for taxpayers	31-Oct-2024
Enabling Digital Governance Project (EDGE)	50	Improve access, quality, and efficiency of selected administrative e-Government services	30-Jun-2024
Green Transition Development Policy Operation (GTDP0-1)	160	Develop 'green' fiscal management, accelerate the clean energy transition, align with EU on environment and climate action	In preparation
Improving PFM for the Green Transition PforR	75	Improve public finance, investment and procurement to enable greener and more resilient growth	In preparation
Financial Sector			
State Owned Financial Institutions Strengthening Project (SOFI)	50	Improve the performance of Banka Postanska Stedionica AD Beograd and promote the reform of SOFIs	30-Apr-2023
Catalyzing Long-Term Finance through Capital Markets	30	Develop capital markets and deepen the corporate bond market, including through green and other thematic issuances	In preparation
Energy and Environment			
Scaling-Up Residential Clean Energy Project (SURCE)	50	Increase households' uptake of energy efficiency, sustainable heating, and rooftop solar PV in participating LSGs	30-Nov-2027
Managing a Mining Sector Transition MPA	70	Support the GoS to reduce carbon emissions and enable production of minerals essential for the energy transition	In preparation
Human Development			
Inclusive Early Childhood Education and Care (ECEC)	50	Improve access to quality ECEC services for children from disadvantaged backgrounds	31-Mar-2024
Third Serbia Health Project	75	Improve primary health care effectiveness in addressing noncommunicable diseases	In preparation
Serbia Emergency COVID-19 Response Project	100	Respond to the threat posed by COVID-19 and strengthen the national health system for public health preparedness in Serbia	31-Aug-2023
Private Sector Development and Innovation			
Accelerating Innovation and Growth Entrepreneurship (SAIGE)	48	Improve the relevance of scientific research, innovative entrepreneurship and access to finance for enterprise growth	30-Sep-2024
Competitiveness and Jobs 2 Project	50	(To be determined)	In preparation
Transport and Urban Development			
Serbia Local Infrastructure and Institutional Dev. Project (LIID)*	100	Improve LSGs capacity to manage climate-resilient sustainable infrastructure and increase economic and social opportunities	30-Nov-2028
Enhancing Infrastructure Efficiency and Sustainability (PforR)	118.6	Improve management/sustainability of public infrastructure with better government capacity, systems, and assets upgrading	31-Dec-2023
Real Estate Management Project	66.9	Improve the efficiency, transparency, accessibility, and reliability of Serbia's real property management systems	31-Dec-2023
Serbia Railway Sector Modernization MPA Phase 1	62.5	Enhance the efficiency and safety of railway assets and improve the governance and institutional capacity of the railway sector	31-Dec-2026
Sava and Drina Rivers Corridors Integrated Program**	85	Improve flood protection and enhance transboundary water cooperation in the Sava and Drina Rivers Corridors	30-Jul-2026
Western Balkans Trade and Transport Facilitation**	40	Reduce trade costs and increase transport efficiency	15-Dec-2025
Serbia Railway Sector Modernization MPA Phase 2	65	(To be determined)	In preparation
Agriculture			
Serbia Competitive Agriculture Project (SCAP)	50	Improve agri-food market linkages of targeted beneficiaries	31-Dec-2024

* Pending effectiveness; **Regional projects.

1. Macroeconomics and Public Financial Management

1. Overarching Messages

Maintaining macroeconomic stability is a fundamental priority for the new government. Sustainable public finances – that is, lower deficits and public debt – are urgent areas for attention and action. Keeping public debt on a declining path requires containing the fiscal financing needs as much as possible in 2023 and consolidating it over the medium-term. The new Fiscal Strategy (2023-25) presents concrete policy choices on the fiscal front. In addition to budgetary savings measures, attention should be paid to the management of arrears and other fiscal risks. The costs resulting from a lapse of fiscal discipline would be significant, as international markets are increasingly volatile, interest rates are rising, and several SOEs are facing financial stress. On inflation, the government could assess the impact of administrative measures taken so far and consider future measures that could help rein in inflation within the NBS target band.

Serbia's biggest medium-term challenge is to increase its low rate of potential growth through targeted structural reforms. Although current GDP growth rates, averaging around 3-4 percent, are helping to improve incomes, they are not enough to bring the country closer to EU living standards fast enough. World Bank simulations suggest that Serbia's growth could be as much as 7 percent annually, if structural reforms are done to boost (domestic and foreign) private investment, upskill workers to raise productivity, and unleash competition and stronger governance practices. This new growth model also requires 'going green' and strengthening internal connectivity and regional integration.¹

2. Key Challenges

Pressures to increase budgetary expenditures are mounting. Rising inflation, interest rates and international commodity prices may result in pressures to increase budgetary expenditures. Announcements are routinely made concerning wage and pension increases in the public sector. In addition, the rising cost of goods and services procured by the government and used in infrastructure projects, and increasing public sector borrowing costs, are driving up budgetary expenditures. Additional pressures come from the provision of subsidies to SOEs that are facing financial stress (notably in the energy sector) and the need to provide social assistance to the vulnerable segments of Serbian society.

Inflation remains stubbornly high. Inflation is high and still rising despite several measures taken by the NBS and the government. The government would do well to assess the effectiveness of the measures taken so far, notably the control of agriculture and food prices, and analyze how that has impacted households and the economy; and better coordinate with the NBS on the formulation of possible new measures. Coordination of fiscal and monetary policy is also crucial at this stage. For the most part, measures should be targeted and time bound.

The management of public finances and capital investments is still inefficient. The PEFA assessment (2020) highlights key gaps in this regard, including weaknesses with respect to the selection and costing of public investment and limited linkages between policy plans and subsequent budget allocations. Many investment projects are managed according to exceptional rather than regular procedures. Furthermore, fiscal transparency remains limited, giving citizens limited insight into how government is executing budgets.

Progress on digitizing services is still uneven. Digitizing administrative services has been a key government commitment and good progress has been achieved, but the process of identifying services to digitize and implementation has been slow. In some cases, the cost of IT procurements has been high, and the ability of civil servants to oversee good implementation of IT projects has been limited, hindering effective roll-out and preventing substantial improvement in public sector efficiency.

1. World Bank, (2020), Country Economic Memorandum, The World Bank: Washington DC <https://www.worldbank.org/en/country/serbia/publication/serbia-new-growth-agenda>.

3. Policy Responses for Consideration

Short-term measures:

- **Limit increases in budgetary expenditures.** The purchase of goods and services has increased rapidly in recent years, a trend that could be reversed now to reduce pressure on prices. The next category for attention is the wage bill, since benefits from earlier restraint could be lost with an excessive increase in salaries. Decisions on public sector wages also have a broader impact on efforts to fight inflation. Finally, subsidies could be reoriented toward minimal support to the economy so that savings are made, with an emphasis on targeted and time-bound measures.
- **Prioritize capital expenditures to create fiscal space without impacting growth.** While the increase in capital expenditures over recent years was welcome, under the current fiscal situation the government would do well to pursue high-return investments including those that may help minimize the negative impact of the energy crisis. New public investment should be thoroughly scrutinized for its social, environmental and financial impacts, and alignment with the country's strategic goals.
- **Ensure that funding allocated to capital expenditures are well targeted and utilized.** In a resource-constrained environment, it is important to undertake green and climate-sensitive capital projects, based on competitive procurement processes and with closely monitored implementation. The government is pursuing several capital investments – e.g., sewage systems, railroad and other public transport endeavors – that will reduce emissions. In addition, amendments to the Budget System Law related to in-year reporting create a legal basis that can improve transparency and offer precious information to policy makers.
- **Protect budgetary allocations for the most vulnerable.** The government would also do well to channel funds to existing social safety net programs and establish new mechanisms to support those most vulnerable – for instance, through the adoption of the Decree on Energy Vulnerable Consumers. In addition, it would be desirable to actively monitor and coordinate the implementation of different social assistance programs with local self-governments in order to ensure adequate funding and smooth implementation.
- **Continue with coordinated efforts with the NBS to lower inflation.** The government should assess the impact of previously adopted price control measures on overall inflation, living standards and performance of the economy and consider alternative counter-inflationary measures and policies. In addition, further necessary adjustments of administratively controlled prices should be done without disrupting the normal functioning of the affected sectors (e.g., energy) and thinking about the impact on the most vulnerable.

Medium-term measures:

- **Improve the performance of SOEs to alleviate budgetary pressures.** The SOEs in the energy sector, in particular, are already placing a significant burden on the budget, requiring unprecedented levels of financial support through subsidies, capital increases, and guarantees. To minimize the risk of contingent liabilities being realized and brought on budget, the government would do well to enhance the monitoring of SOEs' performance, and appoint permanent, instead of acting, managers in state-level SOEs. The adoption of the new Law on SOEs could provide solid ground for improved management and oversight of SOEs going forward.
- **Continue to push for greater public sector efficiency, including through effective digitization.** Serbia has made good initial progress on adopting digital tools; going forward, it will be important to digitize additional services and processes, ensure full rather than partial digitization of processes, value for money, a comprehensive approach to digital governance,

and continuous maintenance of systems. The government needs to ensure that digital tools are effectively deployed and utilized, implementing, in particular, an initial set of priority services that have already been identified (such as the issuance of travel documents, ID cards, and other personal documents, and services provided by the tax authorities). The necessary digital infrastructure for the advancement of digitalization of services is mostly in place or under implementation (interoperability platform, Meta-Register, citizen’s registry, government data center, and government office management application). The government should encourage effective collaboration among ministries and Office for IT and eGovernment to make this happen.

4. World Bank Engagement

<p><i>Ongoing Support</i></p>	<ul style="list-style-type: none"> • Enhancing Digital Governance (EDGE) project supports foundational digitalization in the public sector. There is an opportunity to accelerate the implementation of the digitalization of services to support improvements in efficiency and quality of service delivery. The World Bank is also supporting the digitization of the tax administration and cadaster. • Green Transition Development Policy Operation Series (FY23 and FY24, co-financed with KfW and AFD, US\$420m per operation). The DPO series is articulated around 3 pillars: (i) aligning public finance management with the climate change agenda; (ii) accelerating the clean energy transition; and (iii) supporting the alignment of Serbia with the EU standards on environment and climate change. • Improving Public Financial Management for the Green Transition Program for Results (US\$75m plus co-financing pari passu from AFD). This PforR will offer complementary support to the reform agenda supported by the Green Transition DPO. The PforR will support the implementation of reforms aiming to better link government plans and budgets and the roll-out of key PFM and PIM reforms over the period 2023-2027, including the integration of green criteria into planning, budgeting, PIM, and public procurement. Additional areas under consideration include providing implementation support for the new Law on SOEs and potentially selected aspects of the new environment and climate related legislation (e.g., waste management).
<p><i>Potential engagements</i></p>	<ul style="list-style-type: none"> • A new Public Expenditure Review would provide analytical underpinnings for policy choices to ensure the medium to long-term sustainability of public finances. The World Bank provides several types of reports and technical assistance to support the government in its effort to maintain macroeconomic stability. The World Bank already provides technical assistance to Serbia related to public investment management and fiscal risks management.

2. Financial Sector

1. Overarching Messages

A robust economic recovery and resilience post-pandemic requires deeper financial sector intermediation and diversification beyond commercial banks, which remain limited in Serbia. Financial sector intermediation, measured by domestic credit to the private sector by commercial banks, has remained within a narrow band of 40.3 percent to 46.6 percent over the past 10 years, compared to over 85 percent in the EU. Moreover, long-term financing needs diversification to allow firms to grow and expand. In 2021, over 90 percent of the financial sector assets were held by banks, and 41 percent of assets (including loans) had a maturity between one and five years, while 18 percent of liabilities (including deposits) had a maturity of one to five years. The discrepancy rises with longer maturity terms: 21 percent of assets had maturities of over five years but only 4 percent of liabilities.

Deeper and more diverse domestic markets, including long-term financing, can insulate the economy from swings in global risk sentiment.² Such markets allow for the absorption of larger amounts of government debt without crowding out credit to the private sector; and also help buffer swings in capital.³ But in Serbia financing sources beyond banks are limited. Factoring and leasing are underutilized. The insurance sector, pension sector, and mutual funds are small. The assets of these institutions amount to only 9 percent of overall financial sector assets. Market capitalization on the stock exchange (BELEX) decreased by nearly 32 percent since the Global Financial Crisis (GFC) and about 13 percent since 2016. Private equity, venture capital, and fintech companies are nascent. There are also little financing opportunities for innovative start-ups and microfinance for MSMEs. In addition, as banks remain the predominant source of financing, the sector is vulnerable to credit cycles.

Serbia's financial sector is not yet prepared to support the transition to a low-carbon economy and is vulnerable to climate change's impacts. Climate change exposes the financial sector directly to physical and transition risks that can undermine financial stability. The 2014 flood demonstrated the substantial effect that severe climate events can have on households, firms, the economy, and the financial sector. Looking forward, the financial sector in Serbia can play an active role in supporting the transition to a low-carbon economy by mobilizing the resources needed for investments in climate mitigation and adaptation while also offering protection through insurance and other risk sharing mechanisms. The Serbian authorities have achieved progress on: (i) managing climate and environment risk in the financial sector; and (ii) identifying green financing options – Serbia was the first Western Balkan country to issue a sovereign green bond in September 2021. Nevertheless, additional efforts in financial regulation and supervision to mitigate climate and environmental risks are required to meet the estimated climate-related investment needs of around €8.5 billion over a 10-year period.

