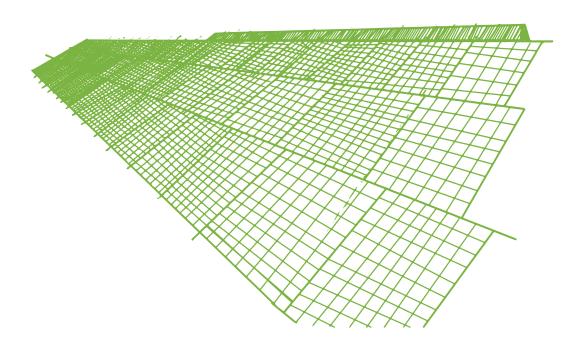


Annual Implementation Report

1 November 2023

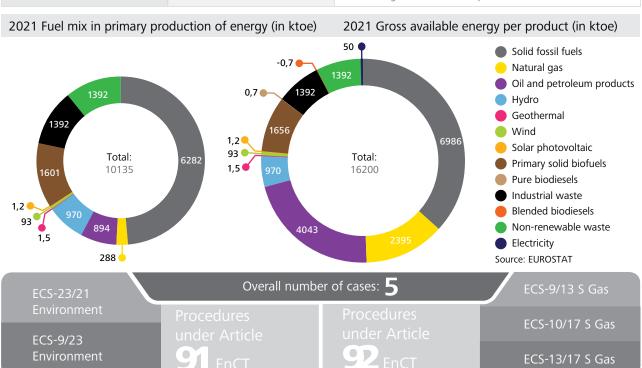


Energy Community Secretariat



IMPLEMENTATION OVERVIEW

CLUSTER		IMPLEMENTATION STATUS	2023 HIGHLIGHTS AND NEXT STEPS	
***	Markets and integration	57%	Amendments to the Serbian Energy Law as of July 2023 allow for the compliant unbundling of the electricity and gas transmission system operators. The intraday electricity market was launched in July 2023. Serbia should focus on the transposition and implementation of the Electricity Integration Package as a precondition for the coupling of its short-term markets. Serbia should certify the gas transmission and storage operators, grant third party access at the interconnection points, and remove any other obstacles to new market entrants.	
CO2	Decarbonising the energy sector	68%	Serbia submitted its draft NECP within the prescribed deadline and adopted its long-term strategies on low-emission development building renovation strategy. Serbia revised its Renewable Energy Law and conducted an inaugural auction for renewable energy. Serbia should adopt the final NECP in line with the Recommendations provided by the Secretariat.	
-	Ensuring energy security	64%	Although the Gas Storage Regulation is yet to be transposed, Serbia fulfilled its storage targets. Serbia should transpose the Security of Gas Supply and the Storage Regulations. Regulation (EU) 2019/941 on Risk-preparedness in the Electricity Sector should be transposed and its implementation should start with the designation of a competent authority.	
8	Improving the environment	56%	Serbia made moderate progress in the area of environment. Environmental impact assessments are still not regulated in a compliant manner, which should be addressed without further delay.	
<u></u>	Performance of authorities	81%	No progress was made with regard to the enforcement by AERS of unbundling of gas transmission operators or third party gas access to gas interconnection points.	





ELECTRICITY 83%



UNBUNDLING

93%

WHOLESALE MARKET

99%

The national transmission system operator EMS is only legally and functionally unbundled. Amendments to the Energy Law adopted in July 2023 establish an independent commission to exercise control over the electricity and gas transmission system operators. With these amendments, Serbia took a major step towards completing the unbundling of its transmission system operators. The regulator is expected to reassess compliance with the unbundling criteria due to a change in control over the transmission system operator, as required by the acquis.

The state-owned distribution system operator, Elektrodistribucija Srbije, is fully unbundled in accordance with the acquis. A new compliance officer was appointed in March 2023, the compliance report is yet to be published.

ACCESS TO THE SYSTEM

82%

Transparent rules govern the access to, the connection and the use of the system. Network tariffs for both transmission and distribution are established based on a published methodology, with the latest tariffs applicable since autumn 2021.

The Ministry adopted three decrees transposing the Connection Codes in September 2022. Within one year of entry into force, system operators are obliged to align their rules governing connection and obtain approval from the regulator. The transmission grid code of 2020 and the distribution grid code of 2017 are to be updated.

