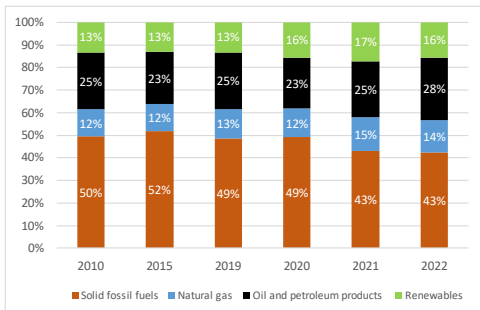


Energy fiche - Serbia

Key energy figures

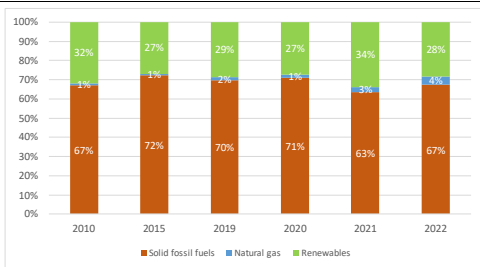
Graph 1: Energy mix



Source: Eurostat

- Serbia is highly dependent on **fossil fuels**, including coal, oil and oil products, and to a lesser extent natural gas, which together account for 84% of the **country's energy mix**.

Graph 2: Electricity mix



Source: Eurostat

- **Coal** (lignite) plays an important role in the country's **electricity sector**, and accounts for two thirds (67% in 2021) of the total annual production. It has been traditionally sourced domestically, but it has been increasingly

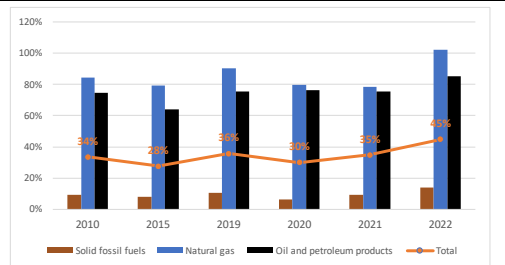
imported since 2021. There is no planned date for the phase-out of coal.

- It is followed by **renewable electricity production** (28% in 2021), dominated in case of Serbia by large hydro power plants (alone accounted for 25% of the electricity mix).
- Still, the country has seen a rising deployment of **wind capacities**. According to the International Renewable Energy Agency, Serbia saw a rise in wind capacity from **398 MW** in 2022 to **511 MW** in 2023. However, the capacity of solar PVs, at 137 MW, remained stagnant during the same period⁽¹⁾.

Energy security

1. DIVERSIFICATION OF ENERGY SOURCES AND REDUCTION OF IMPORT DEPENDENCY

Graph 3: Import dependency on fossil fuels



- (1) Combustible renewables and electricity are excluded
- (2) The total amount takes into consideration the energy mix of the country

Source: Eurostat

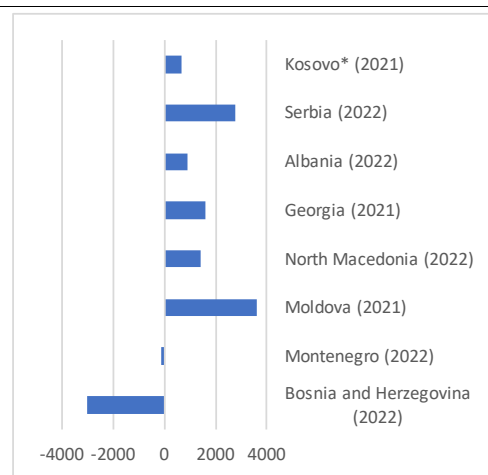
⁽¹⁾ International Renewable Energy Agency (2024). Renewable capacity statistics 2024

Integrated energy market

1. ELECTRICITY

- In 2022, the annual gross electricity production in Serbia stood at 35,510 GWh. The country was a **net electricity importer** in 2022, with 2,751 GWh imported more than exported.
- Process of market integration with the EU is ongoing under the **Electricity Integration Package**, adopted in the Energy Community in 2022. Due to the delay in transposition, an infringement procedure has been opened under the Energy Community Treaty.

Graph 4: **Net electricity imports (GWh)**



(1) Net electricity imports are calculated as electricity imports minus exports.

(2) The values for Bosnia and Herzegovina, Montenegro, North Macedonia, Albania and Serbia are from 2022. The 2022 values for Moldova, Georgia and Kosovo* are still not available, so 2021 data was used. Ukraine was not covered in the overview, as the latest available data was from 2020.

Source: Eurostat

2. NATURAL GAS

- Consumption of natural gas was **2.9 bcm** in 2022. This is a small decrease from 3.0 bcm in 2021. It is mainly covered through imports, with domestic production accounting for **0.32 bcm** in 2022. While the consumption in the country has been increasing in the last years, domestic production steadily decreased from 2015, when it peaked at 0.57 bcm.

⁽²⁾ An agreement was signed in November 2023 between Serbia and Azerbaijan for gas supply of up to 400 mcm/y from 2024 until 2026, and 1 bcm/year after that (the latter being unlikely before 2030).