2. Key Challenges

The contribution of capital markets to private sector financing in Serbia remains negligible. A 2019 World Bank Capital Markets Diagnostic highlighted that Serbia had the necessary preconditions for the development of the capital markets (e.g., macro-economic stability, a sound banking sector, efficient market infrastructure and the existence of a broader legal and regulatory framework including corporate law, insolvency law, and overall tax framework).⁴ However, outside of the government bond market, other types of securities are not well developed. Constraints for the development of capital markets include the lack of companies capable and willing to issue securities and a shallow institutional investor base. There are only a few large, profitable, quality private issuers and state-owned enterprises that could be potential issuers. In light of the surplus of

2. IMF and World Bank (2021), Guidance Note on Developing Government Local Currency Bond Markets, The World Bank: Washington DC.

3. IMF and World Bank Ibid., 2021.

4. The preconditions were still valid in 2022; however, in the context of tightening European and global monetary conditions, funding conditions for the Serbian economy from commercial banks may tighten. This may heighten the need to develop the capital markets as an alternative financing source beyond commercial banks in Serbia.

liquidity and competitive bank funding in the last 10 years, most companies in Serbia did not need to access capital markets. But this is likely to change in the current high-interest rate environment.

The Serbian financial sector faces physical and transitional challenges from climate and environmental risks. Serbia is exposed to droughts and floods. Physical risks can materialize through the banking sector's exposure to agriculture, hydropower, energy, and mining sectors. Transition risks could materialize through exposure to activities related to building, transportation, energy, and agriculture: these climate-policy-relevant sectors make up nearly half of Serbia's GDP.⁵ Concerning green finance, Serbia has taken an important step by issuing a sovereign green bond, which provided an important signal to the market. In the banking sector, leading Serbian banks have offered financing for renewable energy and energy efficiency projects. The banking industry is also developing a sustainable finance roadmap that is expected to strengthen technical capacity and awareness of green finance in the market and ultimately accelerate green lending. The insurance sector also provides climate risk solutions, such as agriculture insurance to farmers, though uptake is limited. Still, supervisory and technical guidelines for financial entities need to be enhanced, and the development of a national green taxonomy could benefit and support green investments while maintaining market integrity by reducing greenwashing.

3. Policy Responses for Consideration

Short-term measures:

- **Monitor closely corporate vulnerability.** In 2019, a financial analysis of corporate vulnerabilities in the public and private sectors indicated that public companies were efficient and had adequate debt servicing and cash flow to manage assets. At the same time, solvency and indebtedness lagged. Likewise, debt repayment capacities for private companies remained adequate but also warranted closer monitoring. In the face of the current challenging global macroeconomic environment, rising inflationary pressures, and the expiration of borrower relief measures, it would be prudent to closely monitor and remain vigilant of the accumulation of risks within the corporate sector.

Medium-term measures:

- **Make the corporate bond market the motor of corporate financing through capital markets development.** Both supply and demand side factors support this assumption. On the supply side, interest from corporates in issuing securities has recently increased with a streamlined issuance process and NBS's open market operations with corporate bonds. On the demand side, fixed income securities such as bonds are an attractive asset class, as they provide investors with fixed periodic interest payments involving less volatility and risk. They can be tailored to the needs of institutional investors and are more intuitive for retail investors. The steady improvements to the government's yield curve also mean that they are now much easier to price. Thus, corporate bond financing could be an attractive alternative source of long-term financing, especially for growth or innovation-focused companies that may not have significant assets to use as collateral. This effort could be coupled with corporate bonds focused on green activities. The authorities can create the enabling conditions – e.g., a green taxonomy, reporting and disclosure requirements, green bond principles and standards, and/or could consider incentives to reduce transaction costs and stimulate green finance.
- **Develop a detailed strategy and approach to climate and environmental risk assessment and management.** An initial step could involve the development of a national green taxonomy, which should be aligned with the EU taxonomy and support market integrity by reducing greenwashing. In addition, it would be desirable to establish an internal governance structure to define the roles and responsibilities of financial sector regulators and build targeted capacity and data infrastructure for assessing and monitoring climate and environmental

5. World Bank, (2022), Serbia: Financial Sector Climate and Environment Risks and Opportunities Assessment, The World Bank: Washington DC.

risks. Building on these efforts and existing qualitative analysis, regulators could perform a more granular climate risk assessment and stress testing for financial institutions. Based on the risk assessment, it would be desirable to develop high-level supervisory guidance and more technical guidelines for supervised financial entities. Monitoring developments of regulatory and supervisory frameworks as well as related actions in the EU would also be important (i.e., the ECB's supervisory guide and environmental, social, and governance [ESG] disclosure requirements by the European Banking Authority [EBA]).

4. World Bank Engagement

<p><i>Ongoing Support</i></p>	<ul style="list-style-type: none"> • The World Bank is supporting the government in the implementation of its Capital Market Development Strategy (CMDs). In November 2021, the authorities adopted the CMDs, along with its 5-year Action Plan, which includes several concrete actions to support the development of capital markets. Serbia is also part of the Joint World Bank and IFC Capital Markets Program (JCAP), which focuses on improving the enabling environment for capital market development and collaboration with the private sector. IFC supports demonstrative transactions to assist the non-government bond market. • Catalyzing Long-Term Finance through Capital Markets (US\$30m). This project supports the implementation do the CMDs and aims to complement the extensive efforts required to offer an enabling environment for non-government bond issuances, including a corporate bond issuer program. The World Bank will also be undertaking an Institutional Investor Diagnostic Study to support the demand side of capital markets.
<p><i>Potential engagements</i></p>	<ul style="list-style-type: none"> • Looking forward, a follow-up Financial Sector Assessment Program (FSAP) may be warranted to better understand emerging risks. The last FSAP for Serbia was conducted in 2010. In the meantime, the country's financial sector has significantly evolved while new challenges – including the mounting inflationary pressures, energy crisis and higher interest rate environment – may also adversely impact financial stability.

3. Energy and Mining

1. Overarching Messages

Serbia's energy sector depends heavily on fossil fuels. Coal accounts for 49 percent of the country's primary energy supply, followed by oil (25 percent) and natural gas (13 percent). Most of the coal consumed is produced locally, with the mining sector being dominated by the state-owned power utility Elektroprivreda Srbije (EPS), the largest utility in the Western Balkans, with 20,152 employees. Serbia's annual coal production (38.9 million metric tons in 2019) makes it the largest producer of coal per capita in the Western Balkans and the wider region, and one of the largest in terms of total production.

The slowness in phasing down coal presents a challenge to EU accession plans. While the government embraced the renewable energy (RE) and energy efficiency (EE) agendas with a package of new sector laws in 2021, it is less clear how the legacy of domestic fossil fuel production is to be managed. Despite high-level international political commitments to decarbonize (including signing the Sofia Declaration in 2020), no official policy document outlines the strategic direction for the sector. The EU-mandated National Energy and Climate Plan (NECP) and Energy Sector Development Strategy (ESDS) are still to be adopted by government, while the Updated Nationally Determined Contribution (NDC) under the Paris Climate Accord has been submitted to the UNFCCC in August 2022.

EPS's financial health sharply deteriorated in 2022 and calls for urgent reforms. A series of accidents in EPS's open-pit coal mines and thermal power plants (TPPs) at the end of 2021, caused partly by a lack of investments in maintenance and capacity expansions, caused a sharp drop in domestic electricity generation and forced EPS to import electricity, gas and coal at record-high prices during the heating season 2021/2022. The Annual report on the implementation of the 3-year business plan published in January 2023 reports losses of EUR 630 m in 2022 after EUR 140 m losses were reported in 2021. Reported losses for 2022 are about EUR 200 m lower than previously projected thanks to the reduction in wholesale electricity prices on the regional markets and lower electricity imports. Thanks to a tariff increase of 6.5 percent in July 2022 and 8.5 percent in January 2023, and the projected gradual phase-out of electricity imports after this winter, EPS's financial position is projected to improve in 2023, but the company might continue reporting losses unless additional tariff adjustments are implemented.

Gas supply diversification, through new contracts and infrastructure, is a priority for the government. Serbia is the largest gas consumer in the Western Balkans, with state-owned Srbijagas dominating the market and importing about 80 percent of domestic consumption. Imports of gas have cost Srbijagas nearly a billion US\$ in the first seven months of 2022. Annual gas consumption hovers around 2.8 billion cubic meters (bcm) per year. A long-term supply contract with Gazprom was re-negotiated for three years in May 2022, for a yearly supply of 2.2 bcm at US\$310-408 for 1,000cm indexed to crude oil prices (the previous price was US\$270 for 1,000cm). After the onset of the Ukraine war, new gas pipeline interconnections are being built and the government is looking at new partners, notably Azerbaijan. The gas Interconnector Serbia-Bulgaria is expected to be completed in Q4 2023.

Serbia has significant potential for mining new minerals that are key to the green energy transition. These include copper and other energy transition metals. Taking advantage of the opportunities of this mineral potential is conditional on modern mine development with transparent environmental and social impact management and best-practice regulation and consultation.

Serbia's reliance on fossil fuels has led to the deterioration of air quality and the environment. Public discontent with the high air pollution levels⁶ and the government's actions is growing. In a 2021 public opinion poll 90 percent of participants believed that pollution levels had a negative impact on their and their families' health, and only 20 percent were satisfied with the government's performance in dealing with the issue. Serbia is facing mounting international pressure to accelerate

6. In 2019-2020, the annual average concentration of PM_{2.5} in Belgrade was 27.4 µg/m³, well above the WHO recommended threshold of 10 µg/m³ (World Bank [2021], Serbia Air Quality Analysis).

the green energy transition. In December 2022, the government adopted the Air Protection Program for 2022-2030, including specific interventions to address emissions from medium combustion plants. Serbia will need to take further measures to comply with the EU's Large Combustion Plants Directive (LCPD), a commitment deriving from the Energy Community. The planned introduction of the Carbon Border Adjustment Mechanism in the EU will increase the pressure on Serbia to introduce some form of domestic carbon pricing.

2. Key Challenges

Investments in clean energy are insufficient. A recent least-cost generation expansion planning study by the World Bank shows that a gradual replacement of existing lignite plants with RE (including hydro, wind, and solar complemented by battery storage) and limited natural gas represents a 'no regret' policy. New lignite capacity for power or heat generation is increasingly uncompetitive over the medium to long-term period due to the declining quality of Serbian coal and the potential imposition of carbon taxes on exports of goods and services into the EU. From 2030, least-cost generation planning leads to rapid decommissioning of lignite-based generation capacity, with a commensurate increase in hydro, wind, solar, and new combined cycle gas turbines (CCGT).⁷ Achieving the transformation of the power system will require substantial investments in clean energy with private sector support.

Decision-making on mining and social impact of mine closure has been slow. With the fatal accident in April 2022 at the underground Soko coal mine, continued coal subsidies, and regional decarbonization agenda imperatives, the closure of the Public Enterprise (PE) Resavica coal mines is a development priority that would send a clear signal regarding the government commitment to phase down coal. The economic shock and social impacts on mono-industry communities of closing coal mines need to be managed and mitigated through a Just Transition for All (JT4A) approach. Being prepared is key and the World Bank is ready to support Serbia through a Multiphase Programmatic Approach (MPA) and associated TA.

The governance of EPS and Srbijagas can be improved. The global energy crisis has exposed long-standing operational issues at the state-owned energy companies EPS and Srbijagas. Fiscal support to EPS and Srbijagas reached about EUR 1.5 bn over the first three quarters of 2022.⁸ EPS's electricity generation has been declining for years and its operations are burdened by overstaffing, questionable public procurement processes, and delayed investment in maintenance and capacity expansion in modern generation capacity, including hydro. Besides increasing tariffs, restoring EPS's long-term financial viability will also require ensuring sound governance, management and business practices to timely implement ongoing and planned investments. Srbijagas also faces pressure and management issues which need to be addressed with increasing urgency given the financial losses it is incurring due to the persisting gap between the gas import prices and regulated tariffs.

3. Policy Responses for Consideration

Short-term measures:

- **Strengthen the policy and regulatory framework in support of RE**, by implementing planned RE auctions, fostering an intraday market, and strengthening prosumers regulations.
- **Approve the NECP and ESDS**, with the endorsement of a low-carbon scenario.
- **Comply with the EU Clean Energy Package and LCPD**, as required by the membership to the Energy Community and for the alignment with the EU's Acquis Communautaire.

7. NEPC simulations show a strong increase in the share of RE in electricity generation in all scenarios beyond the business-as-usual one, from about 30 percent today to more than 80 percent by 2050, although with a slower coal phase-out (around 2050 instead of 2040 as projected in the least-cost generation study).

8. This includes direct subsidies, issued guarantees and capital increases aimed at financing the import of electricity, coal and gas as well as investment in EPS to replace dysfunctional equipment.

Medium-term measures:

- **Adopt carbon pricing** as a revenue generator for the JT4A and energy transition investment needs.
- **Prioritize investments and plan for electricity supply adequacy** in view of gradual thermal capacity retirement and consider analysis for land repurposing and revalorization of idle mining lands.
- **Modernize the energy sector**, with a specific focus on ensuring the utilities’ financial sustainability and improving their management and commercial orientation.
- **Explore the potential of clean energy minerals** under a modernized governance and legal framework for mining.