The Transparency Regulation is largely implemented. EMS publishes most of the information on consumption, transmission, generation and all balancing data on the platform.

The day-ahead market is operational since 2016, the intraday market was launched in July 2023. Traded volumes on the day-ahead market were increasing and resulted in 10,5 TWh in 2022. This amounts to over 30% of final electricity consumption. The state-owned company producer and supplier Elektroprivreda Srbije (EPS) continues to be a dominant player in the Serbian

The balancing market is operational but prices for balancing capacity, as well as for ancillary services are regulated by annual decisions of AERS. Such regulated prices will need to be reassessed under the new Electricity Integration Package which requires free price formation. EPS continues to be the only balancing service provider.

The REMIT Regulation is transposed and implemented.

RETAIL MARKET

electricity market.

78%

Despite all customers being free to choose their supplier, the majority continues to be supplied under regulated schemes. Only 3,8% of customers were supplied at non-regulated prices in 2022. They are predominantly big industrial customers not eligible for regulated supply. EPS continues to satisfy nearly all consumption in Serbia. A Government's recommendation on maximum retail prices of EPS at the outset of the energy crisis in 2021 led to consumers switching back to EPS.

AERS's reports for 2022 repeatedly concluded that deregulation of prices for universal service would be premature. Consequently, the appointment of a universal supplier in a market-based procedure is constantly postponed. End-user prices of regulated supply were increased several times in the reporting period, the latest increase of the average price by around 8% will apply as of 1 November 2023.

The concept of vulnerable customers is established in primary legislation. The Regulation on Energy Vulnerable Customers adopted in 2022 defines measures to protect such customers.

REGIONAL INTEGRATION

61%

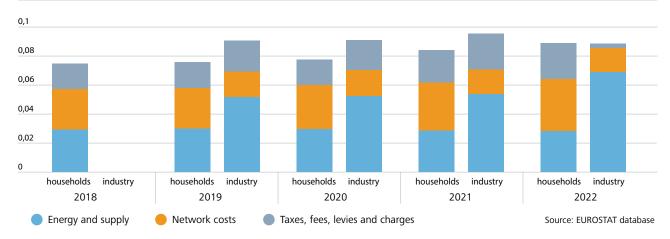
Only capacities on the interconnectors with Croatia and Bulgaria are allocated through the Joint Auction Office (JAO). For other cross-border capacities, except for Kosovo*, joint auctions are organized. For the interconnection with Kosovo* no capacity allocation takes place and respective rules are not established. This is subject to an open infringement case. There were no developments with regard to involving JAO or SEE CAO for the other interconnections.

EMS cooperates with neighbouring transmission system operators bilaterally on the exchange of balancing energy. Imbalance netting takes place with Montenegro within the control block of Montenegro, North Macedonia and Serbia. EMS became operational member of the European platform for the imbalance netting process (IGCC) in October 2022.

Amendments to the Law on Energy from 2021 allow the Government to define the conditions and manner of promoting strategic energy projects. Obligations of competent institutions and to monitor the implementation of such energy projects are also defined, as well as the procedure for preparing and implementing strategic investment projects identified as PECI and PMI projects. Other provisions of the TEN-E Regulation (EU) 347/2013 were supposed to be defined within six months from entry into force of the Law, but no further progress has been made.

There are three electricity PECI projects in Serbia, all part of the so-called Transbalkan corridor. Two are still not finished. Section 3 (2x400 kV OHL Obrenovac - Bajina Basta) is in a preparatory phase with construction to be finished in 2026. Section 4 (2x400 kV OHL Bajina Basta - Visegrad/Pljevlja) is scheduled to go into operation in 2027, depending on financing.

Average annual prices of electricity for end users per component [EUR/kWh]



GAS 30%



UNBUNDLING

10%

Serbia adopted amendments to the Energy Law in July 2023, establishing an independent commission to exercise control over the electricity and gas transmission system operators. These amendments should allow completion of the unbundling of Transportgas Srbija, the only 100% state-owned gas transmission system operator, under the ISO model. For now, neither gas transmission system operator in Serbia was certified in line with the gas acquis. Yugorosgaz Transport's certification has not progressed for the second year in a row since the unbundling plan was adopted by the Government in 2021 and presented to the European Commission.

