



Annual Implementation Report

Energy Community Secretariat

1 November 2021

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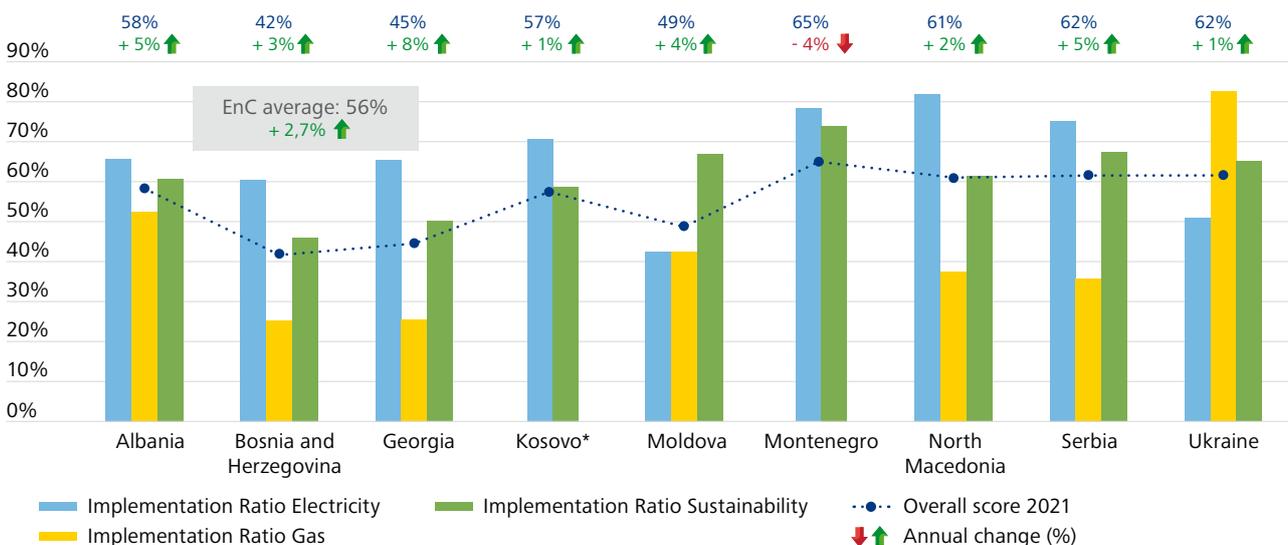
01 State of Implementation

Staying on track when the ride gets bumpy

There are two vantage points to review the past reporting period from November 2020 to November 2021: its beginning and its end, which of course is nothing but another beginning. Both points in time can be described as crises. When we wrapped up the last Implementation Report, the implementation efforts by the Contracting Parties had just been stress-tested by the Covid-19 pandemic. Looking back from today's perspective, we cannot help the bias of the current and unprecedented global surge of energy prices spreading also across Energy Community's energy markets. Having barely escaped the pandemic, government announcements of possible interventions in their energy sector in response to the crisis could further fuel the energy prices. While interventions are legitimate to the extent they address the impact of the price hike and protect vulnerable customers, they become problematic when such interventions are not proportionate in scope or in time, and when the reforms of energy market governance, having sometimes only recently been aligned with the European Union's, are being called into question. While these measures can only be of a short duration, a long-term solution should result from two of the key values the Energy Community is built on: integrated markets and decarbonisation.

As the energy crisis loomed, we have seen in some days the highest electricity prices in Europe recorded on the day-ahead market in Serbia which is not yet coupled. This proved that small isolated markets are more prone to price volatility and that their integration at regional and pan-European level was never more pertinent. The same goes for the decarbonisation path the Energy Community has been embarking on in the footsteps of the Green Deal. An increasing number of Contracting Parties have formally or implicitly accepted that coal and lignite have no future in their energy mix in the mid-term. The full potential of renewable energy is tapped where a stable legal framework and competitive auctions for market-based support schemes have been implemented. Several Contracting Parties have adopted climate laws while carbon pricing – arguably the most effective instrument in the Green Deal's regulatory toolbox – has remained a rare exemption. The rather reluctant endorsement of decarbonisation and the alignment of policies and measures with the European Union's may be choked off by reactions to the energy price surge where governments do not stay the course. For now, domestic lignite and coal-generated power are again in high demand. What matters is that the Contracting Parties do not lose sight of the decarbonization objective in this situation, and follow the transition trail blazed by the European Union. Against this backdrop, the strong signals to be sent by

Overview of Implementation Performance by Contracting Parties

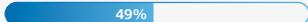
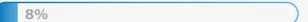
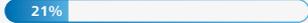
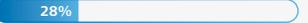
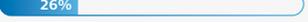
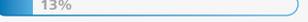
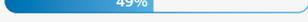
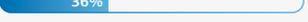
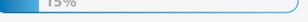
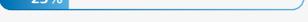
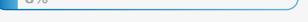
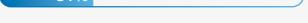
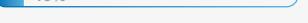
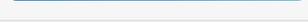
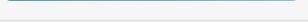
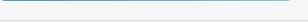


A detailed description of the methodology used for calculating the implementation indicators is available on pages 209 - 210 of this report.

Source: compiled by the Energy Community Secretariat

1 Throughout this Implementation Report, this designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo declaration of independence.

Overview of Transposition Performance by Contracting Parties

			
Albania	 49%	 44%	 8%
Bosnia and Herzegovina	 21%	 51%	 28%
Georgia	 42%	 47%	 11%
Kosovo*	 62%	 26%	 13%
Moldova	 49%	 36%	 15%
Montenegro	 69%	 23%	 8%
North Macedonia	 59%	 31%	 10%
Serbia	 67%	 26%	 8%
Ukraine	 46%	 44%	 10%



Full transposition or significant progress



Partial transposition and ongoing activities



No transposition progress

This summary table groups together all the transposition assessment indicators displayed in the implementation tables of the nine Contracting Parties.

Source: compiled by the Energy Community Secretariat

the Ministerial Council 2021 are highly topical: a decarbonisation roadmap for the Energy Community, the incorporation of the Clean Energy Package and a step further towards meaningful 2030 targets. But we will also not conceal that more support will be needed – a Green Marshall Fund for the Energy Community – to make sure that the transformation is feasible and just. Support should be given to those who respect their commitments and are ready to move further ahead in taking some of the Green Deal's key regulatory instruments such as carbon pricing on board.

While the last twelve months may look dramatic from this November's vantage point, looking at the full period gives a more balanced picture. Generally speaking, most Contracting Parties made progress in important areas but continue to lag behind in others: Albania unbundled the distribution system operator and established a balancing market, but has not yet established a spot market for electricity. Bosnia and Herzegovina unbundled the first transmission system operator in line with the Third Energy Package, but has still not even transposed the Second Energy Package. Georgia pushed ahead in terms of organized markets for electricity and gas, but has not yet unbundled its transmission system operators. Kosovo* is preparing for an energy sector post-coal, while market liberalization has stalled. In Moldova, the current crisis acutely reveals the weaknesses of the country's energy sector governance which is in need of a significant upgrade. Montenegro is finalizing the go-live of its spot market as the second country in the Western Balkans, but needs to revamp or replace its coal-fired power plant. North Macedonia has finally resolved a dispute paralyzing gas sector reforms and committed to coal-phase out by 2028 but has done

little in terms of power market reform. Serbia upgraded its legal framework and thus boosted the renewable energy sector in particular but does not rectify some straightforward cases of non-compliance. Ukraine is taking further steps towards consolidating its market framework in electricity and gas, but still needs to ensure stability and viability of some key market players.

Among the open issues to be addressed in the upcoming period, three deserve special attention: electricity market integration, environmental protection and decarbonisation.

Without further integrating their power sectors, the domestic markets (which are of small scale, with the exception of Ukraine) are economically sub-optimal, non-transparent and do not provide the maximum flexibility for further up-take of renewable energy. This is even more deplorable as the rate of interconnection is way above the European average, and allocating the existing capacities for trade is unduly restricted. Market integration and market coupling has always been among the biggest challenges in the Energy Community. Closing the gap by implementing the European legislative package on capacity allocation, balancing and system operation remains high on the agenda. It is not made easier by the fact that the European regulatory framework is, and at the current state of Energy Community law: cannot be reciprocally applied by the neighbouring EU Member State. Negotiations to amend the Energy Community Treaty to that effect have been going on for years, now it is high time for pragmatic solutions.