4. World Bank Engagement

<p><i>Ongoing Support</i></p>	<ul style="list-style-type: none"> • Scaling Up Residential Clean Energy (SURCE) Project (US\$50m). This project offers households partial grants (channeled through the municipalities) for investments in energy efficiency and distributed clean energy. • Enhancing Infrastructure Efficiency and Sustainability PforR (US\$118.6m). The PforR, co-managed with the transport team, supports EE renovations of public buildings and has US\$40m in energy-related disbursement linked indicators. • Assessment of the financial situation of EPS. This work provides advisory input into the tariff discussion in the context of the Green Transition DPO series. • Support to the prosumer agenda. This work offers policy and analytical support to the government in the context of the adoption of a decree to regulate prosumers in Serbia. • Green Transition Development Policy Operation Series (FY23 and FY24, co-financed with KfW and AFD, US\$430m for DPO1). This DPO series supports legal and policy reforms to green the budget, strengthen environmental sustainability, and modernize the energy sector.
<p><i>Pipeline</i></p>	<ul style="list-style-type: none"> • Managing a Mining Sector Transition Project (FY24, US\$70m for the first phase of a US\$200m MPA). This project is on stand-by. Activities include supporting mining governance for energy transition metals and the pilot closure of several PE Resavica coal mines using the JT4All approach.
<p><i>Potential engagements</i></p>	<ul style="list-style-type: none"> • Analytical and advisory support as well as financing investment could be provided in areas including: (i) hydropower rehabilitation and expansion; (ii) deployment of battery storage solutions; (iii) increased regional energy integration; and (iv) EE, sustainable heating, and decentralized RE (in addition to the ongoing SURCE Project).

4. The Environment and Green Transition

1. Overarching Messages

Serbia needs to significantly improve the quality of its environment. According to the available evidence, Serbia has the highest death rates from pollution among European countries and is ranked 9th globally.⁹ Observed and anticipated climate change impacts, including increasing temperatures and more frequent and intense natural disasters, affect disproportionately vulnerable communities and add to the cost of environmental degradation. In 2019, the Fiscal Council of Serbia estimated that addressing climate change and environmental degradation would require an investment of around EUR 500 m per year (1.3 percent of GDP) over the period 2020-2030.

As a candidate country for EU membership, Serbia would do well to align its domestic policies with the EU energy, environment, and climate legislation. The potential introduction of the planned EU Carbon Border Adjustment Mechanism (CBAM) could penalize Serbian exports that are produced with polluting processes and entail a substantial fiscal burden. In addition to aligning its legislation with the EU requirements and mechanisms, as Serbia looks to the future, it is essential for the government to reduce the country's dependence on the use of heavily polluting lignite, improve energy efficiency, and promote green and resilient development across sectors.

The transition towards greener and more resilient growth needs to be a just one, notably for those communities that depend on polluting industries for their livelihoods. Serbia is a signatory to the *Sofia Declaration on the Green Agenda for the Western Balkans*, which aims to help countries and regions to move away from coal towards a carbon-neutral economy, while ensuring that this transition is just. As such, a robust engagement with civil society, local government planning and responses to assist those impacted by job loss, business closure, local revenue reduction, and social change at the household and community levels will be needed to successfully manage the green transition.

2. Key Challenges

The Serbian economy is highly carbon and energy intensive, leading to the highest GHG emissions among Western Balkan countries. Serbia's energy mix continues to be dominated by fossil fuels (87 percent in 2018). Domestic lignite accounts for around 60 percent of electricity generation in 2022, making Serbia one of the most GHG emissions intensive economies in the ECA region, topped in the Western Balkans region only by Bosnia and Herzegovina. This also translates into high overall GHG emissions, which in absolute terms, are the highest in the Western Balkans region. If not addressed, high GHG emissions will expose Serbia to the adverse implication of the proposed EU CBAM.

Air pollution is the major environmental health concern in Serbia, causing thousands of premature deaths and substantial costs to the economy. The annual average PM_{2.5}¹⁰ concentration in Serbia is above the EU limit value as well as the WHO guidelines. In 2019, PM_{2.5} pollution was responsible for an estimated 12,578 premature deaths in Serbia, or some 144 deaths per 100,000 population, and the annual costs of health damages amounted to 18.9 percent of GDP, the highest share worldwide.¹¹ Air pollution is perceived by citizens to be the most negative aspect that contributes to people's health (71 percent) and is amongst the top issues where government performance is considered inadequate.¹²

Serbia's distorted price signals and policies on energy and other environmentally harmful activities drive its high environmental footprint. Prices that do not factor in environmental costs to society encourage businesses and households to waste energy, water, and other resources; and decrease their own financial costs by increasing environmental costs, which are borne by society as a whole. For environmental incentives to be stronger, taxes and subsidies need to target the

9. Global Alliance on Health and Pollution (GAHP) and The Lancet Commission on Pollution and Health (2019), *Pollution and Health Metrics: Global, Regional, and Country Analysis*, GAHP, Geneva.

10. Fine particles, or particulate matter of 2.5 micrometers or smaller (PM_{2.5}), are considered the most harmful form of air pollution with significant health, social and economic effects.

11. World Bank (2022), *The Global Health Cost of PM_{2.5} Air Pollution*, The World Bank: Washington DC.

12. World Bank (2022), *Public Opinion Poll on Environmental Issues in Serbia*, IPSOS: New York.

products or activities that are most harmful/beneficial to the environment. However, excise duties on fossil fuels are established without reference to their relative carbon content, and polluting fuels, such as oil and coal, are not covered by excises. As a result, these fuels are used without consideration of their environmental impacts.

Weak institutional capacity makes it difficult to implement policies and measures to address deteriorating environmental quality. The key challenges that remain cut across: (i) regulatory aspects, as several key public policies and secondary legislation have not been enacted (e.g., the Low Carbon Development Strategy, the Rulebook on Monitoring and Reporting of GHG emissions from stationary installations); (ii) institutional aspects – in particular, low capacity that hampers poor coordination efforts at both central and local levels; and (iii) investment aspects – the current regulatory framework does not favor investments to address the key challenges such as air pollution and GHG emissions.

The planned but yet to be enacted closure of loss-making coal mines may result in loss of livelihoods and social unrest. Critical challenges include: (i) putting in place support programs for workers directly employed in closing/downsizing industries (e.g., coal) and related value chains, who could lose their job; (ii) thinking through investment and incentives for new business activity and gap-filling of local revenues as economic activity in communities dependent on polluting industries will contract; and (iii) Enhancing support for services (e.g., psychosocial support, child and elderly care, women’s empowerment, youth engagement) as social risks will increase (e.g., gender-based violence, alcohol abuse, etc.).

3. Policy Responses for Consideration

Short-term measures:

- **Tackle air pollution.** Implement the newly adopted *National Air Protection Program*, starting with tackling domestic heating, industrial emissions, and transport emissions.
- **Factor-in the cost of environmental externalities.** Amend the *Law on Fees for the Use of Public Goods* to: (i) expand the coverage of the fees for emissions of SO₂, NO₂ and PM, which includes exemptions that distort incentives and competition; and (ii) abolish the fee for the protection and improvement of the environment (the “eco-tax”), as the payment due is not proportional to emissions.
- **Put a price on Carbon.** Design carbon pricing instruments (e.g., carbon tax) aligned with the EU, starting with carbon intensive sectors, paying attention to potential distributional and spatial implications and other development and environmental co-benefits. Carbon pricing would help reduce GHG emissions¹³, enable Serbia to prepare for the EU CBAM and generate domestic revenues.
- **Strengthen institutional frameworks.** Strengthen institutions to support the implementation of green transition. Adopt secondary legislation to support the implementation of the Law on Climate Change, e.g., the rulebook on the content of GHG Inventory and the report on GHG Inventory.
- **Conduct a regional transition assessment.** Conduct a review of the local economic importance of coal mine production and energy generation, social and economic costs, and benefits of green transition in the most affected communities. Develop a location-specific, prioritized action plan for mitigating social and economic impacts and generating new areas of economic activity.

13. Carbon pricing (simulated by the E3 CGE model in 2022 for the World Bank Report – *Supporting Serbia’s Transition to Greener and more Resilient Growth*) could reduce annual GHG emissions in Serbia by 40 percent in 2035 compared to a business-as-usual scenario, which is up to 5 times more emissions reductions than CBAM alone by 2035.

Medium-term measures:

- **Tackle air pollution.** Continue to implement measures in the *National Air Protection Program* to address the major sources of air pollution and to monitor and report on the air quality improvement
- **Factor-in the cost of environmental externalities.** Amend the *Law on Taxes on the Use, Holding and Carrying of Goods* to ensure that motor vehicles are taxed to favor those with better environmental performance. Revise excise duties to align with the proposed revision of the *EU Energy Taxation Directive*, to further promote a switch to low-carbon energy.
- **Put a price on carbon.** Introduce carbon pricing instrument(s) in carbon intensive sectors likely to be impacted by the EU CBAM such as ferrous metal, that would help generate revenue as well as support structural transformation towards a more knowledge and skills oriented green and just economy.
- **Strengthen institutional frameworks.** Ensure adequate staffing in the MoEP and other agencies in line with the *Action Plan for Administrative Capacity Development* submitted by Serbia to the EU as part of Chapter 27 negotiations. Furthermore, support the mobilization of resources for investment aligned with the *Green Agenda for the Western Balkans* that Serbia is a signatory to.
- **Think about regional transition planning.** Initiate local dialogue with communities which are likely to be most affected by the green transition on the priority areas identified in the transition assessment. Support local government scenario planning and implementation of actions to support the transition.

4. World Bank Engagement

<i>Ongoing Support</i>	<ul style="list-style-type: none"> • Green Transition Analytics (FY22). Recently completed analytics on Serbia's green transition focused on: (i) the role of price signals including environmental fiscal reforms and CBAM; (ii) key sectoral reforms to address energy efficiency, air pollution, waste management, the circular economy, and water and wastewater treatment; and (iii) institutional strengthening. A report on Supporting Serbia's Transition to Greener and more Resilient Growth: Policy and Institutional Reforms has been published in 2022. • Green Transition Development Policy Operation Series (FY23 and FY24, co-financed with KfW and AFD, US\$430m per operation). This DPO series supports reforms to green the budget, modernize the energy sector and strengthen the environment – in particular the adoption of: (i) secondary legislation on climate change; (ii) the national waste management plan and relevant bylaws; and (iii) the national air protection program.
<i>Potential engagements</i>	<ul style="list-style-type: none"> • Inclusive, Responsive Coal Transition in Serbia analytics (FY23). Linked to the 'Managing a Mining Sector Transition for Future Development' Project, this work will focus on the impacts of the potential closure of a cluster of mines at Resavica and mitigating measures to support local communities and the local economy. It will help to empower local governments in Serbia to take the lead in coal mine transition and ensure that the design and implementation of transition plans are guided by robust citizen engagement and responsive to the needs of vulnerable groups (See Energy Policy Brief).

5. Poverty and Inclusion

1. Overarching Messages

Promoting economic and social inclusion is necessary to raise living standards for all Serbian citizens and converge to EU levels. Existing disparities across gender, location, ethnicity, and income status in accessing basic services and jobs represent unequal opportunities that undermine not only the social contract but also Serbia's human capital formation. Given the declining workforce and aging population, promoting economic inclusion is critical to increasing the pool of potential skilled workers and entrepreneurs needed to drive economic growth and innovation for Serbia's future. In addition, pursuing a transition toward growth that is greener and more resilient will be more socially sustainable when accompanied by efforts to mitigate adverse poverty and distributional impacts and enable the inclusion of the poor.

Despite good progress, poverty levels in Serbia remain higher than EU comparators, and further substantial poverty reduction is increasingly difficult. Poverty (defined as income under \$6.85/day in 2017 PPP) fell from 28.3 percent in 2013 to 12.1 percent in 2019 and is estimated to have further declined slightly to 10.5 percent in 2021. The fiscal stimulus package deployed during the COVID-19 pandemic, including wage subsidies and cash transfers to citizens, helped to avert a spike in poverty. Yet the share of Serbia's poor still exceeds that of countries in Central and Eastern Europe and the Baltics (where the share of absolute poverty is in the range of 0.1-9 percent). Moreover, the share of the population considered at risk of poverty and material deprivation (i.e., inability to afford basic housing, food, and durable goods) is higher in Serbia than in comparator EU countries. With slowing growth and the economic impacts of the war in Ukraine, poverty reduction is expected to stagnate in 2022.

2. Key Challenges

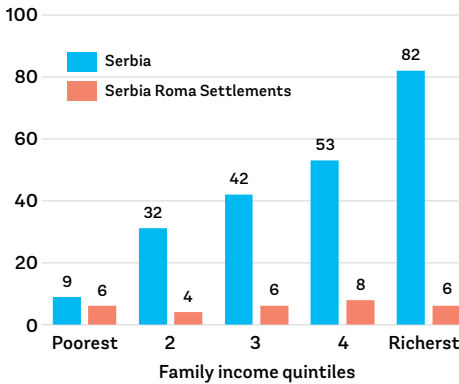
Serbia's poor and disadvantaged groups face inequality and unequal opportunities. Income inequality is high by EU standards (the Gini coefficient was 33.3 in 2019). It partly reflects unequal access to opportunities by specific groups like Serbia's poor, women and girls, Roma, and youth. Children from Roma communities continue to be underrepresented at all education levels from early childhood, have lower educational attainment, and have fewer opportunities to earn a good income later in life (Figure 1). The employment rate among the Roma population is only half that of their non-Roma neighbors. Persisting gender gaps are also costly for the economy. The employment rate among women aged 15-64 is 14 percentage points less than among men (55 percent vs. 69 percent). Youth unemployment and the share of youth not in education or training (NEET) are high.

Low labor market attachment hinders sustained poverty reduction. Job opportunities are the most important and sustained way to reduce poverty in the long run, yet many people in Serbia are not working or searching for a job, particularly among the poor. The poor in Serbia are more likely to have less education, live in rural areas, be unemployed or self-employed, or work in low-skilled jobs. Labor taxes in Serbia are high at lower wage levels, while social assistance is deducted for each dinar earned in employment, limiting incentives for formal jobs.