- Energy sector (51%) accounts for more than a half of **natural gas consumption**. It is followed by industry (22%), households (13%) and services and public sector (13%).
- Serbia has been traditionally fully reliant on Russian natural gas imports via **Bulgaria** (Turk Stream) and via **Hungary** in winter peak days. With the completion of the **Interconnector Bulgaria - Serbia** (IBS) in December 2023, whose works on the Serbia side were financed by the EU (EUR 49.6 million and an EIB loan of EUR 25 million), Serbia gained access to other sources of gas supply, notably from Azerbaijan although current flows are marginal⁽²⁾.
- The wholesale market in Serbia has been dominated by the monopolistic state-owned and unbundled supplier, "**Srbijagas**" providing all imported quantities, mainly from Gazprom, through a long-term contract concluded until 2025.
- Serbia has an **underground gas storage** facility, "**Banatski Dvor**" (majority owned by Gazprom, 51%), with the working volume of 450 mcm. Serbia is engaged on extension of its storage to 750 mcm (working volume). Serbia did not certify its storage system operator and thus violated the Gas Storage Regulation⁽³⁾.
- In the past years, Serbia has also been booking additional gas storage capacities in Hungary.

3. ENERGY INFRASTRUCTURE

Map 1: **Electricity infrastructure including cross-border interconnections**



Source: ENTSO-E

- There is **one electricity project** in Serbia included in the first Union list of **Projects of Common Interest and Projects of Mutual**

⁽³⁾ Regulation (EU) 2022/1032 (the Gas Storage Regulation)

Interest (PCI/PMI). This is a new 400 kW OHL between interconnector Subotica (Serbia) with Sándorfalva (Hungary) with an expected capacity of 1330 MW and the planned commissioning date in 2030.

- The implementation of two sections of the **Trans-Balkan Electricity Corridor** are underway in Serbia. Section 3 (2x400 kV OHL Obrenovac - Bajina Basta) is in a preparatory phase with commissioning expected in 2026. Section 4 (2x400 kV OHL Bajina Basta – Visegrad in Bosnia and Herzegovina/Pljevlja in Montenegro) is scheduled to go into operation in 2027, depending on financing. Both are priority projects in the CESEC Action plan.

Map 2: **Gas infrastructure including cross-border interconnections**



Source: ENTSO-G

- The **interconnector Bulgaria – Serbia (IBS)** was a Project of Common Interest⁽⁴⁾ and CESEC priority project, and it has a nominal annual capacity of 1.8 bcm (60% of Serbia’s annual consumption). Future investments into the infrastructure on both sides have the potential to boost the IBS interconnector to its maximum capacity (from currently 1.8 to 3.2 bcm). The current flows are only for testing purposes and the commercial operations are yet to start.
- Serbia and North Macedonia** are developing a first gas interconnection between the two countries. The construction is yet to be initiated. The Environmental and Social Impact Assessment (ESIA) and Feasibility study are

⁽⁴⁾ The PCI 6.8.3 Gas Interconnection Bulgaria - Serbia (IBS) (6.10 on the 3rd PCI list) was a PCI according to Regulation (EU) 347/2013, priority corridor: North-South Gas Interconnections in Central Eastern and South Eastern Europe (NSI East Gas).

being carried out with the support of WBIF and EBRD (expected results for 2025).

4. ENERGY POVERTY

Table 1: **Energy poverty**

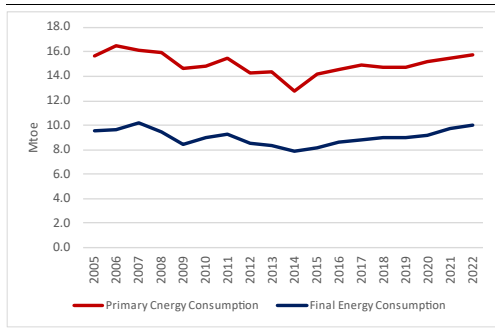
	Serbia			EU		
	2020	2021	2022	2020	2021	2022
Arrears on utility bills (households %)	26.7%	21.9%	22.4%	6.5%	6.4%	6.9%
Inability to keep home adequately warm (household %)	9.5%	9.4%	9.5%	7.5%	6.9%	9.3%
Population living in dwelling with presence of lead, damp and rot (population %)	11.4%	:	:	14.8%	:	:

Source: Eurostat

Energy efficiency

1. ENERGY EFFICIENCY

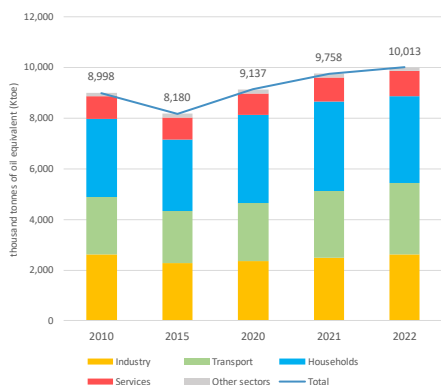
Graph 5: **Primary and final energy consumption**



Source: Eurostat

- The NECP of Serbia sets an energy efficiency target for the planned total maximum level of final energy consumption by 2030 at **9.7 Mtoe**, which is less ambitious compared to the target of 9.54 Mtoe agreed by 2022 Energy Community Ministerial Council Decision.
- As for primary energy consumption, the NECP sets a value of **14.68 Mtoe**, which is more ambitious than the target set by the 2022 Ministerial Council Decision.