Gastrans, exempted and certified by the regulator disregarding the Secretariat's dissenting Opinions, was licensed under the independent transmission operator model. The Banatski Dvor storage system operator is not unbundled. Its certification according to the Gas Storage Regulation is due by 31 March 2024.

Srbijagas the only distribution system operator with more than 100.000 connected customers must implement the unbundling requirements under the Gas Directive, but did not progress with this task.

ACCESS TO THE SYSTEM

9%

Since the Government transposed the Network Codes in October 2022, the gas transmission system operators did not take any action to implement them. There is still no capacity allocation at the interconnection points. For many years, the capacity at the interconnection point Horgos with Hungary, is hoarded by the incumbent shippers, preventing any new entrants to the Serbian market from more liquid Central European hubs. This

is a serious breach of Energy Community law and increases the security of supply risks for the entire region.

The entry-exit transmission tariff methodology is in place, but tariffs in line with the Tariff Network Code are still not set. The balancing network code was not implemented. Gastrans was exempt from third party access contrary to the Secretariat's Opinion. Third party access to the Banatski Dvor storage is not ensured.

WHOLESALE MARKET

37%

The wholesale market in Serbia is the most monopolised market in the Energy Community, with the monopolistic supplier, Srbijagas providing all imported quantities, mainly from Gazprom, through a long-term contract concluded last year until 2025, for approximately 3/4 of the country's annual needs. The rest is procured by Srbijagas purchases from the Hungarian market, and small quantities are produced and consumed by NIS, the oil company in Gasprom ownership.

This results in the gas market's illiquidity. A virtual trading point exists, albeit without exchange, as trade is performed via bilateral contracts.

The REMIT Regulation (EU) 1227/2011 was transposed by the regulator.

RETAIL MARKET

50%

In retail gas supply, Srbijagas is also the dominant market player. Supplier switching is established. There are 23 active retailers and 31 suppliers under public service obligations, which are bundled with distribution system operations. Srbijagas as a retail supplier is bundled with its distribution system operator which is against the Energy Community rules. Srbijagas is the only wholesale supplier for public service suppliers and is the supplier of last resort. The regulated part of the retail market is relatively small, accounting for cca 15% of the market. A negligible number of customers have switched their suppliers.

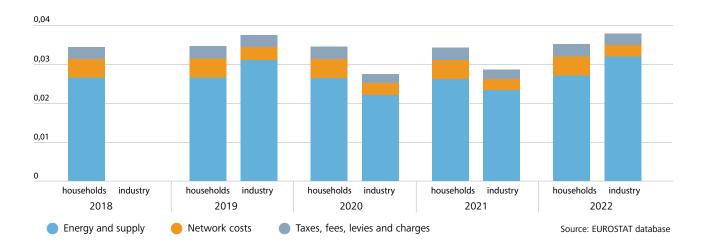
REGIONAL INTEGRATION

80%

Amendments to the Law on Energy from 2021 allow the Government to define the conditions and manner of promoting strategic energy projects. Obligations of competent institutions and to monitor the implementation of such energy projects are also defined, as well as the procedure for preparing and implementing strategic investment projects identified as PECI and PMI projects. Other provisions of the TEN-E Regulation (EU) 347/2013 were supposed to be defined within six months from entry into force of the Law, but no further progress has been made

The interconnectors Bulgaria - Serbia and Serbia - North Macedonia are PECI projects. The interconnector Bulgaria - Serbia is also a PCI priority project. It is currently under construction on Serbian territory and is scheduled to be commissioned in 2023. The project will diversify still available gas sources. In order to exploit its full potential for regional integration, third party access on the Horgos interconnector must be in place so that the pipeline can link Southeast and Central European markets. Transportgas Srbija has interconnection agreements with the adjacent transmission system operators.

Average annual prices of gas for end users per component [EUR/kWh]





Decarbonising the energy sector

GOVERNANCE / CLIMATE IMPLEMENTATION

61%



NATIONAL ENERGY AND CLIMATE PLANS

92%

Serbia submitted its draft NECP to the Secretariat. At the time of submission, it was subject to public and regional consultation.

GREENHOUSE GAS 2030 TARGET

80%

Serbia has not defined the 2030 climate target in its national legislation, but has defined it in the draft NECP. The target is in line with the 2030 targets set by the Energy Community.