Spatial inequalities and lagging regions. The share of households at risk of poverty ranges from 4.8 percent in Novi Beograd in Belgrade to 66.1 percent in Tutin in the region of Šumadija and Western Serbia. Lagging low-income regions have high levels of poverty, lower human development outcomes, and poor quality of infrastructure and municipal service delivery (particularly water and wastewater treatment).

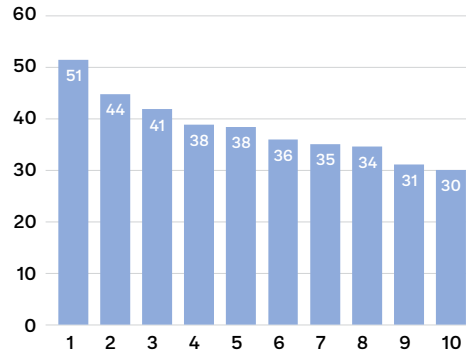
Rising prices and distributional impacts of the energy transition. Current inflationary pressures are limiting purchasing power and disproportionately affecting low-income families in Serbia. Inflation in July 2022 was at 12.8 percent (compared to July 2021), driven by rising food (20.4 percent) and energy (9.1 percent) prices. As the poor spend a higher share of their income on food (Figure 2) they are disproportionately affected by the high food prices.

Figure 1. Share of children aged 36-59 Months Attending Early Childhood Education



Source Serbia MICS 2014.

Figure 2. Shares of Food spending in Total Expenditures by Income Deciles

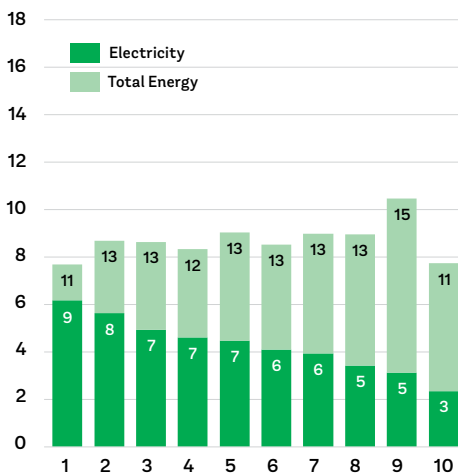


Source World Bank estimates based on the 2019 Household Budget Survey (HBS)

Higher energy prices, when passed onto household tariffs, can exacerbate energy poverty and hurt the poor and vulnerable unless they are protected through compensatory schemes.

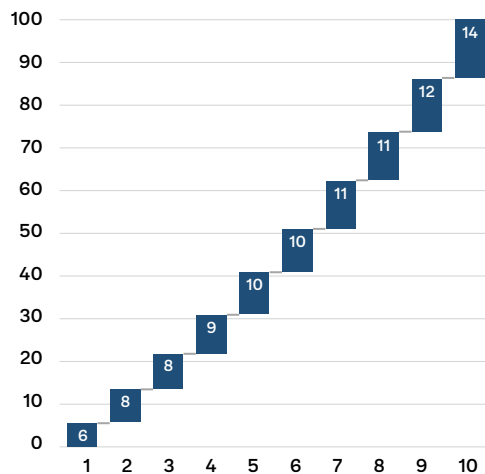
Although the poor spend a higher share of their income on electricity (Figure 3), a much smaller share of total electricity consumption goes to the lowest decile (Figure 4). As a result, better-off parts of the population who have higher electricity spending receive a much larger part of the implicit subsidy due to the price caps. While Serbia has a relatively well-targeted last resort social assistance program (Financial Social Assistance) and a bill discount program for energy-vulnerable customers, the coverage of these programs is relatively small but has been recently increasing in 2023 (with further plans to continue in 2024).

Figure 3. Share of Energy Spending in Total Expenditures by Income Deciles



Source World Bank estimates based on the 2019 HBS

Figure 4. Share of Each Income Decile in Total Electricity Consumption



Source World Bank estimates based on the 2019 HBS

3. Policy Responses for Consideration

Short-term measures:

- **Protect the vulnerable from food and energy price increases.** Prioritize targeted social assistance—such as income support or cash transfers targeted to poor and vulnerable groups—over across-the-board subsidies or price caps, which are more cost-effective and avoid distortionary effects. Assess and mitigate adverse poverty and distributional impacts of the green transition (e.g., just transition from coal, targeted cash transfers, equitable reskilling, upskilling for the green economy).

Medium-term measures:

- **Enhance equal opportunities for human development and strengthen social protection.** Promote early childhood development and access to quality education, healthcare, and sanitation for all. Increase the low coverage of targeted social assistance and build adaptive social protection for better resilience to shocks. Reduce barriers and disincentives to work for vulnerable and disadvantaged groups (e.g., reduce labor tax and contribution burden, notably for low-wage, low-skill workers, and those with dependents). Consider equity besides efficiency in the tax and transfer system (e.g., more progressivity in labor tax, more equitable and efficient social spending).¹⁴
- **Promote gender equality and Roma inclusion.** Continue to promote gender equality through improving access to child and elder care and promoting workplace arrangements and flexibility to facilitate care duties. Continue efforts to reduce disincentives and barriers for women’s work in labor taxation and regulation, and support social norms on gender equality to reduce barriers faced by women. Continue efforts to address the multiple barriers that the Roma population faces in education, health, the labor market, and concerning social norms and discrimination.
- **Address the challenges of lagging regions.** Enhance agricultural productivity and competitiveness and promote backward and forward linkages with non-farm activities, which is key for poverty reduction in rural areas.¹⁵ Strengthen equitable service delivery, basic infrastructure in lagging regions, and local transport and digital connectivity can boost access to markets and jobs.

4. World Bank Engagement

<p><i>Ongoing Support</i></p>	<ul style="list-style-type: none"> • The World Bank is supporting research on the poverty and distributional angle of the green transition under the Green Transition DPO Series (e.g., electricity tariff adjustments and the protection of vulnerable households), providing analytical and advisory support on the poverty and equity impacts and mitigation measures. A Gender Assessment is under preparation.
<p><i>Potential engagements</i></p>	<ul style="list-style-type: none"> • The World Bank could provide analytical and advisory support to Serbia on the following topics: (i) further monitoring and addressing spatial disparities, by analyzing the subnational level of wellbeing (poverty and household welfare mapping with the 2022 Census) and informing the targeting of investment; (ii) strengthening gender equity in Serbia under a Gender Assessment currently under preparation; and (iii) analyzing the poverty and distributional impacts of carbon pricing to inform policy options.

14. See Policy Notes 6, 7, and 8 on Health, Education, and Social Protection for further details.

15. See Policy Note 12 on Agriculture.

6. Health Systems

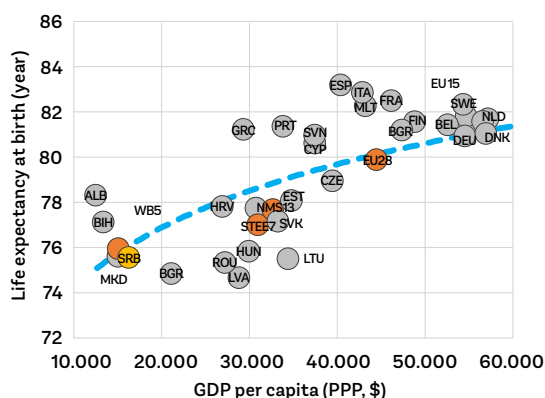
1. Overarching Messages

Despite progress in the last two decades, the health system in Serbia faces challenges arising from the large burden of noncommunicable diseases and the recent shock caused by the COVID-19 pandemic. The government has shown strong leadership in steering the health system. Over the last two decades, it has adopted a number of strategy documents to guide the future direction of the health sector. Significant progress has been achieved in the areas of infrastructure investment, strengthening primary health care, and the development of eHealth. The government's response to COVID-19 was fast, determined, and strategic, making Serbia one of the first countries in Europe that successfully secured vaccines for its population. However, more strategic measures are warranted to improve the system's performance in order to achieve value for money and deliver better health outcomes for the whole population.

2. Key Challenges

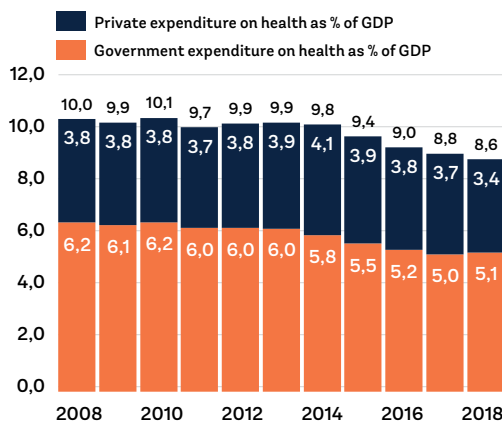
Despite improvements over the last decades, Serbia does not compare well with peers and aspirational peers in health outcomes. Life expectancy at birth is lower than in several Western Balkan countries (Figure 1). At 12 per 100,000 live births, the maternal mortality ratio in 2017 was more than double the average among countries in the European Union (EU). Subjectively, 16 percent of the population perceived their health as 'bad' or 'very bad' in 2018, higher than in nearly all comparator countries. Although most of the population thinks that public health services are accessible, dissatisfaction remains regarding waiting time, facility conditions, patient communication and privacy, and the practice of 'asking for favors'.

Figure 1. Level of economic development and life expectancy (2018)



Source World Development Indicators

Figure 2. Health financing over time



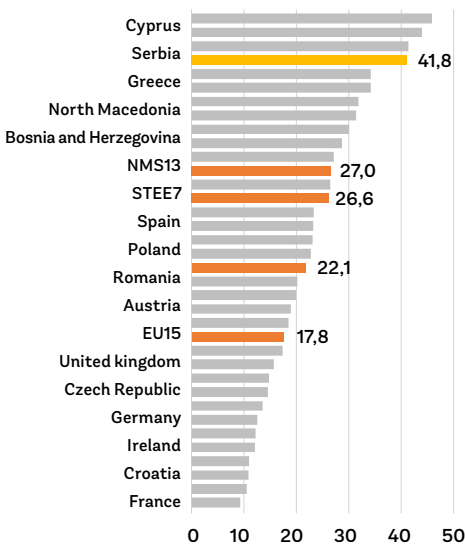
Source National Health Account

Serbia's health financing is based on the principle of universal health coverage. This is done through social health insurance managed by a single purchaser, a favorable setup for financial protection and efficiency gains. Total health spending between 2008-2018 accounted for an appreciable 8.6-10 percent of GDP. However, the long-term trend in government health spending shows a remarkable decline, from 6.2 percent of GDP in 2008 to 5.1 percent in 2018 (Figure 2).

Despite the presence of social health insurance, a comprehensive health network, and a generous benefits package, Serbia has not achieved universal coverage in its full meaning. Universal coverage implies that services are not only physically accessible, but also of high quality and effectiveness, not imposing a financial burden on the population or leaving certain groups behind, while being delivered in an efficient and sustainable manner. In this regard, the system's performance shows weaknesses in financial protection, effectiveness, efficiency, and equity.

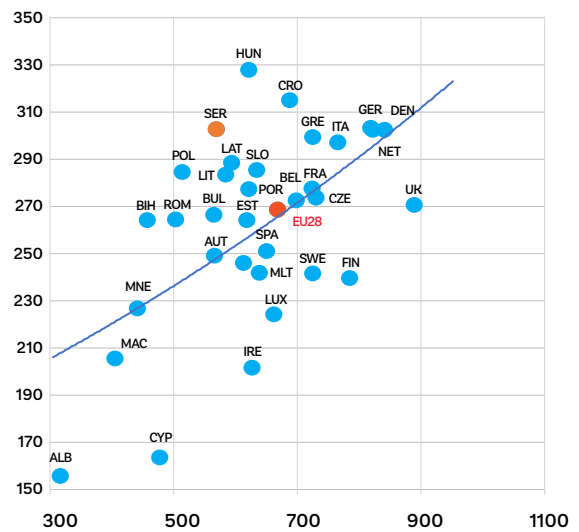
Specifically, Serbian households shoulder a remarkable financial burden of health care, while the effectiveness of care can improve. Citizens bear 42 percent of total health expenditure (Figure 3), of which 62 percent was spent on pharmaceutical products in 2018. Nearly 5 percent of households experienced catastrophic health spending in 2019 (defined as health spending higher than 25 percent of total non-food consumption expenditure), higher than any other country in the Western Balkan except Albania. Serbia's cancer death rate in 2017 was the highest among comparator countries with similar incidence levels, pointing to weaknesses in the effectiveness of care (Figure 4). In general, 407 per 100,000 deaths from different causes in 2017 could have been averted with better prevention and treatment.