The Treaty reform negotiations have also not yet yielded results in addressing another weak spot of the Energy Community gov-

ernance: the absence of proportionate and deterrent financial penalties for breaches of the Treaty, to replace the ineffective mechanism of political measures. This is of particular relevance for the compliance with the environmental *acquis communautaire*, where coal-induced pollution in several Contracting Parties exceeds drastically the unambiguous thresholds agreed under the Large Combustion Plants Directive. Without a functioning penalty system, the Contracting Parties concerned will continue not to respect their own commitments and the rule of law. Respecting their commitments to implement the Energy Community rules is the Contracting Parties' main pledge for participating in the pan-European energy market on equal footing.

The axiomatic requirement of implementation and enforcement is to be resolved also with the perspective of credibly engaging in further decarbonisation activities. The lack of pricing in externalities resulting from carbon emissions in the energy and industry sectors widens the gap with the European Union,

where carbon prices have been picking up. The European Commission's proposal for a carbon border adjustment mechanism to address the risks of carbon leakage from economic sectors including electricity generation puts Contracting Parties on the spot. While the discussion on carbon pricing has only started, and will depend on further efforts in building up reliable monitoring, reporting and verification systems, it is one of the measures to be reflected also in the National Energy and Climate Plans (NECPs) for 2030. Most Contracting Parties are about to finalize their first NECPs, which need to be updated once the Energy Community has agreed on a set of targets for emission reduction, increase of renewables and energy savings. In the wake of the Paris Agreement and in the absence of most efficient carbon pricing, targets and plans have become second best instruments to manage the energy transition, helping to build up demand for investment in green fuels and technology. If followed-up by effective implementation, they still have a potential for the Contracting Parties.



Janez Kopač



Dirk Buschle

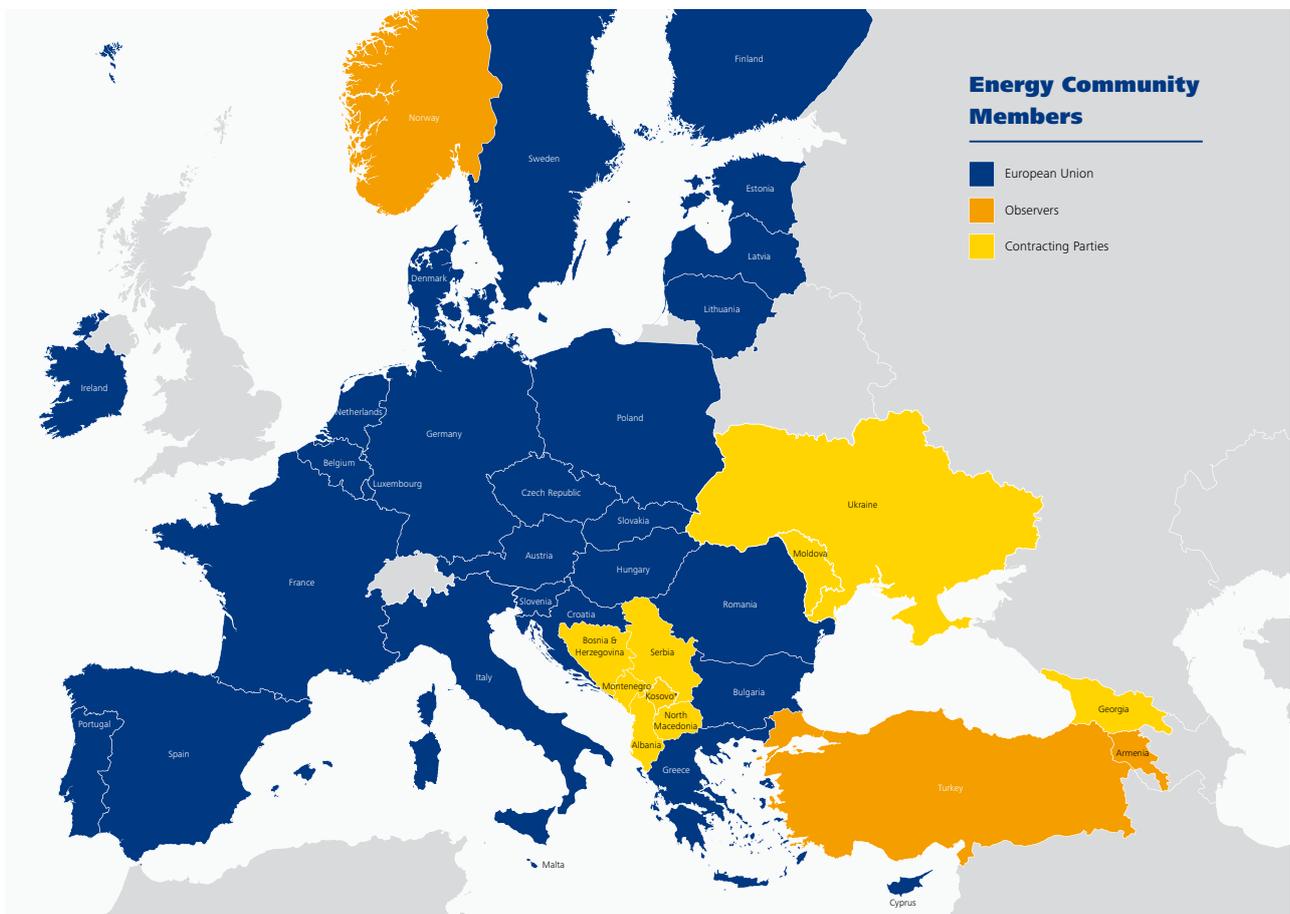


02 Introduction

a. Presenting the Energy Community

The Energy Community extends the European Union (EU) internal energy market to its neighbouring countries. The principle objectives of the Energy Community are to create a regulatory

and market framework which is capable of attracting investments for a stable and continuous energy supply. By signing the Energy Community Treaty, the Contracting Parties committed to implementing key EU energy legislation within a fixed timeframe.



b. Members

The Treaty establishing the Energy Community was signed in October 2005 in Athens. Following ratification by all Parties, the Treaty entered into force on 1 July 2006. As of 15 October 2021, the Parties to the Treaty are the European Union, and nine Contracting Parties, namely Albania, Bosnia and Herzegovina, Georgia, Kosovo*, North Macedonia, Moldova, Montenegro, Serbia and Ukraine. Armenia, Norway and Turkey are Observers under Article 96 of the Treaty.

c. Institutional setting

The Energy Community has its own institutional framework. The highest decision-making body is the Ministerial Council, which meets once a year to establish key priorities and adopt new legislation.

The Energy Community Secretariat, based in Vienna, is independent and performs the day-to-day work of the Community. The Secretariat is responsible for reviewing the progress made by the countries in transposing and implementing European energy law incorporated by the Energy Community Treaty.

d. Dispute settlement

The Energy Community Treaty provides for a dispute settlement procedure, which is meant to ensure the enforcement of the commitments under the Treaty.

A preliminary procedure precedes the submission of a case of non-compliance to the Ministerial Council under Article 91 of the Treaty. It may be initiated by the Secretariat by way of an Opening Letter to be followed, as the case may be, by a Reasoned Opinion and Reasoned Request to the Ministerial Council. The procedure is closed upon compliance by the Party concerned with its obligations under the Treaty at any time of the preliminary procedure or with a decision of the Ministerial Council. If a breach identified by the Ministerial Council has not been rectified, a procedure for a decision under Article 92 of the Treaty may be initiated. If a Party to the Treaty persistently fails to comply with its obligations, the Ministerial Council may suspend certain rights derived from the application of the Treaty, including voting rights and right to participate in meetings or mechanisms provided for in the Treaty.