NATIONAL SYSTEMS FOR CLIMATE REPORTING

48%

There is a legal basis for a national inventory system. Serbia has not nominated a lead reporter, and no report was submitted on the national system on policies and measures and projections.

NATIONAL GREENHOUSE GAS EMISSIONS POLICIES AND MEASURES / ADAPTATION

25%

Reporting obligations have been transposed in the legislation. Serbia has not nominated lead reporters for the Governance Regulation to report activities. No reporting activity was initiated.

LONG-TERM STRATEGY AND CLIMATE NEUTRALITY

63%

The legal basis for a long-term strategy has been adopted. Serbia has recently adopted a long-term strategy until 2030 with projections until 2050. While the strategy foresees coal phaseout for 2050, it lacks a climate neutrality objective.



2030 RENEWABLE ENERGY TARGETS

20%

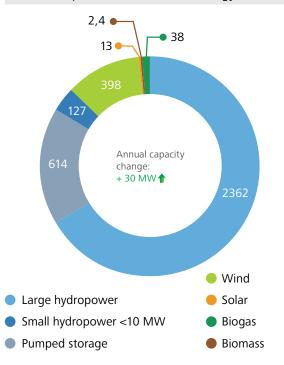
The overall target of achieving a 33,6% share of renewable energy in the gross final energy consumption, as stipulated in the draft NECP, is not in line with the 40,7% 2030 target set by the Energy Community. The overall 2030 renewable energy target is subdivided into sectorial targets for electricity (45%), transport (7%), and heating and cooling (41,4%). In line with Article 26 of the Renewable Energy Directive (REDII), Serbia has adjusted its minimum target for renewable energy in transport to 7% by 2030. The 2030 target for renewable energy in heating and cooling of 41,4% is not aligned with Article 23 of REDII.

QUALITY OF SUPPORT SCHEME

90%

Amendments to the Renewable Energy Law adopted in April 2023, supported by secondary legislation, established the preconditions for auctioning in the form of market premiums. In June 2023, the inaugural auction was held for wind (400 MW) and solar (50 MW) power plants. A total of 400 MW in onshore wind capacity was awarded across four projects, with winning prices varying from EUR 64,48 to EUR 79 per MWh. Additionally, 25,2 MW in solar photovoltaic capacity was awarded among four projects, with winning prices ranging from EUR 88,65 to EUR 98,8 per MWh.

Total Capacities of Renewable Energy 2022 (MW)



Total capacities of renewable energy (MW):

3554

Source: Ministry of Mining and Energy

SELF-CONSUMPTION AND ENERGY COMMUNITIES

75%

Serbia deploys a two-prong strategy to promote self-consumption, with net metering mechanisms for households (up to 10,8 kW) and net billing for industries (up to 150 kW). Amendments to the Renewable Energy Law have paved the way for the introduction of renewable energy communities in accordance with REDII requirements. However, the actual implementation is still missing.

GUARANTEES OF ORIGIN

65%

Currently, Serbia is the only Contracting Party to have successfully implemented a functional guarantees of origin (GOs) system for electricity, which includes the adoption of disclosure rules and the publication of a national residual mix. Its issuing body EMS, become a member of the Association of Issuing Bodies (AIB). However, the existing legal framework envisages the issuance of GOs solely for renewable electricity without encompassing other energy carriers as required by the REDII.

SUSTAINABILITY CRITERIA FOR BIOFUELS, BIOLIQUIDS/BIOMASS FUELS

50%

Amendments to the Renewable Energy Law in Serbia created the legal framework for incorporating sustainability and greenhouse gas emissions criteria. To achieve full alignment with RE-DII requirements, the decree on sustainability and greenhouse gas emissions savings criteria for biofuels, bioliquids, and biomass was adopted in October 2023.

RENEWABLE ENERGY IN HEATING AND COOLING

83%

Programmes for the renovation of residential buildings implemented in 2023 incentivise, among others, the purchase of heat pumps. The Ministry established a programme to support eleven district heating systems with the installation of renewables-based technologies. The potential for utilising renewable energy in district heating would require further support from local authorities in line with Article 71 of the Renewable Energy Law.



2030 ENERGY EFFICIENCY TARGETS AND POLICY MEASURES

74%

The 2030 energy efficiency targets, as stipulated in the draft NECP, are only partly aligned with the 2030 targets set by the Energy Community. While the 2030 primary energy consumption target is aligned, the final energy must be aligned with the target agreed by the Energy Community (9,54 Mtoe).