Figure 3. Out-of-pocket health expenditures as percent of total health expenditure (2018)



Source World Development Indicator

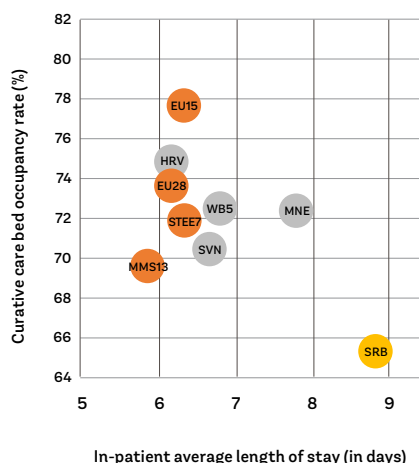
Figure 4. Cancer incidence and death rate per 100,000 population (2017)



Source The Global Cancer Observatory

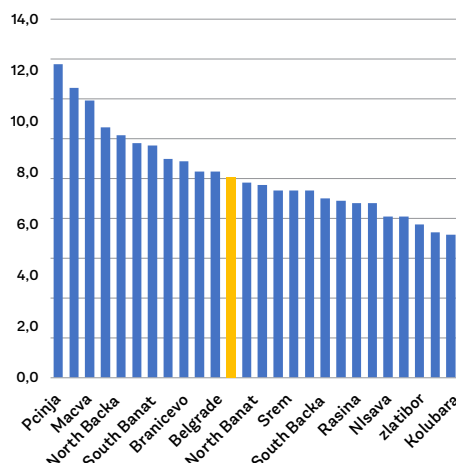
The high length of stay and low bed occupancy indicate inefficiency (Figure 5), while equity concerns persist (Figure 6). The adoption and provision of day surgeries, which could deliver services at lower cost while offering quality and convenience for the patients, only recently picked up. This is further exacerbated by the fact that Serbia still relies heavily on provider payment systems that do not incentivize efficiency and effectiveness in patient management. On equity, although there is no clear evidence of rich-poor gaps in the utilization of basic services, wide differences exist in health outcomes across districts (Figure 6) and between Roma and the general population.

Figure 5. Curative care length of stay and bed occupancy rate (2018)



Source Eurostat

Figure 6. Low birth weight across districts, percent (2018)



Source Institute of Public Health

3. Policy Responses for Consideration

Short-term measures:

- **Develop a comprehensive strategy to tackle noncommunicable diseases that includes a full spectrum of health promotion, prevention, early detection, and case management.** The improvement of the health system’s effectiveness in addressing NCDs is the objective of the new health project that is being prepared (US\$75m).

Medium-term measures:

- **Reform the service delivery network** to rely less on inpatient care and more on primary and new models of care.
- **Solidify recently initiated provider payment reforms in primary health care and hospitals** to improve efficiency and quality.
- **Implement a comprehensive health quality improvement plan** that includes, among others, implementation of clinical guidelines and care pathways, development of quality measurement methods, and enforcement of quality data collection, monitoring, and reporting.
- **Strengthen interventions targeting the population and providers** aimed at rational drug use and prescription control in order to reduce pharmaceutical spending.
- **Fill remaining sector gaps**, including oversight of the private health sector, quality of care, use of data for decision making, and targeted strategies to support disadvantaged populations.

4. World Bank Engagement

Ongoing Support	<ul style="list-style-type: none"> • COVID-19 Emergency Response Project (US\$100m). The focus of this project is to respond to the threat posed by COVID-19 and to strengthen the national health system for public health preparedness in Serbia.
Pipeline	<ul style="list-style-type: none"> • A third health system project (Serbia NCDs Prevention and Control Project, US\$75m, under preparation) focuses on NCDs prevention and control.
Potential engagements	<ul style="list-style-type: none"> • In addition to supporting the unfinished agenda in health financing reforms and implementation of the health care network optimization plan, new areas of engagement could include targeted interventions to address primary health care effectiveness, hospital sector efficiency, stewardship over the private sector, and use of data for decision making.

7. Education

1. Overarching Messages

Investing in education and boosting human capital will steer Serbia towards a more sustainable and inclusive growth path. Serbia's population is declining due to low birth rates and outmigration. Public funding for education has gradually declined from a high of 4.5 percent of GDP in 2009 to 3.9% in 2019, the latest year with available comparable data. This is relatively low vis-à-vis comparator countries and below the EU average of 4.6 percent of GDP. Despite a swift education policy response to COVID-19, the pandemic has threatened to further weaken education outcomes, aggravating already unequal learning opportunities especially for disadvantaged students who face the greatest risk of learning losses. In this context, Serbia cannot afford to leave anyone behind. Going forward, for Serbia to converge with the EU on human capital outcomes¹⁶ and economic growth, it would be prudent to pursue initiatives that foster higher quality education, promote inclusion of poor and vulnerable students at all levels, continue improving digital literacy, and protect education spending while promoting efficiency and equity.

2. Key Challenges

Learning outcomes have been stagnant since 2012 and lag almost two years behind those of OECD peers. Serbia's overall performance on international learning assessments for primary education is strong, but performance in later grades, as well as equity, remain key concerns for the system. Results from the 2019 Trends in International Mathematics and Science Study (TIMSS) show that 4th graders' performance is above the international average. However, international assessments¹⁷ in later primary grades, at the transition point between primary and secondary education, indicate a deterioration in learning outcomes. PISA consistently shows that student achievement in Serbia has been below the international average by about half a standard deviation, equivalent to 1.5 years of schooling. The most recent findings from PISA 2018 show that nearly four in ten 15-year-old students are performing below the basic level of reading, math, and science literacy, and scores have not improved between 2012 and 2018.

The education system is characterized by a high level of inequity, visible in unequal access to early childhood education, unequal learning outcomes, and unequal transition to tertiary education. Expanding access to and quality of early childhood education and care (ECEC) is one of the key objectives of the Government of Serbia. Although access to pre-primary education continues to increase (from 50 percent in 2014 to 66.8 percent by 2022), there are still persistent disparities in access by location and socioeconomic status (SES), particularly for Roma children. This is due to an unevenly distributed network of kindergartens, lack of seats, parental knowledge and attitudes, costs associated with attendance, and quality of provision. Based on projections, despite population decline, Serbia will need to increase the supply of regulated ECEC by 71 percent in order to meet full enrolment for children aged 3-6 years by 2030. Given that skills formation begins early in life and lays the foundation for all future learning, providing access to quality education right from the start is essential to develop the skilled labor force it needs for better employment outcomes and economic productivity.

These inequities in early learning opportunities persist into compulsory education and beyond. PISA 2018 data show that students in the bottom 20 percent of SES perform the equivalent of nearly 2 years of schooling behind students in the top 20 percent; the gap is also large between urban and rural students. Although data are not available for ethnic minorities, their concentration in low-income rural municipalities shows that such students also face sizeable gaps in learning outcomes. Secondary education attendance is also lower for disadvantaged groups: 57percent of secondary school-aged children in Roma settlements are out of school.

16. Serbia's Human Capital Index score is 0.68, meaning that a child born in Serbia today will be only 68 percent as productive when she grows up as she could be if she enjoyed complete education and full health. This is below the average for EU member states (73 percent), and well below top EU performers like Slovenia and Estonia (78 percent).
17. Serbia has participated in multiple cycles of PISA (2003, 2006, 2009, 2012, and 2018) and TIMSS (2003, 2007, 2019).

The digital divide and lower quality of remote teaching during the pandemic likely exacerbated existing learning inequities. For example, while coverage of remote teaching and learning was high overall, coverage of vulnerable students was less favorable: 17 percent of Roma students in primary schools were not able to access distance learning, and only about 54 percent of students with disabilities were able to participate in online platforms. The main obstacles were lack of internet connectivity in their homes, lack of digital devices, and weak digital literacy among teachers and parents.

Tertiary education attainment lags compared to the EU, and the relevance and orientation of the labor market are inadequate for both secondary and higher education. Tertiary education enrollment in Serbia has increased steadily from around 40 percent in the early 2000s to nearly 70 percent at present (similar to the EU average). Still, Serbia lags behind the EU in terms of tertiary education attainment: 34 percent of the adult population aged 30-34 have successfully completed tertiary education, compared to 41 percent in the EU.¹⁸ The increasing tertiary education enrollment rate is further contributing to the stock of skills in Serbia, and the trend is expected to continue given that 77 percent of 15-year-old students in secondary education expect to complete tertiary education (compared with 69 percent in the OECD on average). A positive sign is that even among disadvantaged students, 62 percent expect to complete tertiary education. However, the labor market relevance of secondary education remains a challenge, even though the Ministry of Education has made progress in optimizing and reducing the number of profiles for technical and vocational education and training (TVET) that are not in line with the needs of the economy. Labor market relevance and alignment of tertiary education with the changing needs of the workforce are also among the challenges. Only 69 percent of recent tertiary education graduates between the ages of 20-34 are employed, the figure being 17 percentage points lower than the EU average.¹⁹

3. Policy Responses for Consideration

Short-term measures:

- **Enhance skills development and lifelong learning (LLL) opportunities to improve employability and entrepreneurship.** Up to half of employers list a lack of required skills as a challenge when recruiting staff. In the short-term, Serbia could continue its focus on skilling workers as a key component for productivity and growth – concentrating on several areas:
 - Support the Government’s agenda for dual secondary education and continued consolidation of secondary TVET profiles to improve quality and labor market relevance.
 - Improve and develop new skills training programs at post-secondary TVET levels in fields with the highest potential for economic growth and diversification, such as agriculture, tourism, and fields relevant to Green Transition, like environmental management, energy, and transport.
 - Provide academic support programs to entrepreneurs seeking to grow innovative small businesses in the above-mentioned sectors.
 - Enhance responsiveness of the LLL system to provide just-in-time skills training for adult learners. This requires a more prominent role for employers, improvements in information flows, processes of accreditation of training providers, and recognition of prior learning.

Medium-term measures:

- **Turn the learning crisis aggravated by COVID-19 into an opportunity for accelerating foundational learning in basic education.** The country can use the focus and innovations of the recovery period to build back better, ensure remediation to recover learning losses, and prevent student dropouts. Serbia would also do well to protect overall education spending while reinvesting savings achieved through efficiency gains in building the system’s resilience.

18. The EU 2030 goal is to have 45 percent of the population aged 25-34 with tertiary educational attainment.

19. Eurostat 2019.

Such a response could have several core components in line with the RAPID Framework for learning recovery:

- Reach every child by continuing to prioritize equity of access to preschool education, focusing on closing gaps in access and quality between disadvantaged and less disadvantaged communities. This could include possible options for diversification and private provision.
- Introduce initiatives to improve the quality of learning conditions in primary schools, including modern teaching/learning approaches (in line with ongoing reforms in ECEC), improving schools’ infrastructure and learning environments, transitioning from multi-shift to single-shift schools, and increasing instructional hours during the academic year.
- Support underperforming schools through, *inter alia*, a school improvement grant mechanism that could help to equalize resources between schools and promote greater inclusion and resources at the school level for quality and equity improvement.
- **Provide strategic support for higher education, namely on labor market relevance, quality assurance, and system-level funding.** The higher education system in Serbia has great potential to contribute more to human capital development, innovation, and social mobility. A response to higher education could involve several key areas:
 - Improve labor market relevance and internationalization of higher education through the expansion of dual model programs, international study programs, internationally accredited study programs, entrepreneurship modules, and mobility programs for teaching staff.
 - Enhance key steering mechanisms—namely quality assurance frameworks and funding mechanisms which have not kept pace with other developments in the sector. Strengthening the system in these areas through targeted reforms and consultative dialogue with HEIs could catalyze stronger higher education policy and orient the system more towards the outcomes.
 - Promote equity of access through expanding student support programs at the HEI level, particularly for disadvantaged students, and adjusting the student standard system to develop a merit-based and needs-based approach to student support.

4. World Bank Engagement

<i>Ongoing Support</i>	<ul style="list-style-type: none"> • Inclusive Early Childhood Education and Care (ECEC, US\$50m), which aims to improve access to quality ECEC services for children from disadvantaged backgrounds.
<i>Pipeline</i>	<ul style="list-style-type: none"> • Primary Education Project, which aims to support modern pedagogies and improve learning conditions in primary schools; and help to assess single-shift schooling programs.
<i>Potential engagements</i>	<ul style="list-style-type: none"> • Read@Home, a program to deliver reading and learning materials to vulnerable families to support children’s learning. • Pro-equity incentives to improve quality and enrollment: TA on different scholarship/ conditional cash transfer and grant programs for supporting low performing schools. • Higher education steering mechanisms: funding, QA-TA on higher education financing reform, funding formulas, strategic financing options; internal and external QA processes and incentives for HEIs to integrate/adapt.

8. Social Protection and Employment

1. Overarching Messages

A stronger social protection and employment support system is needed to face the challenges posed by aging, low productivity, and unequal opportunities in Serbia. Social assistance programs remain out of reach for most of the poorest households. The provision of social services is still limited and varies in availability and quality across the country. A rapidly aging population, together with rising informality, affects the coverage of the pension system and makes the trade-off between the adequacy of pensions and financial sustainability more difficult. Labor Market Programs (LMPs) have limited outreach and impact, especially considering employment challenges for vulnerable groups. Going forward, further prioritizing the poor in social assistance can be a win-win reform in terms of poverty reduction and public spending efficiency. At the same time, the government could consider strengthening the quality and availability of social services, reforming the pension system to make it more financially sustainable and improving its coverage, expanding outreach of labor market programs and services to jobseekers, and investing in human and technological capacity of the National Employment Service (NES).