The Report includes open cases under both Article 91 and Article 92 of the Treaty, as well as cases where the procedure under Article 91 of the Treaty has been closed with the adoption of a Ministerial Council decision, but the breach has not been rectified yet. Cases in which the Ministerial Council has adopted a decision under Article 91 and have been followed up by opening a procedure under Article 92 of the Treaty, are reflected only in the boxes related to Article 92.

It also includes cases where the breaches are not rectified despite adoption of Ministerial Council decisions establishing a serious and persistent breach or imposing measures under Article 92 of the Treaty.

e. Acquis

Since 2006, the Energy Community acquis has significantly evolved to incorporate new directives and regulations. Presently, the acquis covers legislation on electricity, gas, oil, infrastructure, renewable energy, energy efficiency, competition and State aid, environment, statistics, climate and cybersecurity.

The 2021 Ministerial Council is to decide on a total of six new legal acts in the area of electricity, gas, renewable energy, energy efficiency and governance. In addition, the Energy Community is in the process of adopting additional network codes and guidelines for electricity and gas. All five gas and three out of the eight electricity codes have already been incorporated into the acquis.

The tables below display the core Energy Community acquis communautaire presently in force². The implementation deadlines have been set by the respective Ministerial Council decisions. Due to their later accession, some of the implementation deadlines differ for Moldova (2010), Ukraine (2011) and Georgia (2017).

 Acquis on Electricity
Directive 2009/72/EC concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC
Regulation (EC) 714/2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) 1228/2003
Regulation (EU) 838/2010 on laying down guidelines relating to the inter-transmission system operator compensation mechanism and a common regulatory approach to transmission charging
Regulation (EU) 543/2013 on submission and publication of data in electricity markets and amending Annex I to Regulation (EC) 714/2009
Regulation (EU) 2016/1388 establishing a network code on demand connection
Regulation (EU) 2016/631 establishing a network code on requirements for grid connection of generators
Regulation (EU) 2016/1447 establishing a network code on requirements for grid connection of high voltage direct current systems and direct current-connected power park modules
Regulation (EU) 1227/2011 on wholesale energy market integrity and transparency

² Available on the Energy Community website: <https://www.energy-community.org/legal/acquis.html>.



Acquis on Gas

Directive 2009/73/EC concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC

Regulation (EC) 715/2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) 1775/2005

Regulation (EU) 2015/703 establishing a network code on interoperability and data exchange rules

Regulation (EU) 2017/459 establishing a network code on capacity allocation mechanisms in gas transmission systems and repealing Regulation (EU) 984/2013

Regulation (EU) 2017/460 establishing a network code on harmonized transmission tariff structures for gas

Regulation (EU) 1227/2011 on wholesale energy market integrity and transparency

Regulation (EU) 312/2014 establishing a network code on gas balancing of transmission networks



Acquis on Security of Supply

Directive 2005/89/EC concerning measures to safeguard security of electricity supply and infrastructure investment

Directive 2004/67/EC concerning measures to safeguard security of natural gas supply



Acquis on Infrastructure

Regulation (EU) 347/2013 on guidelines for trans-European energy infrastructure



Acquis on Environment

Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment, as amended by Directive 2014/52/EU

Directive (EU) 2016/802 relating to a reduction in the sulphur content of certain liquid fuels

Commission Implementing Decision (EU) 2015/253 laying down the rules concerning the sampling and reporting under Council Directive 1999/32/EC as regards the sulphur content of marine fuels

Directive 2001/80/EC on the limitation of emissions of certain pollutants into the air from large combustion plants

Chapter III, Annex V and Articles 72(3)-(4) of Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control)

Article 4(2) of Directive 79/409/EEC on the conservation of wild birds

Directive 2004/35/EC on environmental liability with regard to the prevention and remedying of environmental damage, as amended by Directive 2006/21/EC, Directive 2003/31/EC and Directive 2013/30/EU

Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment



Acquis on Renewable Energy

Directive 2009/28/EC on the promotion of the use of energy from renewable sources



Acquis on Energy Efficiency

Directive 2012/27/EU on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC

Directive 2010/31/EU on the energy performance of buildings

Regulation (EU) 2017/1369 setting a framework for energy labelling and repealing Directive 2010/30/EU



Acquis on Oil

Council Directive 2009/119/EC imposing an obligation on Member States to maintain minimum stocks of crude oil and/or petroleum products

Recommendation 2018/02/MC-EnC on preparing for the implementation of Directive 98/70/EC relating to the quality of petrol and diesel fuels and amending Council Directive 93/12/EEC



Acquis on Statistics

Regulation (EC) 1099/2008 on energy statistics

Regulation (EU) 2016/1952 on European statistics on natural gas and electricity prices and repealing Directive 2008/92/EC

Implementing Regulation (EU) 2019/803 concerning the technical requirements regarding the content of quality reports on European statistics on natural gas and electricity prices pursuant to Regulation (EU) 2016/1952



Acquis on Climate

Recommendation on preparing for the development of integrated national energy and climate plans by the Contracting Parties of the Energy Community

Recommendation on preparing for the implementation of Regulation (EU) 525/2013 on a mechanism for monitoring and reporting greenhouse gas emissions



Acquis on Competition

The acquis on competition (Articles 18 and 19 of the Energy Community Treaty) rests on three pillars:

1. The prohibition of anticompetitive agreements established by Article 101 of the Treaty on the Functioning of the European Union (TFEU);
2. The prohibition of abuse of a dominant position provided for in Article 102 of the TFEU; and
3. The prohibition of State aid granted in violation of Article 107 of the TFEU.

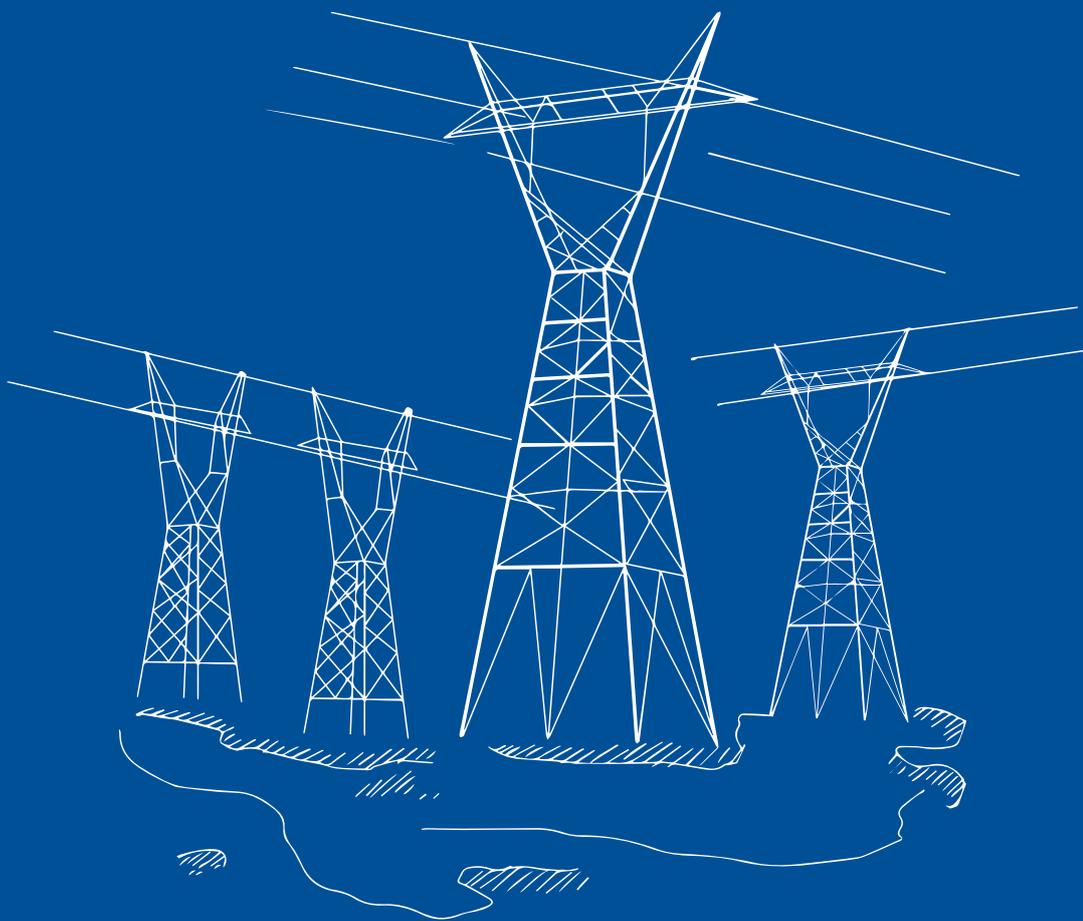


Cybersecurity

Procedural Act 2018/02/MC-EnC on the establishment of an Energy Community Coordination Group for Cybersecurity and Critical Infrastructure