Upon adoption of the Law on Energy Efficiency and Rational Use of Energy in April 2021, the remaining implementing acts were adopted during 2023. The rules on minimum criteria for energy audits and training for energy managers enhance compliance with the amended Energy Efficiency Directive (EED). The systems for monitoring of energy savings and the information system for energy audits were updated in 2023.

ENERGY EFFICIENCY IN BUILDINGS

64%

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.

ENERGY EFFICIENCY SCHEME AND FINANCING

92%

Serbia implements Article 7 target on obligation schemes through alternative measures. Previously part of National Energy Efficiency Action Plans, the reporting is now included in the draft NECP.

The Administration for Financing and Promotion of Energy Efficiency, established within the Ministry of Mining and Energy, adopted annual its programme for 2023, in line with Article 20 of EED. Financial support for energy efficiency projects in the public and residential sector is available.

ENERGY EFFICIENT PRODUCTS – LABELLING

92%

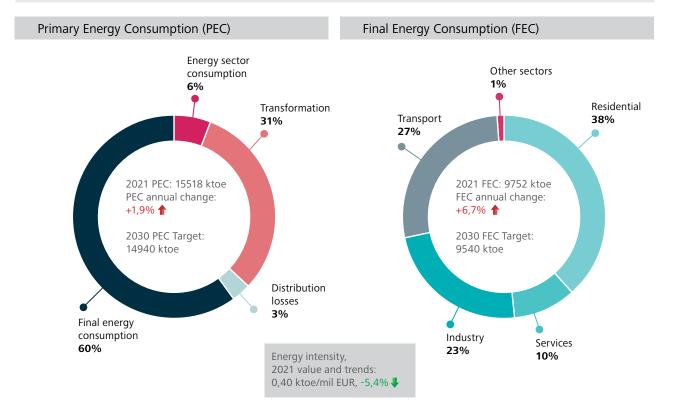
The Framework Labelling Regulation (EU) 2017/1369 was transposed by the Governmental Decree on Energy Labelling, which was adopted in May 2023. In the previous reporting period, the Ministry updated the existing rulebooks to introduce new requirements and rescaled labels for fridges and freezers, washing machines and dishwashers, electronic displays and light sources, as required by the 2022 Ministerial Council Decision.

EFFICIENCY IN HEATING AND COOLING

76%

While an assessment of the potential for efficient heating and cooling was drafted in 2023, it has not been adopted. Of 58 district heating systems, only one quarter implements consumption-based billing, while the rest apply payment per square meter. Serbia adopted a rulebook on determining the technical feasibility of installing heat meters. Rules on heat cost allocation are still missing. Implementation of consumption-based billing in all cities would be essential for improving the efficiency of district heating. In 2023, Serbia continued to support households with subsidies for the replacement of inefficient heating devices.

2021 Energy Efficiency Indicators and Trends



Source: EUROSTAT 2023 data, draft NECP and 2022 Ministerial Council Decision

	Status of transposition and implementation of energy efficiency acquis of the Clean Energy Package							
	l Government gs Renovation	Energy Efficiency Obligation Scheme	Alternative Policy Measures	Metering and Billing Information for District Heating				
		20	\longleftrightarrow					
•	•	n/a						

In place In progress Not in place Source: compiled by the Energy Community Secretariat



Ensuring energy security

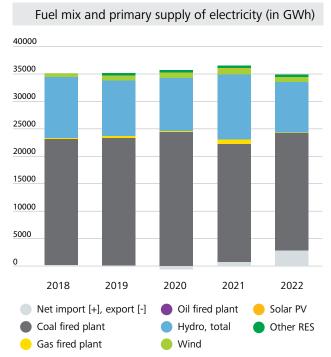


ELECTRICITY SECURITY OF SUPPLY

80%

Serbia transposed Directive 2005/89/EC and regularly submits Security of Supply Statements.

Cybersecurity in the energy sector is implemented through information and communication systems of special importance, established by the Law on Information Security. Risk assessment is also defined in this Law and performed by SRB-CERT. Inspection and supervision of information and communications technologies takes place on an annual basis and includes energy companies.