2. Key Challenges

Spending on social assistance is inefficient and its coverage of the poor is low. More than half of the population in the poorest income quintile still does not receive any benefits. In 2020, spending on categorical programs was 77 percent of all social assistance spending, which exceeds by a factor of 3 spending on poverty-targeted benefits. The expansion of pro-natality benefits based on the 2018 law on financial support to families with children risks crowding out spending on poverty targeted benefits. The two poverty targeted programs are very well targeted to the poor and have good cost-effectiveness in terms of poverty reduction. However, only 3.5 percent of the population receives Financial Social Assistance. The number of beneficiaries has dropped over the years, and the overall poverty reduction impact of these programs is limited because the coverage is quite narrow; overly strict eligibility criteria and case management challenges further reduce coverage. The COVID-19 shock also showed that social assistance lacks the capacity to adjust and scale up to help households weather shocks.²⁰

The provision of social services is expanding, but quality and availability varies significantly across the country. Social services are being expanded with a broad system of programs and a diversified set of providers, including the central government, local self-governments (LSGs), non-governmental organizations, and the private sector. Expenditures on social services are high by Western Balkan standards, but the provision of services is uneven across LSGs. Public care for the elderly remains very limited despite an aging population. The central government is deinstitutionalizing accommodation services as a key reform objective, but progress is uneven and quality problems persist. High caseloads for the Centers for Social Work, fragmented delivery systems, and lack of standardized referral procedures limit coordination and effective services provision. Weaknesses related to targeting and substitution effects reduce the effectiveness of earmark financing.²¹

An aging population and the persistent share of employees uncovered by the pension system seriously affect its sustainability. Almost one-in-ten Serbians aged above 65 is not covered by a pension scheme, and average beneficiaries can only expect to replace half of their net income as retirees – a ratio that has been steadily declining over the last decade. While the total number of contributors was equal to 86.3 percent of total employment in 2002, it decreased to 75.8 percent in 2019, before recovering slightly to 77.9 percent in 2020.²² Alternative and voluntary retirement savings schemes to stimulate savings among the better-off remain underdeveloped, whereas there are no targeted measures to protect the elderly poor, who are less likely than non-poor to receive pensions in the contributory system. Going forward, in light of the aging

20. World Bank, UNCEF(2022), Serbia Social Assistance Public Expenditure Review Note 2022

21. World Bank (2022), Serbia, Social Protection Situation Analysis.

22. The measures put in place to retain employees during COVID-19 drove this recovery. Those who have lost their jobs during the pandemic were mostly in the informal sector or uncovered by social insurance.

population and an increase in informal sector jobs, the trade-offs between coverage, adequacy, and sustainability will become more complex. As a result, Serbia would do well to review the parameters of its pension system, foster higher savings among those currently employed and consider non-contributory options for the elderly poor.

Labor market programs have very limited reach, and their efficiency and impact can be improved. Serbia spends comparatively little on LMPs: spending on unemployment benefits is around 0.3 percent of GDP. Coverage of LMPs is low by international standards: only 6 percent of registered unemployed receive unemployment benefits, and participation in activation programs is very limited.²³ Spending on active LMPs was between 0.08-0.09 percent of GDP during 2017-2019, compared with 0.63 and 0.48 percent of GDP respectively for the OECD on average. Among LMPs, the offer of training programs is limited and largely focused on on-the-job training for recent university graduates rather than including more vulnerable populations or reskilling of adults needed to address skill gaps and modernize the workforce. In this context, improving a life-long learning environment is important. High caseloads among caseworkers make it difficult for the NES to provide quality services, starting with adequate profiling of jobseekers and their needs. Programs are not systematically evaluated, and, with a few exceptions, no causal impact evaluations are carried out to determine their value-added and cost-effectiveness. The efficiency and effectiveness of LMPs are jeopardized by insufficient human resources, outdated technology and information tools, and regulatory constraints.

3. Policy Responses for Consideration

Short-term measures:

- **Improve coverage of the poor in social assistance and develop a relevant information system.** The coverage of poverty-targeted social assistance programs can be expanded to reach more poor households who live below the absolute poverty line (currently, 3.5 percent of households are covered by the program versus 7 percent of households living in absolute poverty). To achieve this, it is important to relax eligibility criteria and increase outreach efforts with a particular focus on rural areas and households with children. To improve the efficiency of spending on social assistance programs, it is important to reconsider the objectives of spending on categorical benefits and make necessary adjustments, including considering the introduction of means-testing— for programs such as the Parental Allowance. Continuing to develop and implement the Social Protection Information System and the Social Card Registry will also contribute to improving the efficiency of the delivery of social assistance programs and their ability to respond quickly and adequately to shocks.

Medium-term measures:

- **Improve the quality and availability of social services.** This could be done by continuing to expand the provision of public and private social services, accelerating the de-institutionalization reform, and revisiting eligibility criteria for earmarked transfers. It is also important to reduce the caseload of social workers and enforce case management approaches and ensure adequate staffing and training for the staff of the Center for Social Work.
- **The pension system requires policies that simultaneously improve pension adequacy and pay-as-you-go (PAYG) system's financial sustainability.** PAYG parameters can be revisited/adjusted to improve its financial viability and adequacy: this includes a review of the eligibility parameters for general early retirement, early retirement for hazardous and arduous occupations, the indexation pattern, and options to raise the retirement age as the population

23. Skills development training participants numbered 10,000 in 2019 and 15,000 in 2020. Private sector incentive schemes (e.g., entrepreneurship programs, wage subsidies for new jobs) and public works reached only 2 and 1 percent of NES unemployed clients in 2020, respectively, (administrative data provided by NES).

ages. Voluntary savings mechanisms should also be supported.²⁴ The Farmers Pension should be phased out and integrated into the general pension system in the form of a social pension or designated elderly social assistance provided to the uncovered elderly poor to reduce the risk of poverty in old age. Policies on active aging and delayed exit from working life to foster longer productive careers in the context of population shrinking and demographic aging should complement pension system reforms and be included in its design.

- **Increase the efficiency and effectiveness of services provided to the unemployed and underemployed, including investments in human and technological capacity.** This could include increasing the funding for active LMPs provided by the NES and the efficiency of procurement of quality private active LMP providers. There is also a need to systematically align the offer of active LMPs with information on labor markets and jobseeker characteristics and develop a long-term perspective on skill needs. The caseload burden of the NES can be reduced by: (i) updating the beneficiary registry; (ii) reducing the administrative tasks for caseworkers; (iii) implementing statistical profiling or information systems analytics; (iv) and continue to develop the labor market information system (LMIS).

4. World Bank Engagement

<i>Ongoing Support</i>	<ul style="list-style-type: none"> • Improving the efficiency of social assistance delivery. Current work here includes TA on the Reintegration of Returnees, specifically on information systems. • Support pension reforms. Under the Serbia Competitive Agriculture project (SCAP see Policy Brief on Agriculture), there is ongoing TA on Western Balkans Pensions. • National Employment Service Reforms. Just Transition TA.
<i>Potential engagements</i>	<ul style="list-style-type: none"> • Improving the efficiency of social assistance delivery. Financial support and TA for the further development of information systems and assessing the poverty focus of social assistance. • Support pension reforms. Continuous support through Western Balkans TA in FY23 under the ongoing SCAP Project. • Social Services. Mapping of social services, including the range of coverage and spending. • National Employment Service Reforms. Jobs and Competitiveness Project II (focus TBD see Policy Brief on Private Sector and Innovation).

9. Private Sector and Innovation

1. Overarching Messages

Serbia needs a new growth agenda to sustain increases in income and prosperity and to gradually converge with the standard of living of the EU. Determinants of previous growth and investment attraction, such as price competitiveness (cheap energy and cheap labor) in lower value-added sectors, are eroding. Low productivity growth and negative demographic trends represent additional challenges.

At the heart of this new growth agenda is the focus on increasing productivity and improving skills. Making inroads on these important fronts will require a shift in policies to attract foreign and domestic investment and provide a better environment for the private sector to grow. At the same time, building back better after COVID-19 requires a strong focus on transitioning to a greener and more digitalized economy. Key levers here include strengthening research and innovation capacities, making them more relevant and better integrated with the economy, attracting higher quality investments and ensuring a conducive and predictable business environment, especially for SMEs and fast-growing companies.

2. Key Challenges

Over the last decade, the engine of economic growth in Serbia has been exports and investments. Economic growth in the 3 years prior to COVID-19 averaged 3.6 percent in Serbia, an insufficient rate for rapidly bringing the country to converge with EU countries. With an aging population, emigration pressures, a shrinking labor force, and eroding price competitiveness, a shift towards higher value-added activities and higher productivity will be necessary for growth.

Domestic and foreign private sector investment will need to increase, both in terms of volumes and quality. Investment attraction policies should shift more towards targeting investments that have higher technological content and innovation potential, as well as more linkages with the local economy. Some sectors, such as ICT, are performing well, but untapped potential lies in further upgrading other established sectors such as automotive; greening the sectors such as energy, agriculture, and food production; and making advances in emerging sectors such as biotechnology and artificial intelligence. Additionally, skills are a crucial factor in determining the location of higher value activities and labor market mismatches should be addressed in coordination with the industry.

The business environment also needs to be improved. Regulatory barriers and inefficient procedures still dampen new firm entry, investment, and job creation. Although progress has been made, the cost of administrative burdens on businesses is still at 3 percent of GDP (according to the Standard Cost Model measurement). The role of the state in the economy remains substantial with a sizeable presence of SOEs (despite progress over the previous years, with more than 300 companies from the former Privatization Agency portfolio resolved) and through complex regulations in various sectors, reducing contestability and thus negatively impacting firm performance. SOEs create fiscal risks and distort markets.

Despite making gains on innovation-related indicators, the R&D system needs further improvements. The country has done well in providing R&D incentives, science grants, and entrepreneurship programs, including those supported by the ongoing SAIGE Project. Still, gaps in entrepreneurial capacity, technology transfer, and R&D excellence and relevance remain, as indicated by Serbia's flat performance across the Global Innovation Index indicators. Further, budget allocations for R&D and private sector investment are less than half of the EU average, at 2.2. and 0.35 percent of GDP, respectively. The overall R&D system requires further reforms to reduce duplication of efforts, governance deficiencies, and a lack of linkages with the economy, all resulting in lost economic opportunities.

3. Policy Responses for Consideration

Short-term measures:

- **Develop a comprehensive investment strategy with clear targets to attract and retain investment.** Suggested measures here include the following:
 - **Revise and update the Law on Investments and related by-laws** to align current investment incentives with strategic priorities, including moving away from enticing low-tech labor-intensive investments, and toward green investment and technology transfer.
 - **Strengthening the framework for Public Private Partnerships.** PPPs are key for mobilizing private capital. As such, the PPP Agency could take on additional responsibilities and competencies, allowing for the establishment of PPP investment guidelines and strategic pipelines.
- **Implement additional measures to spur innovation.** Suggested measures here include the following:
 - **Improve the efficiency of investment in the innovation space by incentivizing public-private collaboration in R&D (e.g.,** through additional Innovation Fund and Science Fund programs), guaranteeing equitable sharing of IP generated in public institutions, and providing centralized as well as targeted support for technology transfer.
 - **Create post-doctoral studies for researchers, as well as industry internships for graduate students.** This would be important to spur innovation and reduce the brain drain in R&D. Entrepreneurial, managerial and financial training should be included at the secondary and tertiary levels in the school system to boost human capital and innovation.
- **Redress hesitation on the part of investors to back ‘green’ projects.** This is due to the lack of: (i) open data on power transformation stations (i.e., location maps indicating where extra capacity generated by renewables can be fed back into the grid); and (ii) decision-making power at the local level for approving small projects. The uptake of green energy solutions could be furthered by the following measures:
 - **Simplify the transition process for consumers** – currently, nine separate steps are necessary for installing solar panels onto a private dwelling roof, for instance.
 - **Provide tax incentives not only to consumers but also producers, distributors, and installers of wind and solar hardware.**

Medium-term measures:

- **Update the range of SME-support programs to focus on increasing SME productivity and growth.** Suggested measures here include the following:
 - **Better target of SME support programs towards productivity upgrading.** Design and delivery of programs for SMEs based on clearly defined criteria that focus on targeting new companies and helping existing ones to increase their capabilities and productivity. Current programs are generally non-targeted and dispersed, with small amounts allocated to each firm.²⁵ Enhancing firm capabilities to produce more efficiently will be important, and this can be achieved by fostering higher investment in research and development by firms.

25. E.g., the Support Program for SMEs to Purchase Equipment allocates EUR20m to nearly 1,000 companies, mostly on a “first come, first served” basis. Initiatives that provide only inputs (e.g., cheap loans, machinery) without improving the firm’s ability to use them will often not produce a substantive change in SME performance.

- **Strengthen international market integration for scale economies.** Programs should also focus more on helping firms build stronger market linkages. Deeper integration into the regional and GVCs, considering current trends in GVC restructuring (nearshoring), could greatly boost Serbia’s economic growth and upgrading. Policies that help local SMEs be better equipped to supply large companies would allow them to tap into a growing market, estimated at well over €1 billion annually (according to calculations from the 2019 Country Economic Memorandum).
- **Implement next generation business environment reforms to reduce market distortions.** The business environment should be improved by further digitizing and simplifying government to business services, with a focus on the most frequent and costly processes, and by reforms that facilitate competition and reduce market distortions. According to the calculations from the 2019 Country Economic Memorandum, this could potentially add up to 1 percent to growth annually.
- **Invest in artificial intelligence (AI) and biotechnology in light of their transformative potential for innovation outputs over the long term** – based on system reforms across these sectors.