03

Albania

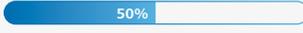
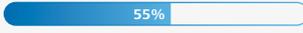
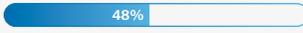
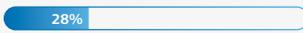






Albania

Summary Implementation

Summary Indicators	Transposition Assessment	Implementation Status	Descriptions
 Electricity		 66%	Implementation in the electricity sector of Albania is well advanced.
 Gas		 52%	Implementation in the gas sector of Albania is moderately advanced.
 Oil		 50%	Implementation in the oil sector of Albania is moderately advanced.
 Renewable Energy		 55%	Implementation in the renewable energy sector of Albania is moderately advanced.
 Energy Efficiency		 48%	Implementation in the energy efficiency sector of Albania is moderately advanced.
 Environment		 75%	Implementation in the environment sector of Albania is well advanced.
 Climate		 72%	Implementation in the climate sector of Albania is well advanced.
 Infrastructure		 28%	Implementation in the infrastructure sector of Albania is still at an early stage.
 Statistics		 59%	Implementation in the statistics sector of Albania is moderately advanced.
 Cybersecurity		 68%	Implementation in the cybersecurity sector of Albania is well advanced.

Overall number of cases: **2**

Procedure by Article **91**

ECS-4/17 Electricity

ECS-03/19 Environment



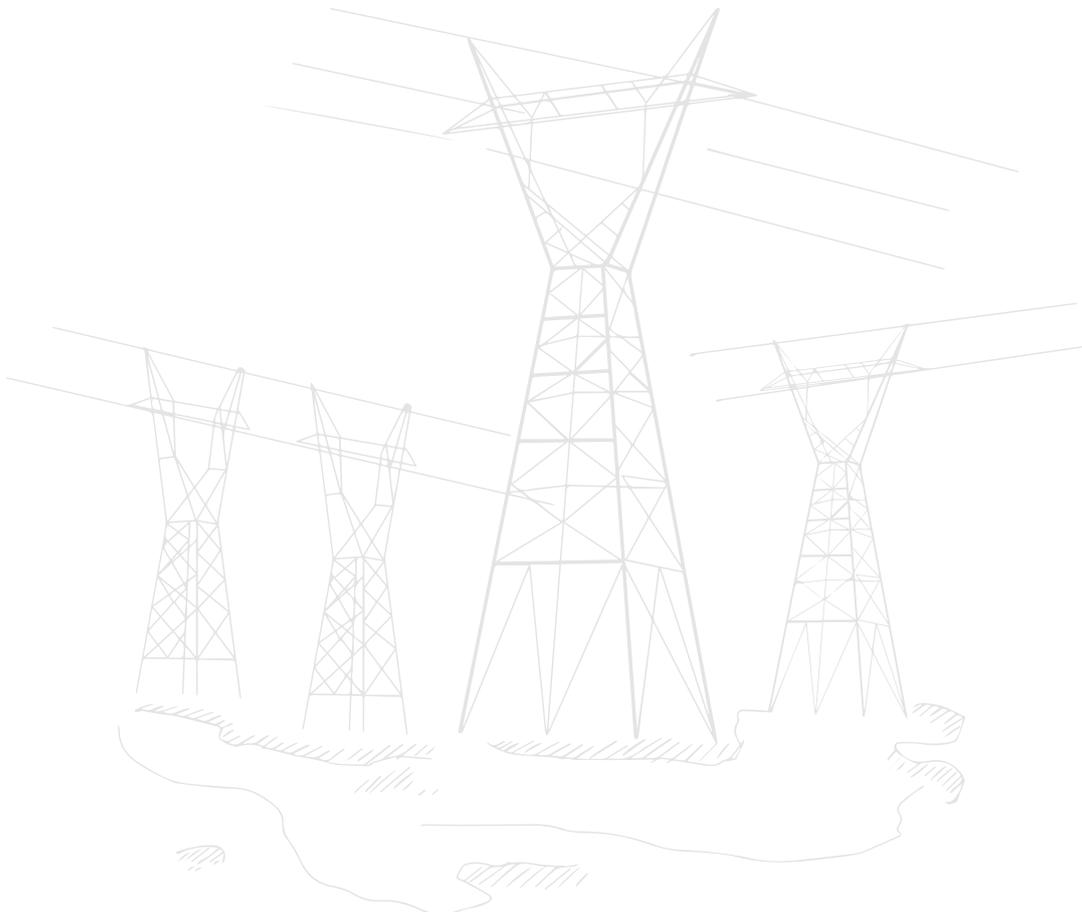
Albania

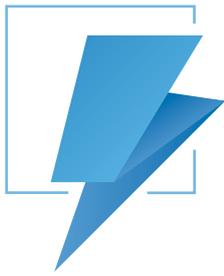
State of Energy Sector Reforms

Albania has advanced in terms of unbundling its distribution system operator for electricity, but the establishment of a power exchange is delayed. In the gas sector, the Trans Adriatic Pipeline (TAP) has become operational at the end of last year, yet without supplies to the national market. Auctions for renewable energy

projects continue successfully. The plans for comprehensive environmental protection of the rivers Vjosa and Valbona should be put in action. As other Contracting Parties, Albania needs to amend its legislation on environmental impact assessment.

Albania is in an excellent starting position for the Green Deal, with a power sector fully based on carbon-free hydropower. With the exception of traders, suppliers and a number independent hydropower and solar producers, the players on the electricity market are all state-owned. Albania is a transit country for the TAP, and hopes to increase the role of gas in its domestic energy mix as well. Discussions on making the Vlora power plant operational and connecting it to gas have not yielded concrete results. The production of electricity from solar plants is yet to begin. Like all Western Balkan Contracting Parties, Albania is well interconnected with its neighbours.