Source: Ministry of Mining and Energy, compiled by the Energy Community Secretariat



GAS SECURITY OF SUPPLY

50%

The Security of Gas Supply Regulation and the Storage Regulation have not been transposed. Yet, Serbia complied with the storage target requirements and has a security of supply

framework in place, which needs to be brought in compliance with the acquis.



OIL SECURITY OF SUPPLY

58%

Serbia adopted primary and secondary legislation on oil stocks and forms mandatory oil reserves. The current crude oil equivalent corresponds to 41 days of net imports. Serbia is not compliant with the emergency oil stocks obligation of 90 days of net imports or 61 days of inland consumption. Considering the increase in materials and oil derivatives prices, there is a need to revise the 2021 - 2026 action plan for establishing these reserves. The Emergency Response Plan is adopted, establishing the authority and assigning the responsibility for eliminating supply disruptions. The plan entails actions to assure emergency stock availability to the market in case of international decisions.

Serbia is the only Contracting Party that has submitted all required reports as specified in Directive 2009/119/EC. This includes a summary of the stock register for 2022, monthly oil statistics from January to July 2023 and the annual report analysis of the measures taken by national authorities to ensure and verify the availability and physical accessibility of emergency stocks.



Improving the environment

ENVIRONMENTAL ASSESSMENTS

43%

The breach established by the Ministerial Council concerning the incomplete transposition of the amended Environmental Impact Assessment (EIA) Directive persists. A draft of the new EIA Law was submitted to the Parliament for adoption. The draft EIA Law features significant improvements, including public consultation process with an extended timeframe of 40 days, and external expert assessment to enhance the quality of EIA reports. However, the proposal lacks a provision requiring projects to obtain the development consent only after the EIA process is finalized. Instead the EIA is required only at the stage of commencement of works. The Secretariat has already identified this breach in the applicable legislation, deviating from the fundamental requirement of Article 2(1) of the EIA Directive. Furthermore, the draft law lacks mechanisms to assess projects that have been carried out without the necessary permits and EIAs, and clear timeframes. This absence opens the possibility for developers to circumvent the EIA.

The draft Law on Strategic Environmental Assessment (SEA) has been submitted to the Parliament, which, upon adoption, will transpose the SEA Directive. Serbia has initiated the SEA process for the draft National Energy and Climate Plan (NECP) and has engaged in a transboundary process. The outcome of this consultation process is still pending.

LARGE COMBUSTION PLANTS

60%

Serbia complied with its reporting obligations under the Large Combustion Plants Directive for the reporting year 2022. Emissions of nitrogen oxides and dust have decreased, while sulphur dioxide emissions increased. Compliance with the ceilings for dust was maintained for the fourth consecutive year. Significant non-compliance in the case of sulphur dioxide however still persists. An infringement procedure for non-compliance with the NERP ceilings has been opened in March 2021. Out of the four large combustion plants operating under the opt-out regime, TPP Morava has already reached the end of its 20.000 hours limit, for which the Secretariat also opened infringement proceedings. The end of 2023 marks the end of this implementation alternative for all other opted-out plants. These units cannot be operated after 1 January 2024.

SULPHUR IN FUELS

92%

With legislation in force since December 2020, Serbia has complied with the provisions of the Sulphur in Fuels Directive also related to heavy fuel oil. Amendments to the Rulebook related to the requirements for marine fuels are being drafted. The annual fuel quality monitoring programme foresees the sampling and analysis of heavy fuel oil and gas oil.

NATURE PROTECTION

67%

Efforts to establish Natura 2000 sites continue, with the current proposal encompassing 277 potential Sites of Community Interest and 85 Special Protection Areas for Birds, as part of future Natura 2000 network of Serbia. This proposal covers approximately 35% of Serbia's territory.

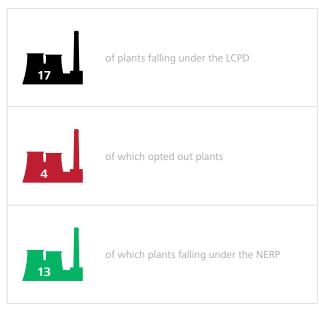
Additionally, five Pilot Management Plans are ready for approval. The national action plan for bird conservation and the National Red List for bird species is delayed. Challenges persist in terms of institutional and human resource capacity, both at the national and local levels, in the area of nature conservation. Additionally, the ban on constructing small hydropower plants in protected areas, introduced through the Law on the Use of Renewable Energy Sources, does not require the appropriate assessment of the ecological network.