4. World Bank Engagement

<p><i>Ongoing Support</i></p>	<ul style="list-style-type: none"> • Serbia Accelerating Innovation and Growth Entrepreneurship (SAIGE) Project (US\$48m). This project builds on a decade-long partnership on the innovation agenda between Serbia, the World Bank, and the EU. It focuses on: (i) Science Fund research grants; (ii) training, mentoring, and co-investment grants for innovative start-ups through the Innovation Fund’s Katapult program; and (iii) support for the transformation of Research and Development Institutes (RDIs), including in emerging areas such as biotechnology and artificial intelligence. The World Bank has closely partnered with the EU, which is contributing an additional EUR41.5m. Additional activities are being discussed in the areas of R&D reforms, support for the Bio4 Campus, creative industries, and Serbia’s Smart Specialization Strategy. • Efforts to improve the business environment are supported by the joint World Bank and EU Improving Business Environment project. These include simplification and optimization of administrative procedures, creating and updating transparent and comprehensive registries of administrative procedures and requests, and digitalization of key government to business services based on the business episode approach. These are complementary to activities by the EBRD and USAID in this area.
<p><i>Pipeline</i></p>	<ul style="list-style-type: none"> • Competitiveness and Jobs 2 Project (US\$50m). The design of this project is under preparation and discussion. It could support the development and implementation of a new investment strategy, additional SME support programs, and skills development. This can be further complemented by IFC’s potential investments in sectors such as green energy and e-mobility. Closer collaboration with the EU and leveraging incentives created by the EU accession agenda (including the sizeable Economic and Investment plan, Green Deal initiatives, and funding potentially through the Western Balkans Investment Framework mechanism) provides further opportunities.

10. Urban Development and DRM

1. Overarching Messages

The potential of Serbia's cities to contribute to economic growth and address growing climate change and resilience challenges is still untapped. Serbia's urbanization rate was 60 percent in 2021, 15 percent lower than the EU average.²⁶ At the same time, Serbia's cities are facing financial and human capacity constraints to effectively address persisting infrastructure and service delivery needs, challenges made worse by increasingly limited fiscal space. Yet, cities contribute to an estimated 70 percent of greenhouse gas emissions (GHG), and with Serbia's emissions growing by 9 percent over the past 10 years, they will need to be part of the solution to lower the country's carbon footprint. Cities are also facing recurring natural disasters, such as heat waves and floods, which are compounded by climate change. These disasters can be very costly: in 2014, severe floods caused damages and losses equating 4.7 percent of GDP.

Urban environmental challenges, in particular, have come to the forefront in recent years, including air pollution, water and sanitation, and solid waste management. Environmental pollution contributes to substandard living conditions and negatively affects productivity. Solid waste management in Serbia is below EU standards. Cities have no organized collection, sorting, separation, and recycling of municipal solid waste, and most municipal waste is disposed of at unsanitary landfills. Water pollution is a major problem due to the lack of municipal wastewater treatment; wastewater is discharged directly into natural river courses, including the Danube and all its tributaries. Serbia's cities also have some of the poorest air quality in Europe, given the widespread reliance on coal-fired power plants and the burning of solid fuels (such as coal and wood) to heat private homes. Road traffic is another key contributor to poor air quality, caused largely by obsolete second-hand, imported vehicles.

Improving urban development can unlock the potential of Serbian cities to contribute to a better quality of life for citizens while becoming part and parcel of the green transition. This potential is still unrealized. For instance, despite its status as the economic hub of the country, Belgrade's economy grew slower between 2010 and 2017 relative to the metropolitan areas with similar demographic trends in the region.²⁷ Economic growth in Serbia's secondary cities, moreover, was lackluster. Between 2002 and 2011, secondary cities in lagging regions were underperforming compared to smaller cities, especially in low growth, lagging regions. However, with the adoption of the first ever Sustainable Urban Development Strategy (SUDS), the government has a unique opportunity to implement far reaching urban policy reforms and investment programs. These reforms can also go a long way to support Serbia's EU accession process, including meeting the requirements of the EU's Green Deal and Multi-annual Financial Framework 2021–27, many of which will need to be addressed at the local level.

2. Key Challenges

Serbia underinvests in critically important infrastructure and public service at the local level, while local capacities in urban development remain insufficient. LSGs in Serbia have significant needs to improve the quality of infrastructure, including solid waste management, urban regeneration, drinking water and wastewater treatment, clean energy, energy efficiency, and urban mobility, as well as related public services. Yet, LSGs' capital investment expenditures in Serbia, at 1 percent of GDP (a third of which go to Belgrade and Novi Sad), are lower than those in the EU-27 (1.4 percent of GDP).²⁸ Meanwhile, local capacities in planning, financing, and delivering urban infrastructure and public services at the local level, including on operation and operations & management (O&M) practices, remain limited. An investment scale-up would need LSGs to strengthen their institutional capacities to plan more effectively and enhance the efficiency and effectiveness of their investments. Furthermore, local revenues could be raised through enhanced property taxation based on a more up-to-date, reliable, and transparent property valuation system.

26. Serbia's largest cities, Belgrade, Novi Sad, and Nis have experienced the strongest urban growth in recent years.

27. World Bank, (2019), Western Balkans and Croatia Urbanization and Territorial Review, The World Bank: Washington DC.

28. 1.5 percent of GDP if compared to all Central and Eastern European countries.

While several national strategies²⁹ acknowledge the impact of climate change and advocate for a greener, more resilient Serbia, few implementation mechanisms exist at the local level.

The EU Green Deal and the requirements of the 2021–27 Multiannual Financial Framework will drive the EU's financial programming over the medium-term. They offer an opportunity for cities to step up their engagement on the climate mitigation and adaptation fronts. But there are limitations to addressing this 'next generation' set of urban development challenges, including the need to focus on urban regeneration and renewal and revitalization of neglected city areas such as public spaces. It will be important to build capacity and align policies and regulatory frameworks with the EU Green deal requirements so that LSGs will be better prepared to absorb and implement financial flows that may come from the EU.

Coordination for effective Disaster Risk Management (DRM) is still inadequate to face mounting natural disasters. Cities in Serbia are particularly prone to natural hazards. Most of the damage caused by 2014 floods occurred at the local level, with hefty reconstruction costs. Similar extreme weather conditions, though more localized, occurred across the country in 2015, 2016, 2018, 2019, and 2020; and are likely to become more frequent given the impact of climate change. Since the 2014 floods, policy makers focused on strengthening the institutional and legal framework for DRM. They have shored up capacities at the central and local levels and developed the infrastructure for national geospatial data – which enables better sharing of information, planning, and informed decision making. Despite these efforts, there is room for improvement, notably in the capacity of LSGs to assess and mitigate risks and disaster preparedness and response. Further efforts will be needed to continue to reinforce capacities and coordination mechanisms on DRM and risk prevention between the national and local levels.

3. Policy Responses for Consideration

Short-term measures:

- **Support the implementation of the SUDS and its Action Plan** – focusing on improved urban planning at the local level.
- **Finalize and adopt the Spatial Plan of the Republic of Serbia (SPRS)**, currently under development.
- **Revise the Law on Planning and Construction and respective bylaws** to include climate change and resilience aspects.
- **Increase local capacities to cope with disaster risks and hazards** by incorporating disaster risk and climate change aspects into mandatory planning documents.
- **Support the development of a municipal finance system** with a greater reliance on own-source revenues, including through property taxes.

Medium-term measures:

- **Launch a local infrastructure and service improvement program** focusing on secondary and medium-sized cities and lagging regions, which face the greatest capacity constraints.
- **Improve consistency across the legally binding local planning documents for LSGs**, thereby becoming more effective in implementing sectoral strategies and allocating resources.
- **Upgrade national and local capacity on DRM** to not only better respond to disasters but also proactively plan for and reduce natural hazards and climate change risks.
- **Improve public real estate asset management** by bringing the asset registry up-to-date to link it with other relevant registries and set up the ground for establishing an efficient public asset disaster risk insurance.

29. These include the SUDS and Action plan, the Climate Change Strategy and Action plan, the Serbia Waste Management Program, among others.

4. World Bank Engagement

<p><i>Ongoing Support</i></p>	<ul style="list-style-type: none"> • Local Infrastructure Institutional Development (LIID) Project (FY22-FY26, IBRD US\$100m and US\$200m AfD co-financing). This project will improve LSGs’ capacities to manage sustainable infrastructure and increase access to economic and social opportunities in a climate aware manner. The project has an initial focus on the roads and mobility sector, while strengthening technical capacity at the national and LSG level to prepare the ground for future investments across a broader set of sectors. • Real Estate Management (REM) Project (FY15-FY22) and Additional Financing (FY20-FY24, IBRD US\$66.9m). This project is focused on improving the efficiency, transparency, accessibility, and reliability of the government’s property management systems. • Serbia Green, Livable, Resilient Cities Technical Assistance (TA) Program (FY21-FY25, US\$3.8m funded by SECO). The Program supports the government in operationalizing the SUDS with an emphasis on strengthening the capacities of selected LSGs (including in lagging regions) to better plan, prepare, and implement green and climate resilient investments.
<p><i>Pipeline</i></p>	<ul style="list-style-type: none"> • Local Infrastructure Institutional Development (LIID) Project, Phase II (FY24). A planned LIID II project would build on the implementation of LIID I and the SECO funded TA and broaden the engagement in support of LSGs beyond the roads sector to tackle a broader set of next generation of urban development challenges in (i.e., urban regeneration, renewal, and revitalization of neglected city areas such as public spaces, resilience, other key urban infrastructure, such as solid waste management, etc.) in secondary cities to address the imperatives of the EU Green Deal and climate change challenges. • Going forward, the World Bank maintains readiness to support Serbia by providing analytical and advisory assistance, including exploring financing investment on disaster risk management at the national, local, and sectoral levels

11. Transport

1. Overarching Messages

Serbia’s vision for the transport sector is consistent with its ambition to access the EU. The vision includes policies to connect communities in a safe, sustainable, resilient, smart, and reliable manner while protecting the environment by reducing air pollution, noise, and GHG emissions through more diverse and greener means of transport. Key elements include: (i) better connecting to the EU Trans-European Transport Network (TEN-T) and EU transport markets, (ii) improved accessibility to jobs and services and reduced pollution at the local level; and (iii) liberalization and competitiveness of transport markets.

Important reforms to reduce the fiscal burden of transport SOEs and bring the sector in line with EU standards were initiated but need to be completed. Direct fiscal support to the railway sector was reduced since 2015. Moreover, the Public Enterprise Roads of Serbia (PERS) has prepared a Service Level Agreement (SLA) with the Government of Serbia (GoS), which would significantly improve the management of the road sector and establish clear accountability and responsibility roles. However, its adoption is pending. On the infrastructure side, important progress was realized in completing the main transport corridors (e.g., Corridor X), but there are challenges on dealing with non-physical barriers and ensuring smooth maintenance practices – something that jeopardizes the sustainability of investments and Serbia’s convergence with international standards.³⁰ The country still does not have a multimodal national transport strategy that defines the interplay between various modes of transportation and informs the robust investment pipeline.

The transport sector needs to be decarbonized and its resilience boosted to address climate change and the vulnerabilities of the network. Besides energy, the transport sector is the main contributor to GHG emissions and a significant cause of air and noise pollution in urban areas.³¹ The motorization rate in Serbia has increased by 22 percent in the past 5 years and raising demand for road mobility is being met with old, highly polluting vehicle fleets. During 2015-2018, Serbia was among the top 5 importers worldwide of secondhand light-duty vehicles from the EU. There is a need to tackle the carbon intensity of the road sector while pursuing a modal shift of current and future traffic means to greener modes. The resilience of transport infrastructure to climate change has to be improved to reduce network vulnerabilities arising from the increasingly frequent occurrence of floods, flash floods, and landslides.

2. Key Challenges

A large maintenance backlog and poor maintenance capacity are threatening the sustainability of these investments. Serbia’s geographic position opens significant opportunities to deepen regional trade, economic integration, and improve regional connectivity by making transport a key enabling factor to domestic and regional economic activity. But decades of underinvestment means that over 50 percent of conventional TEN-T roads are in ‘medium-to-poor conditions’, and almost 50 percent of the railway network is in ‘poor or very poor conditions’, allowing for a maximum speed of just 50km/h. In light of large investment needs but limited resources in the sector, transport SOEs should use road and rail asset management systems to inform annual and multiannual budgets and define priorities while including considerations like resilience, climate impact, and safety.

The reform agenda on key transport SOEs is still unfinished. In the current investment cycle, the GoS is planning to invest EUR4bn in the rail sector. In parallel, substantial funding has been destined for the completion of the new highway links. The sustainability of these investments calls for a sharp focus on maintenance, in particular in Railway companies and PERS. SOEs should also continue to reform, embracing asset management systems, improving capacities, modernizing their practices, insisting on transparent and clear contractual arrangements, and ensuring their commercial orientation and financial sustainability.

30. The 2018 Logistics Performance Index ranked Serbia 65th out of 160 economies. The 2019 Global Competitiveness index ranked Serbia 98th on the quality of roads and 82nd on the efficiency of train services out of 141 countries.

31. Serbia’s CO2 emissions per unit of GDP are about twice those of the EU average.

While current mobility depends, by and large, on road-based transport, environmentally friendly modes of transportation are less developed. Road transport makes up 98 percent of transport in Serbia. Rail services are not dense enough nor reliable enough due to poorly maintained assets. Moreover, around 80 percent of the cargo fleet has more than 40 years of service. At the local level, green transport could be a driver for increased economic activity and the creation of more livable spaces, but human and financial capacities are still insufficient, while citizens are weakly engaged in the process of reshaping the urban environment.

Despite Serbia being prone to floods, infrastructure resilience is not embedded into the day-to-day operation of transport subsectors. Some 12,000 km of road infrastructure and 900 km of railways are directly exposed to potential flood risk. Floods, flash floods, and landslides are posing a threat to the transport network and the ability of the GoS to respond to emergency events. National and local roads are critical to enable a twoway flow of goods and people: access to and evacuation of affected people and ensuring uninterrupted supply chains. It is thus important to take resilience into consideration in the process of designing, constructing, rehabilitating, and maintaining the existing infrastructure. Failing to do so results in higher building-back-better costs as well as in disruption of critical supply chains.