Albania Electricity

Electricity Implementation

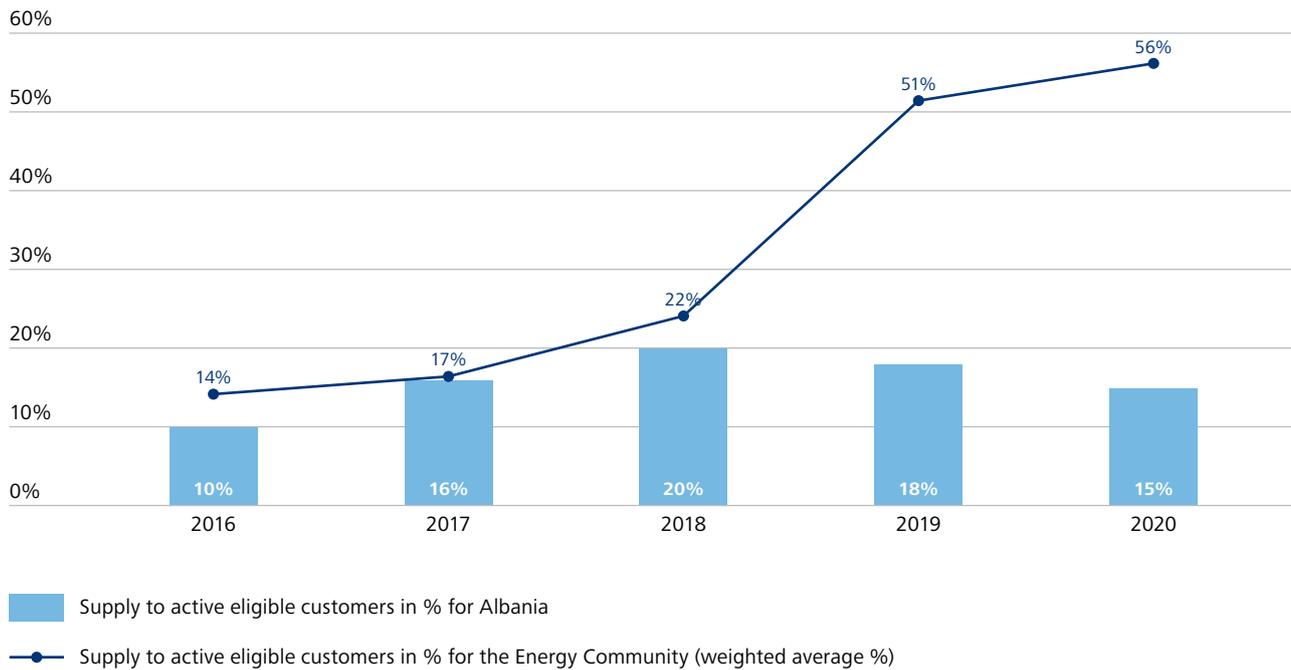
Electricity Indicators	Transposition Assessment	Implementation Status	Descriptions
Unbundling			The transmission system operator is unbundled and certified. The distribution system operator is legally unbundled.
Access to the system			Network access tariffs are approved and published. The Connection Network Codes are transposed but not implemented despite the expiry of the deadline. The Transparency Regulation is transposed and partially implemented.
Wholesale market			As long as there is no power exchange, competition is distorted by a public service obligation. A competitive balancing market is operational as of April 2021. The REMIT Regulation was transposed.
Retail market			All customers below 35 kV continue to be supplied by the universal supplier at regulated prices without the possibility of switching. The distribution system operator published standard load profiles in April 2021.
Regional integration			Cross-border capacities are allocated through the Coordinated Auction Office in South East Europe (SEE CAO), except split auctions on the interconnection with Serbia. The transmission system operators of Albania and Kosovo* implemented a common dimensioning of the balancing reserve within the Albania - Kosovo* (AK) control block, as well as joint provision of secondary control.

Albania has not made further progress in the full opening of the wholesale and retail market, with the notable exception of the balancing market.

Unbundling of the distribution system operator, which is subject to an infringement case since 2017, is still ongoing. While legal unbundling was ensured by the restructuring of the former integrated utility OSHEE into a holding of three subsidiaries, licensed respectively as universal service provider (FSHU), electricity supplier (FTL) and distribution system operator (OSSH), functional unbundling is still to be completed. In December 2020, the compliance programme of OSSH was approved by the national regulatory authority (ERE), but the monitoring of its implementation and appointment of a compliance officer is pending. The statute was amended to grant independent decision-making rights to the distribution system operator related to network management and network development.

Development of competition in the wholesale market is impeded by a non-compliant public service obligation replicating a bulk contract between state-owned companies. Under that scheme, the supplier FTL purchases electricity from the generation company KESH and renewables producers, and sells it to FSHU for needs of universal supply and to OSSH for covering distribution losses, respectively. This concerns 86% of the total electricity consumption in 2020. Such a practice eliminates the possibility for market participants to compete for these volumes. All customers below 35 kV continue to be supplied by the universal supplier, despite that the deadlines set by the Electricity Law for these customers to enter the free market have expired. Furthermore, the distribution system operator has not yet informed these customers that metering requirements for them to enter the free market were fulfilled. To allow customer switching without interval meters, the distribution system operator OSSH started publishing standard load profiles as of April 2021.

Retail Market Opening



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

The establishment of the day-ahead and intraday market is again delayed. The Albanian power exchange company ALPEX, which is responsible for setting up these markets both in Albania and in Kosovo*, is currently tendering for a service provider of electronic trading platforms and corresponding services. After two unsuccessful attempts, ALPEX has launched a third tender which is suspended due to a complaint. The day-ahead market in Albania should be operational after nine months, and the coupling with Kosovo* should commence 11 months upon signature of the contract with the successful bidder.

A major development in the electricity market was the start of a competitive balancing market as of April 2021, when balancing rules approved by ERE in 2020 entered into force. Frequency restoration reserve (FRR) is procured through weekly auctions, with four balancing service providers active so far. Balancing capacity is procured based on pay-as-bid, while for balancing energy the marginal price is used (with no price caps applied).

In addition, common dimensioning of FRR has been implemented with Kosovo* pursuant to the agreement establishing the Albania - Kosovo* (AK) control block. Automatic FRR (aFRR) is procured and activated jointly for both transmission system operators, while manually activated FRR is procured separately. A balance group arrangement between KESH and HPP Ashta ended the long-standing dispute on balance responsibility of their mutually cascading assets. The dispute was mediated by the Secretariat's Dispute Resolution and Negotiation Centre.

Implementation of the Transparency Regulation is still to be completed. Most recently, balancing market data started to be published on the ENTSO-E Transparency Platform.

All three network codes on network connections were transposed by ERE in 2018, however, transmission and distribution network codes are still to be aligned. Most recently, ERE transposed the REMIT Regulation in May 2021.



Albania

Gas

Gas Implementation

Gas Indicators	Transposition Assessment	Implementation Status	Descriptions
Unbundling			The TAP certification conditions were fulfilled before its commercial operational date on 31 December 2020. The domestic transmission system operator Albgaz was certified but the conditions in the certification decision are not yet implemented.
Access to the system			Network Codes are transposed and operationalised by TAP and Albgaz in separate codes. Implementation of third party access is performed only by TAP, in line with the exemption conditions.
Wholesale market			There is no national natural gas market. The REMIT Regulation was transposed.
Retail market			Despite the lack of a national gas market, secondary legislation regulating supply to customers was developed.
Interconnectivity			Following the operation of TAP, Albania is formally connected to gas markets. Gas emergency rules are in place. The Gas Law was amended in 2021 to transpose some elements from Regulation (EU) 2017/1938 on security of supply.

Building on the regulatory framework of the 2015 Gas Law, the start of the commercial operation of the Trans Adriatic Pipeline (TAP) in late 2020 is the most important event for the development of Albania's gas market so far. TAP, which at the moment transits gas from Azerbaijan to Italy via Albania, is certified under the independent transmission operator model following an exemption decision, and has fulfilled all certification conditions before the operational date. The on-going construction of exit facilities of TAP towards a future Albanian network is another milestone for the country's ambition to establish a gas market. In spite of the positive momentum, there was no progress in Albania developing its own gas infrastructure.

Albgaz, a state-owned company established to kick-start gas penetration in Albania, has not commenced any activities so far. It adopted the network code approved by the regulatory authority, ERE, and was unbundled and certified under the ownership model as a combined operator for transmission and distribution. Not having any meaningful infrastructure for transmission and distribution in place means that Albgaz' network code remains unimplemented in practice. In addition, Albania failed to address the certification decision's conditions requiring

the complete transfer of competences over investment decisions to the ministry exercising control over Albgaz.

TAP implements its own network code, in line with the exemption decision. It has performed the first market test and concluded that at present there is no need for additional capacity. The new phase of the 2021 market test is in progress.

ERE has progressed with the finalisation of all necessary secondary acts under its competences; it transposed the REMIT Regulation and the gas Network Codes. During the reporting period, ERE adopted metering, LNG and storage codes, as well as rules on public supply and exemptions.

Albania did not progress with the implementation of its Gas Master Plan since its adoption three years ago. The country lacks focus and coherent actions. Most notably, this is evident in the failure of Albgaz to come up with any viable solutions. The Government has not implemented its plan to switch the non-operational TPP Vlore from oil to gas, a project that has been high on Albania's agenda for many years. Albania's potential demand for gas – especially in the industrial sector – remains untapped.