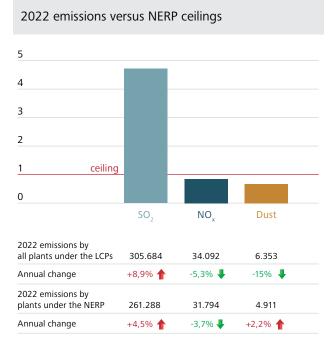
ENVIRONMENTAL LIABILITY

10%

Serbia has transposed certain provisions of the Environmental Liability Directive in the Law on Environmental Protection. The Law on Liability for Environmental Damage has not been adopted.

Installations under the Large Combustion Plants Directive





Source: compiled by the Energy Community Secretariat

Amount of operational hours used from opt-out period

Termoelektrana Kolubara A3 (boilers 3, 4, 5)	Expected expiry of opt-out period	April 2023
(bollets 3, 4, 3)	Remaining hours	1.165
	Operating hours consumed in 2018 - 2022	18.835
Termoelektrana Morava	Expected expiry of opt-out period:*	EXPIRED
\Box	Remaining hours	0
	Operating hours consumed in 2018 - 2022	23.051
Termoelektrana Kolubara A3 (boiler 1)	Expected expiry of opt-out period	April 2023
(boller 1)	Remaining hours	1.122
	Operating hours consumed in 2018 - 2022	18.878
Termoelektrana Kolubara A5	Expected expiry of opt-out period	November 2023
$\overline{\mathbf{y}}$	Remaining hours	3.701
	Operating hours consumed in 2018 - 2022	16.299

 $^{^*}$ Calculations for the expected expiry of the opt-out period are based on 2018 - 2022 average load factor. Source: compiled by the Energy Community Secretariat



Performance of authorities



REGULATORY AUTHORITY

77%

The legal setup governing the Energy Agency of the Republic of Serbia (AERS) is largely in line with the Energy Community legislation. However, the autonomy of the management related to internal organization and the use of the annual budget is limited by the requirement of the Parliament to adopt statutes and hire additional staff. Furthermore, the penalties imposed by AERS are limited in terms of scope and magnitude.

In 2023, AERS approved amendments to the electricity market code, electricity pricing methodologies and a methodology for natural gas distribution charges. It also approved the electricity distribution network development plan.

No progress was made regarding AERS's enforcement of unbundling of natural gas network operators or third party gas access to gas interconnection points. Certification of the electricity transmission system operator EMS in line with the Secretariat's requirements depends on the establishment of a new body (Republic Commission on Energy Networks) in control of network operators. The regulator still took no action to enable third party access to gas interconnection point Horgos. AERS also continues to set market prices. There is no record of AERS performing enforcement actions yet.



COMPETITION AUTHORITY

70%

In the reporting period, the Commission for Protection of Competition again limited its enforcement activity in the energy sector to the clearing of one merger. Full compliance with its

obligations under the Treaty would require effective enforcement of the competition acquis in the energy sectors.



STATE AID AUTHORITY

80%

In the reporting period, the Commission for State Aid Control reviewed the support granted by the Ministry of Energy to Elektroprivreda Srbija for the implementation of a high-efficiency cogeneration project at Nikola Tesla A TPP, as well as for the

construction of the Obrenovac-New Belgrade heating pipeline and found it to be in compliance with the criteria for State aid for environmental protection and energy.



STATISTICAL AUTHORITY

100%

The Statistical Office of the Republic of Serbia (SORS) is the main producer of national energy statistics. The five annual question-naires with 2021 data are transmitted on time and published by EUROSTAT, together with the disaggregated data on energy consumption of households and the questionnaire on renewables shares in 2021. Mini-questionnaires with the preliminary data for 2022 were also compiled and transmitted to EUROSTAT.

SORS is responsible for disseminating monthly data. In cooperation with the Ministry of Mining and Energy, monthly electric-

ity, coal, natural gas and oil data including oil stocks data are collected and transmitted to EUROSTAT.

Bi-annual prices of electricity and natural gas for end users in industry and households per consumption band, as well as the price breakdown per main components, are submitted to EUROSTAT in accordance with the acquis. The quality reports on electricity and natural gas price statistics are submitted to EUROSTAT and published.