Despite improvement, road crashes continue taking a high toll on human lives in Serbia. The country has reduced the road traffic death rate from 9 to 7 per 100,000 population between 2010 and 2021. Yet, this 23 percent cut is far from the targets put forward by the UN Decade of Action (i.e., halving the number of fatalities) and still well above the average EU level (5.1 deaths per 100,000 population). A key area of concern in traffic accidents is the safety of children: 6,800 children were injured in traffic accidents over the past 5 years.

3. Policy Responses for Consideration

Short-term measures:

- **Establish clear accountability and responsibility roles and improve the performance of the road sector** by negotiating SLA with PERS and making it conditional for the next year's budget.
- **Adopt the new Road Safety Strategy**, which will outline systematic coordination among various relevant sectors and sustainable financing streams.
- **Approve the National Energy and Climate Plan and Energy Sector Development Strategy**, including the introduction of a ban on the import of Euro 3 standard vehicles.

Medium-term measures:

- **Define the interplay between various modes of transport and the sector's decarbonization agenda** and inform a robust investment pipeline through the adoption of a Multimodal Transport Strategy.
- **Strengthen governance and accountability in the railway sector** by ensuring the existing contractual arrangements are followed, capacities are strengthened, and KPIs are defined and monitored.
- **Improve the effectiveness of SOEs spending and secure sustainability of investments**, including by mandatory use of road and rail asset management for defining maintenance and reconstruction plans.
- **Foster economic development and livability at the local level** by strengthening the capacity for planning, implementing, and managing sustainable transport solutions.

4. World Bank Engagement

<p><i>Ongoing Support</i></p>	<ul style="list-style-type: none"> • Local Infrastructure Institutional Development (LIID) Project (FY22-FY26, IBRD US\$100m and US\$200m AfD co-financing) aims to improve LSGs' capacity to manage infrastructure and increase access to economic and social opportunities in a climate aware manner (initial focus: roads and mobility). • Railway Sector Modernization Multi Phase Program, Phase 1 (FY21-FY25) (US\$125m [total US\$400m], co-financed with AfD on equal share). Phase 1 finances systematic changes in asset management, human capital, modal shift, safety management and investments in important regional and suburban lines. • Regional Trade and Transport Facilitation Project (FY20-25) (Phase 1 allocation to Serbia US\$40m). Phase 1 focuses on improvements in border crossings, automation of customs and trade procedures, improving railway safety, and development of the national multimodal transport strategy. • Regional Sava and Drina Rivers Corridors Integrated Development Program (transport support to Serbia US\$17m, co-financed pari passu by EIB). Phase 1 aims to improve navigability and flood protection in the Sava and Drina corridor. It also supports the multimodal connectivity of the Sremska Mitrovica port. • Enhancing Infrastructure Efficiency and Sustainability Program for Results (FY18-24, multisector approach, with US\$59.85m assigned to transport related DLIs). Transport-related DLIs support the adoption of the SLA, 3-year Performance Based Maintenance Plans and extension of Performance-Based Maintenance Contracts. • Safe2School application supports local governments in identifying unsafe locations on the children's way to and from school. The tool was piloted in Serbia. • eMobility Pathway for Serbia and decarbonization of vehicle fleet supports policy and investment options to decarbonize the vehicle fleet and transition to electric mobility. • International Passenger Rail in WB6 countries offers an analysis of potential passenger rail lines among WB6 countries and with EU and policy measures to support modal shifts. • Resilience of the Local Road Network is developing guidelines for local road vulnerability assessment and transport management plans in case of emergency. • Framework for Infrastructure Policy Decision Making informs policy decisions at the local level to improve the livability in cities and municipalities.
<p><i>Pipeline</i></p>	<ul style="list-style-type: none"> • Railway MPA 2 (FY24). The proposed Phase 2 of the Railway MPA project, budgeted at US\$130m, will focus on ensuring the sustainability of recent and planned investments in the subsector by supporting the maintenance of the network and maintenance equipment purchases, increasing maintenance capacities, and ensuring the recently built high speed rail is adequately maintained.
<p><i>Potential engagements</i></p>	<ul style="list-style-type: none"> • Going forward, the World Bank could support Serbia by providing analytical and advisory support as well as financing investment in areas including: (i) transport sector decarbonization policy reform; (ii) resiliency and safety of the transport network; and (iii) greener mobility at the local level and livable cities.

12. Agriculture

1. Overarching Messages

The growth of the agricultural sector in Serbia has stagnated and needs to be underpinned by new drivers of transformation and a revamped strategic vision. The sector's average growth rate in the last 10 years has hovered around 1.4 percent, well below its potential.³² Capital investments and the expansion of knowledge and climate-smart agriculture innovation would be critical to increase labor and land productivity, strengthen forward and backward linkages of the primary sector with the agri-food industry, and accelerate the overarching transformation of the sector. Potential drivers of transformation include: (i) diversification and broadening of the production base; (ii) innovation and modernization of production at different scales; and (iii) development of the entrepreneurial capacity of agri-food producers.

Increasing the productivity and competitiveness of the agri-food sector requires renewed efforts to strengthen capacities in the public and private sectors.³³ Public support for business-driven capital investments can crowd-in private sector investment in capital intensification, knowledge formation, and farm innovation. This would also increase economic efficiency and resilience to shocks. Policy measures could focus on increasing access to agricultural finance, strengthening the aggregation capacity across agricultural value chains while ensuring the productive inclusion of small farmers, and the provision of risk management and agribusiness development advisory services. Land markets and the lease system of state land can be further improved to enable access to factors of production and contribute to sector growth.

2. Key Challenges

Low productivity and competitiveness of the agri-food sector.³⁴ Issues that deserve attention include very small and fragmented land holdings (78 percent of landholdings operate on less than 5 hectares [ha]), an aged farm labor force, low efficiency and use of technology, high labor intensity, low financial liquidity and capital availability for investment (for smallholder farmers), and outdated production management practices. Inadequate irrigation systems, weak advisory services, phytosanitary controls, low access to credit by producers, and poorly functioning land markets are also important structural impediments.

Distorted allocation of productive resources in the agricultural sector. Subsidized farms display lower technical efficiency. For instance, farms receiving coupled subsidies, which are tied to the level of output (such as milk premia), have suffered significant losses. In the case of meat and milk, production deficits started to materialize in 2018 when coupled subsidies were introduced after years of surpluses. In general, there is an inverse relationship between the effect of subsidies on technical efficiency and the size of the holding, signaling a misallocation of productive resources and farm support.

Low effectiveness of public spending and service delivery. Some 80 percent of public spending in the agricultural sector during 2011-2017 went to subsidies and direct transfers in the form of headage, price support for milk, and area-based payments. It has been argued that support through direct payments does not contribute to increase farm productivity. In parallel, the provision of support, irrespective of farm size, reduces incentives to raise production, preserves farm structures

32. Agriculture accounts for 6.5 percent of GDP and 15.5 percent of formal employment. Serbia's average value added per worker is US\$6,907, low when compared to US\$26,845 in the EU-28. Closing one quarter of the gap in the stock of agricultural capital per worker relative to EU-28 levels would increase agricultural labor productivity by 30 percent.

33. World Bank, 2018. Exploring the Potential of Agriculture in the Western Balkans: A Regional Report.

34. According to FAO estimation (FAOSTAT, 2022), only 2.6 percent of arable land is equipped for irrigation if Serbia (3-year average of 2017-2019). By comparison, the proportions of arable land equipped for irrigation in North Macedonia, Montenegro, Bulgaria, and Bosnia and Herzegovina are 30.6 percent, 25.8 percent, 3.9 percent, and 0.3 percent, respectively.

dominated by smaller farms³⁵, and does not contribute to the acceleration of structural change³⁶. When resource misallocation is combined with low funding for rural development, including the provision of public goods (e.g., agricultural infrastructure, R&D, and advisory services), the resulting policy framework does not facilitate farm restructuring and, at worse, constrains the growth potential of smaller and medium-sized farms.

Lack of strategic vision. As the National Agriculture and Rural Development (NARD) Strategy (2014-2024) enters its final implementation stage, it could be revamped to focus on new market opportunities and outcomes that support the expectations of key stakeholders. At the same time, further policy reform needs to consider the frequent ad hoc trade and policy measures introduced in the sector (e.g., export bans/limitations, mandatory domestic price regulations and payment interventions, and increase of price support) – which have not been beneficial for the alignment Serbia's agricultural policy with the EU Common Agricultural Policy.

Increased occurrence of extreme weather events. The impact of the 2021 drought compares with those of 2012 and 2017, which caused significant economic losses: in 2021, EUR2bn were lost in the agricultural sector alone. Average temperatures are growing, causing vegetative seasons to start earlier and end later while intensifying the incidence and severity of pest and disease outbreaks.

Structural challenges in the sector are exacerbated by ongoing shocks, such as rising inflation and input prices. According to the National Bank of Serbia, food prices have increased by 23 percent year-on-year (y-o-y) in 2022, influenced by higher costs of inputs (fertilizers, diesel, energy, feed for livestock) and disruptions in supply chains. According to Serbia's Statistical Office, the highest price increase was recorded for mineral fertilizers and amounted to 126.6 percent in the third quarter of 2022, y-o-y.

3. Policy Responses for Consideration

Short-term measures:

- **Improve the targeting of rural development policies and provide incentives for technical change and innovation.** This includes addressing regional and size disparities, supporting younger farmers with entrepreneurial potential, as well as making medium-scale producers more efficient. This policy framework could be complemented by measures to improve access to credit, farm enlargement, and actively promote modern forms of cooperation amongst farmers and between farmers and other actors of the agri-food chain. In parallel, support for smaller farms could be granted through simpler measures and coordinated with broader economic and social policies. Additionally, the policy framework should support the implementation of climate-smart agriculture practices that can mitigate the impact of greenhouse gas emissions from farms, increase climate adaptation, and increase productivity.

Medium-term measures:

- **Converge with the EU acquis on agriculture and rural development.** Priorities for action include the establishment of the Integrated Administration and Control System and the Land Parcel Identification System, as well as improving the Farm Accountancy Data Network. Improving capacities for the implementation of the Instrument for Pre-Accession Assistance for Rural Development (IPARD) also remains a priority, as well as the adoption of a comprehensive strategy and action plan for alignment on food safety, veterinary and phytosanitary policy, and the upgrade of the risk-based approach to official controls for imports.³⁷

35. Only 1 percent of farms in Serbia have 50 ha of land and most of them are in Vojvodina. Farmers with less than 5 ha of land account for 78 percent of all holdings and 25 percent of the total cultivated area are concentrated in the South and East Serbia.

36. World Bank (2016). *New Opportunities and Old Constraints: The Context for Agriculture Sector Development in Serbia*. GFADR Europe and Central Asia. Washington DC: The World Bank.

37. European Commission (2022). *Commission Staff Working Document – Serbia 2022 Report Accompanying the document Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions*. SWD (2022). Brussels: European Commission.

- **Shift to decoupled farm support.** The current trend of reducing the direct payments envelope in favour of rural development (e.g., advisory, farm extension services, and R&D) should be continued. This would allow farmers to make production decisions based on competitive advantage, increase farm investment, production specialization, adoption of climate resilient farm innovations, and shift land-use towards high-value production. Combined with cross-compliance (where farmers are encouraged and supported to comply with high EU standards), this policy would promote the adoption of sustainable and resilient farming practices and make Serbian products more competitive.
- **Undertake a rural development policy which stimulates public-private partnerships and resilient investments.** The rural development budget could significantly increase its focus on the sustainable management of natural resources, green and resilient agricultural diversification, including promoting investments in climate resilient agri-food value chains, and farm and agri-food processing innovations. Together with market-oriented decoupled farm payments, such shift would facilitate an increase in farm productivity and efficiency and accelerate structural transformation to unleash on- and off-farm economic growth, create jobs, raise income, and improve the livelihoods of rural families.
- **Develop Serbia’s Agriculture Knowledge and Information Innovation System (AKIS) based on stronger cooperation between the private and public sectors and promote climate smart agriculture investments.** Increasing public investment in well-targeted R&D to a quarter of the R&D gap relative to the EU-28 level would increase agricultural productivity by 6 percent. Complementarily, enabling the environment for innovation in digital agriculture (low-cost, data-intensive on-farm digital technology applications) could promote capital accumulation and knowledge sharing at lower cost, especially for small and medium-size farmers. Aligning the knowledge agenda with climate resilience and improved access of farmers to agroclimatic information will further improve the sustainability of investments.

4. World Bank Engagement

<p><i>Ongoing Support</i></p>	<ul style="list-style-type: none"> • Serbia Competitive Agriculture Project (SCAP, US\$50m; closing Dec-2024) aims to improve agri-food market linkages by increasing the productivity and efficiency of farmers through improved access to technical support and finance for farm and agri-processing innovations. • Strengthening Agriculture Sector Capacities for Evidence-Based Policy Making (PHRD grant; US\$1.8m; closing Jan-2024): to strengthen the M&E capacity and systems for strategic planning. • Transforming Crop Residue Management for Improved Air Quality (CSF grant; US\$0.35m; closing Dec-2023): TA on crop residue management and climate change.
<p><i>Potential Engagements</i></p>	<ul style="list-style-type: none"> • To expand the support for the transformation of the agriculture sector by scaling up the results of SCAP and improving the enabling environment for green, resilient, and inclusive agribusiness development and private capital mobilization. To help to assess: (i) the results of key agrarian policies and identify options for policy reforms to enable more efficient and effective implementation, and (ii) the challenges and opportunities to develop the AKIS.