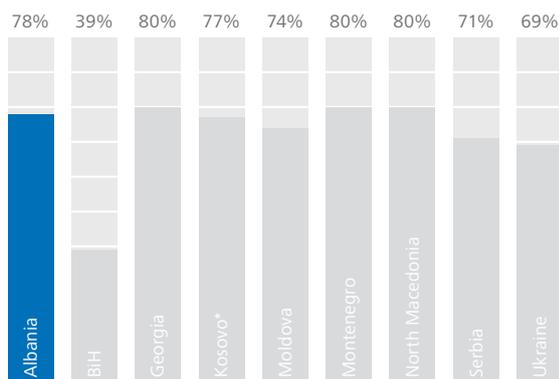


Albania

National Authorities



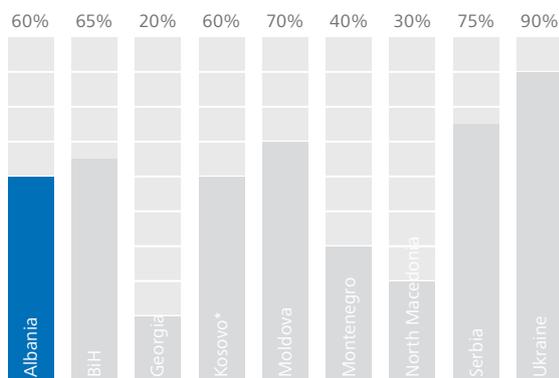
Regulatory Authority



The Energy Regulatory Entity (ERE) issued decisions that contributed to the better functioning of the retail and wholesale electricity market such as on the use of standardized load profiles. ERE also launched steps for implementation of the REMIT Regulation, approved rules for designation of the NEMO in line with EU practice, and decided on kicking-off balancing market operation in April 2021. However, a complaint about third party access and supplier switching, while finally closed, is evidence of lack of effective functional unbundling of the distribution system operator and raises concerns about regulatory independence. Moreover, the regulator neither enforced full opening of the electricity retail market nor made available a price comparison tool for customer switching. A methodology for the calculation of the renewable energy surcharge to be paid by all final consumers of electricity is pending.



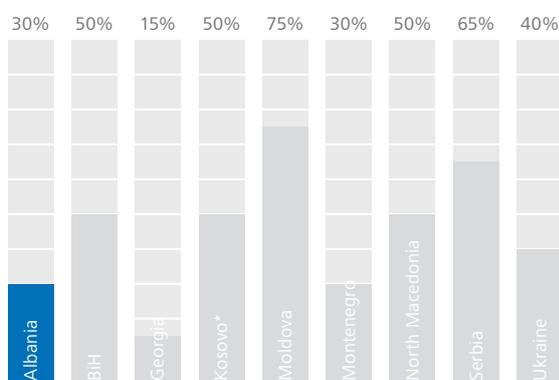
Competition Authority



The activities of the Albanian Competition Authority (ACA) in the energy sector mainly focus on opinions and recommendations regarding compliance of decisions by ERE with the Law on Protection of Competition. However, full compliance with the Treaty's obligation on enforcement of the competition acquis requires more rigorous enforcement activity by ACA.



State Aid Authority



The institutional structure and the enforcement mechanism continue to be a cause of concern. Staff originally assigned to the State Aid Control Unit (SACU), which provides technical and administrative support to the decision-making body (the State Aid Council, SAC), was transferred to other departments; they only provide support to the SAC on an ad hoc basis. Furthermore, the independence of the members of the SAC from the Ministry of Economy and Finance is questionable. Full compliance with the Treaty's obligations in the area of State aid would require an independent State aid authority with sufficient human and technical resources which actively enforces the acquis.



Albania Oil

Oil Implementation

Oil Indicators	Transposition Assessment	Implementation Status	Descriptions
Stockholding obligation			Albania's current emergency oil stockholding system is assigned to the oil industry (oil refineries and wholesale oil companies), which is required by law to hold stocks equal to at least 90 days of average annual sales. The system is not compliant with Directive 2009/119/EC. A draft Law on the Establishment, Maintenance and Management of Security Minimum Stocks of Crude Oil and Petroleum Products was prepared in 2018.
Emergency procedures			The measures to be taken in the event of a petroleum emergency have been laid down in the new draft Law. The Government is tasked to draft the National Response Plan, which should include among other measures the determination of the market price and detail the use of security stocks.
Fuel specifications of petrol, diesel and gas oil for non-road mobile machinery (NRMM)			Starting from 1 January 2009, only petrol and diesel fuels that meet the requirements of European standards are permitted to be placed into the market and used in road vehicles. The sulphur content limit in gas oil for NMRR is not defined by law.
Monitoring compliance and reporting including the lay down the rules on penalties			A system for fuel quality control is in place and specified in legislation. Fuel quality monitoring is ensured through Annual Monitoring Programmes.

For the fourth year in a row, Albania failed to adopt the draft Law on the Establishment, Maintenance and Management of Security Minimum Stocks of Crude Oil and Petroleum Products. The draft Law continued to be discussed by stakeholders, but no progress was achieved during this reporting period. The current oil stockholding system is not compliant with Directive 2009/119/EC.

The main provisions of Directive 98/70/EC were transposed into Albanian legislation through the Government's Decision on the Quality of Fuel, Petrol and Diesel. Legislation to ensure that sulphur content in gas oil for non-road mobile machinery (NMRR) is less than 10 mg/kg is scheduled to be adopted within the second half of 2022.



Albania

Renewable Energy

Renewable Energy Implementation

Renewable Energy Indicators	Transposition Assessment	Implementation Status	Descriptions
National Renewable Energy Action Plan			The share of renewable energy sources in Albania's energy consumption reached 36,67% in 2019. The deadline to meet the 2020 target of 38% was unilaterally extended until the end of 2021.
Quality of support schemes			The Renewables Law defines support schemes in the form of administratively set feed-in tariffs (FiT) and Contracts for Difference (CfD). Auctions with a fixed purchase price were conducted, envisaging conversion into CfD once a day-ahead market is operational. All renewable producers were made balance responsible on 1 April 2021. However, producers under support scheme have not yet taken balance responsibility in practice.
Grid integration			Renewable energy producers enjoy guaranteed and priority access to the grid. The network operators have developed medium and long-term plans to accommodate new renewable electricity generators to the grid.
Administrative procedures and guarantees of origin			No progress has been made to simplify administrative procedures and establish a one-stop shop. Albania has expressed interest to join the Energy Community regional initiative to establish an electronic system for guarantees of origin.
Renewable energy in transport			Provisions related to sustainability of biofuels are still not transposed and the legal framework remains completely non-compliant with Directive 2009/28/EC. Thus, biofuels, which presently make up more than 10% of the fuel market, cannot be calculated towards the target.

Albania proceeded with the implementation of auctions for renewable energy projects and drafted amendments to the existing legislation to provide clarity on the support scheme. Although the electricity sector is almost completely renewable in Albania, additional efforts are needed, in particular in heating and cooling as well as in the transport sector, to reach the overall 2020 renewables target.

In February 2021, Albania adopted a decision to prolong the revised National Renewable Energy Action Plan (NREAP) and to extend the 2020 renewable target until the end of 2021, with the aim to bridge the gap until targets for 2030 are adopted.