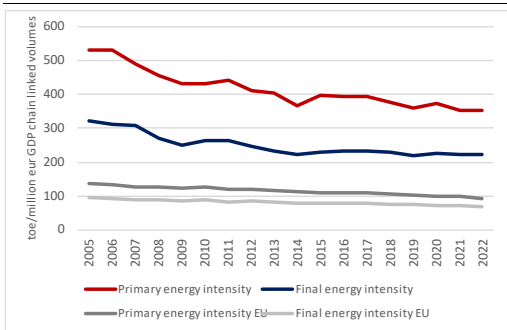
Graph 6: Final energy consumption by sector



(1) Final energy consumption excludes consumption of the energy sector (including transformation and distribution losses) and non-energy use of energy carriers.

Source: Eurostat

Graph 7: Primary and final energy intensity



Source: Eurostat

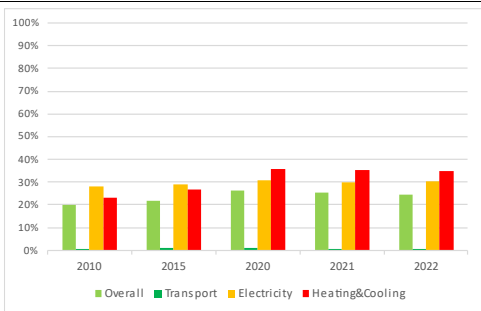
2. ENERGY SAVINGS IN BUILDINGS

- Serbia adopted a **long-term building renovation strategy** until 2030 in February 2022, and is now in the process of drafting an implementing action plan.
- On the other hand, no progress was achieved in the finalization of the **regulation on minimum energy performance requirements and certification**, which is required to achieve full compliance with the Energy Performance of Buildings Directive.

Decarbonisation

1. SECTORAL SHARE OF RENEWABLE ENERGY

Graph 8: Share of renewable energy sources

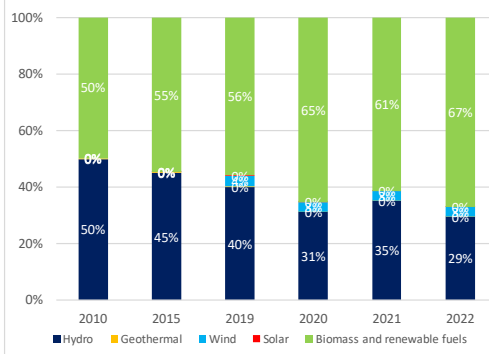


(1) In % of gross final consumption of energy.

Source: Eurostat

- In **2022**, Serbia recorded a share of renewable energy in gross final energy consumption of **24.7%**, which is below its 2020 target of 27%.
- The NECP of Serbia sets a new target for planned minimum share of renewable energy in gross final energy consumption by **2030** at **33.6%**, which is below the target of 40.7%, set by the 2022 Energy Community Ministerial Council Decision.

Graph 9: Renewable energy mix



(1) In % of gross final consumption of energy.

Source: Eurostat

Enlargement

- Serbia applied for EU membership in **December 2009** and was granted EU candidate status in **March 2012**.
- The EU-Serbia accession negotiations began in **January 2014**. So far, 22 out of 35 negotiation chapters have been opened, including chapters covered under the cluster 4 (green agenda and sustainable connectivity).
- As regards cluster 4⁽⁵⁾, Serbia has some level of preparation in **environment and climate change** (chapter 27), moderate preparation in the areas of and **trans-European networks** (chapter 21) and **energy** (chapter 15) and good level in **transport** (chapter 14)⁽⁶⁾.

Energy partnerships

- Serbia is engaged in a number of regional cooperation initiatives and organizations, such as the **Energy Community, Transport Community, Central European Free Trade Agreement (CEFTA), CESEC, the South-East European Cooperation Process (SEECP), EU macro-regional Strategy for the Adriatic and Ionian Region (EUSAIR) and the Danube Region (EUSDR)**, and the **Regional Cooperation Council**.
- Serbia is also a member of the **IRENA** and **IAEA**.

National Energy and Climate Plan (NECP)

- Serbia submitted its draft National Energy and Climate Plan (NECP) to the Energy Community Secretariat for its review in June 2023. The Secretariat assessed the draft Plan and issued its [Recommendations](#) in November 2023.
- The Government of Serbia adopted the NECP on 25 July 2024 which was notified to the Energy Community Secretariat on 30 August 2024.

⁽⁵⁾ Following the introduction of the revised methodology for the accession negotiations in February 2020, negotiating chapters are now divided in six thematic clusters.

⁽⁶⁾ European Commission (2023), Serbia 2023 Report, SWD(2023) 695 final