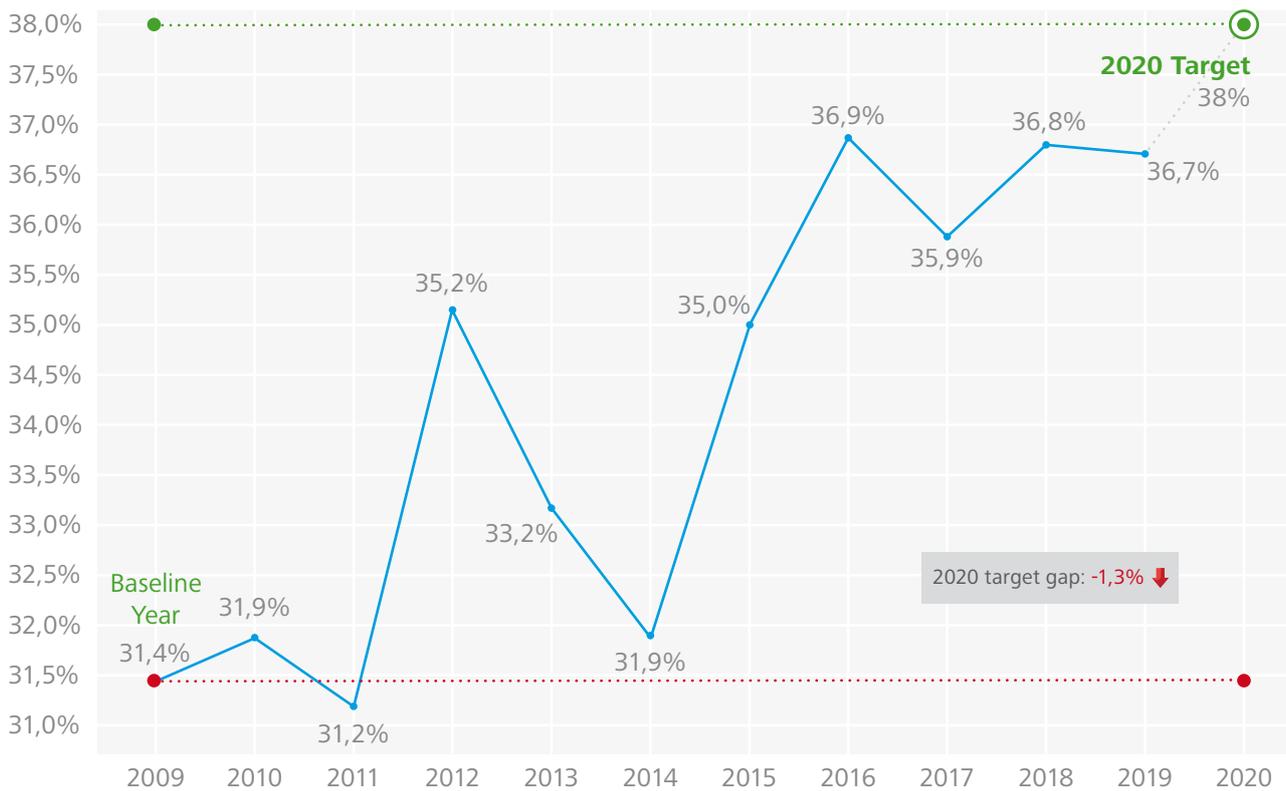
Albania's legislation enables a net-metering scheme for consumers with installed capacity up to 500 kW. Surplus electricity can be sold to the universal service supplier. However, it is not yet implement-

ed and the methodology that should define the price at which the surplus is to be redeemed is yet to be adopted.

Although envisaged by the Renewables Law, the appointment or creation of an agency responsible for renewable energy sources, which, among others, would be in charge of keeping a register of priority producers and their energy balances, has not taken place yet. The same goes for the Renewable Energy Operator, which is to act as counterparty for projects under the support scheme.

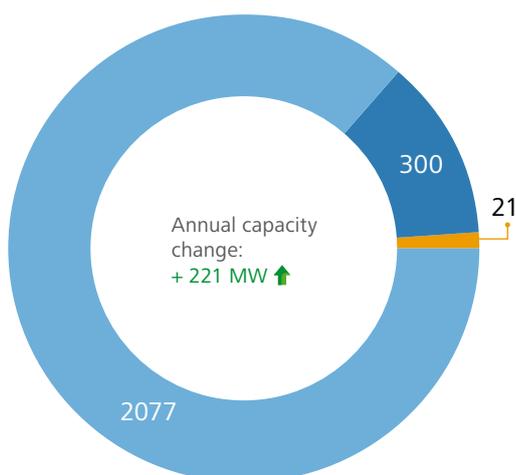
Following the progress made in conducting auctions, Albania should focus on updating its legal framework to assure clarity and predictability of the support scheme. Other priorities should be the transposition of provisions related to sustainability of biofuels and establishment of a functional electronic system for guarantees of origin.

Shares of Energy from Renewable Sources



Source: EUROSTAT

Total Capacities of Renewable Energy 2020 (MW)



- Large hydropower
- Small hydropower <10 MW
- Solar

Source: Ministry of Infrastructure and Energy

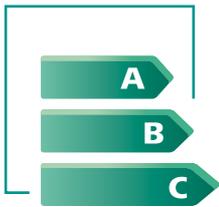
Albania's high dependence on hydropower means hydrology has a significant impact on the achievement of the 2020 target. According to the amendments to the NREAP, additional efforts are envisaged for the diversification of the electricity sector by adding 490 MW of solar PV, 150 MW of wind and 57 MW of hydropower energy by the end of 2021.

In March 2021, the Albanian Ministry of Infrastructure and Energy announced the winner of the auction for the solar power plant Spitalle with a bid of 29,89 EUR/MWh. 70 MW are envisaged to be supported via an offtake agreement for 15 years, while an additional 30 MW will be sold on the market. A power purchase agreement (PPA) is signed and being implemented.

In June 2021, Albania announced a 100 MW wind auction. Bidders can compete with projects between 10 MW and 75 MW and the winners will be awarded a 15-year power purchase agreement. Developers are invited to submit their qualifications by June 2022. This will be followed by a request for proposals from applicants successful in the first phase.

Total capacities of renewable energy (MW):

2398



Albania

Energy Efficiency

Energy Efficiency Implementation

Energy Efficiency Indicators	Transposition Assessment	Implementation Status	Descriptions
Energy efficiency targets and policy measures			Amendments to the Energy Efficiency Law adopted in March 2021 transposed Directive 2012/27/EU. 2030 energy efficiency targets as well as renovation targets for public buildings are to be set as part of the NECP. Targets and policy measures for the energy efficiency obligation have not been developed. The fifth Annual Progress Report was not submitted to the Secretariat.
Energy efficiency in buildings			Albania adopted by-laws implementing the 2016 Law on Energy Performance of Buildings, including the methodology for calculation and setting of minimal energy performance requirements and certification of buildings. A long-term building renovation strategy has not been adopted.
Energy efficiency financing			No financing framework (state fund) for energy efficiency exists. Amendments to the Energy Efficiency Law promote the development of the ESCO market, with a strong facilitating role by the Energy Efficiency Agency. Several international technical assistance and investment programmes support energy efficiency improvements, especially in the buildings sector.
Energy efficient products - labelling			There was no progress with respect to updating existing, or adopting new regulations as required by the Ministerial Council Decisions adopted in September 2014 and November 2018.
Efficiency in heating and cooling			Albania has no district heating or cooling systems. The 2021 amendments of the Energy Efficiency Law envisage development of guidelines and a comprehensive assessment of the potential for the application of high-efficiency cogeneration and efficient district heating and cooling by April 2022.

Albania made progress with the adoption of legislative amendments transposing Directive 2012/27/EU and the adoption of by-laws implementing the Energy Performance of Buildings Directive. Progress was also achieved in implementation of energy audits and production of first building energy performance certificates.

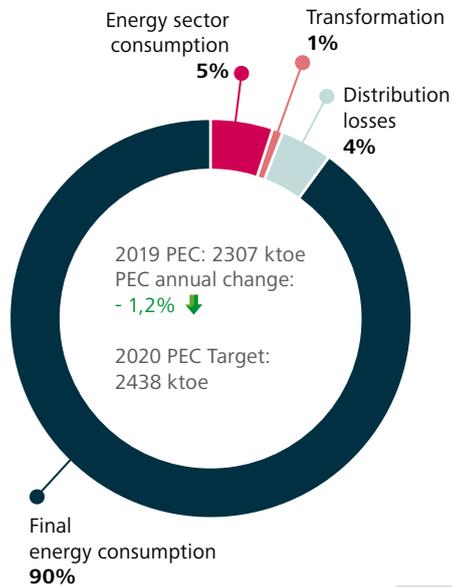
With primary legislation in place, Albania should shift its focus to implementation: adoption of by-laws to implement the Energy

Efficiency Law, including establishment of the energy efficiency obligation scheme, as well as a monitoring and reporting mechanism. The adoption of the new labelling regulations also remains a priority.

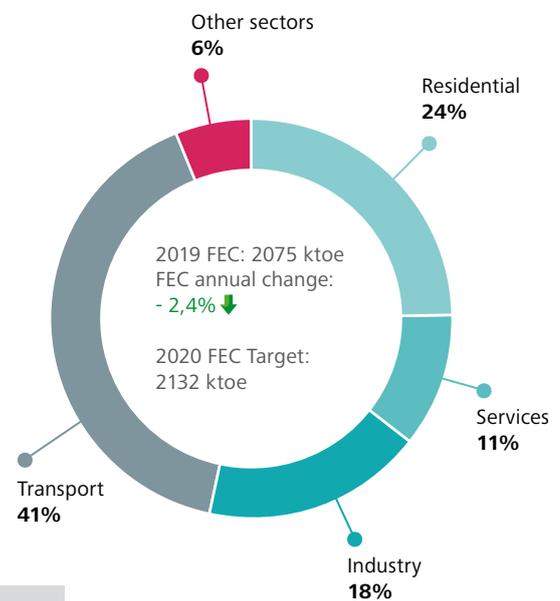
The country should focus on the timely finalization and adoption of its integrated National Energy and Climate Plan (NECP), which is important for the design and implementation of the energy efficiency targets and policy measures by 2030.

2019 Energy Efficiency Indicators and Trends

Primary Energy Consumption (PEC)



Final Energy Consumption (FEC)



Energy intensity,
2019 value and trends:
0,21 ktoe/mil EUR, -2,1% ↓

Source: EUROSTAT 2021 data and Contracting Party's Reports

Energy Efficient Products – Overview of Implementation of Labelling Regulation

FRAMEWORK REGULATION*											
Household dishwashers	●										
Fridges and freezers*		●									
Household washing machines			●								
Televisions				●							
Air conditioners and fans*					●						
Household tumble driers						●					
Electrical lamps and luminaires							●				
Solid fuel boilers*								●			
Space heaters*									●		
Water heaters & storage tanks										●	
Domestic ovens and range hoods											●

● Adopted and implemented ● Compliance or implementation issues detected ● No progress with adoption/implementation

* The new labelling package adopted by the Ministerial Council in November 2018 was assessed, as the transposition deadline expired in January 2020.

Source: multiple sources of data (EECG reports, NEEAPs etc.), compiled by the Energy Community Secretariat



Albania Environment

Environment Implementation

Environment Indicators	Transposition Assessment	Implementation Status	Descriptions
Environmental impact assessment (EIA) and strategic environmental assessment (SEA)			The current EIA legal framework is only partially compliant with the acquis. The EIA Law needs to be aligned with Articles 8 and 8(a) of the EIA Directive. Secondary legislation on EIA must be adopted to ensure the Law's implementation. The SEA of plans and programmes should be conducted in parallel with the drafting of such documents.
Sulphur in fuels			Albania must ensure that the testing of fuels falling under the scope of the Directive are carried out in accordance with the standards stipulated in the transposing legislation. Secondary legislation on the quality control of sampling and analysis of the fuels is still not adopted.
Large combustions plants and industrial emissions			The thermal power plant Vlora is still not in operation, and plans to convert it into a gas-fired plant have not materialized. As any new plant, it would have to comply with the emission limit values of the Industrial Emissions Directive.
Nature protection			Borders and categories of 44 protected areas are defined by a decision of the National Territorial Council, including new areas like the Vjosa river. Individual designation decisions for each site to determine its management have not been adopted by the Government. The country's policy of limiting the development of energy projects in protected areas is in line with the goals of the Birds Directive. The capacities of the national authorities, in particular the supervisory authority and prosecutors, should be strengthened.
Environmental liability		n/a	The Law on Environment transposes most provisions of the Environmental Liability Directive into national law. Adoption of secondary legislation is still necessary to achieve full alignment with the Directive.

Amendments to the Law on Environmental Impact Assessment (EIA) were adopted in late 2020. However, they are still not in line with Articles 8 and 8(a) of Directive 2014/52/EU. Secondary legislation, in particular by-laws on certification of EIA experts and EIA screening criteria, is lacking. Concerns raised by the Secretariat related to the possibility of approving a project contrary to the decision on the preliminary EIA or the environmental EIA statement have not been addressed. Furthermore, the prospects of hydropower development on the Valbona and Vjosa rivers remain unclear. Early and effective consultations with the public as well as with other relevant national authorities in the decision-making process should be supported by various traditional and modern media and information channels.

The strategic environmental assessment (SEA) procedure for the draft NECP was initiated. SEAs should be synchronized with the preparation of the plan or programme in order to secure integration of environmental considerations.

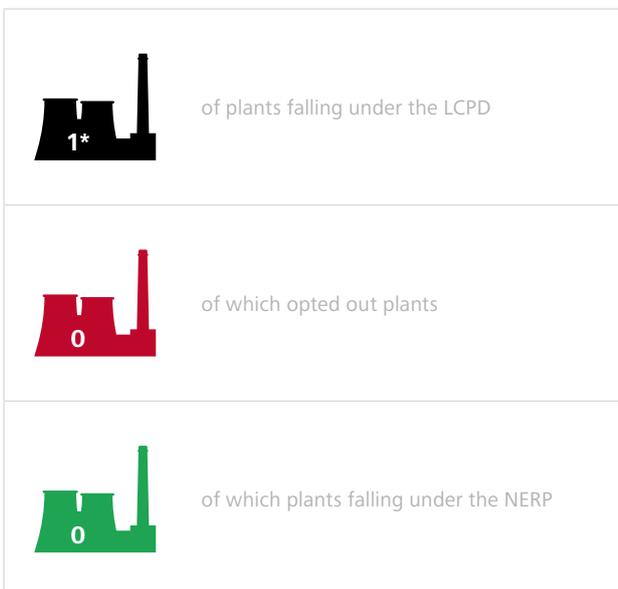
The Decision on the Quality of Certain Liquid Fuels Used for Thermal, Civil, Industrial Use and Sea Transport of June 2019 transposes the Sulphur in Fuels Directive, including provisions on marine fuels. Ministerial level decisions to implement and enforce the obligations for reduction of the sulphur content of certain liquid fuels, especially with regard to the provisions on sampling and analysis, are missing.

The only large combustion plant in Albania, the thermal power plant Vlora, is not in operation. The tender for awarding a concession for the plant was cancelled in early 2020. The project for the Fier-Vlora gas pipeline was launched in June 2020 and is still in a preparatory stage. One of the expected results of this project is to enable the plant to switch its fuel to natural gas. Such a modification is considered as a substantial change and must be made subject to an environmental impact assessment procedure. Furthermore, the new plant must comply with the emission limit values of the Industrial Emissions Directive.

On 28 December 2020, the National Territorial Council adopted a Decision on the approval of the borders of protected areas. Forty-four protected areas were identified by the Decision, including new areas like the Vjosa river classified as a nature

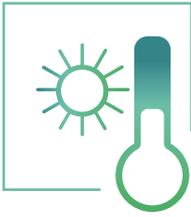
park/nature managed reserve – a category IV protected area. Individual protection decisions by the Government and management plans for each site should follow. The Government should increase the proposed protection categories for some areas, like the Vjosa river, where the international expert community assesses that a higher protection category should apply. National protected areas as well as Emerald sites were identified as no-go zones for the future development of wind farms in the latest call for auctions. The five-year ban on hunting, including the hunting of wild birds, was extended for a further five years. Although amendments introduced to the Criminal Code of Albania in 2019 include two types of criminal penalties for endangered wild fauna, the national capacities of the investigators and prosecutors remain low and insufficient.

Installations under the Large Combustion Plants Directive



* not in operation

Source: compiled by the Energy Community Secretariat



Albania Climate

Climate Indicators	Transposition Assessment	Implementation Status	Descriptions
National greenhouse gas emissions monitoring and reporting systems			The Climate Change Law was adopted in December 2020. Draft secondary legislation on a mechanism for monitoring and reporting of GHG emissions is expected to be approved by the Government in the fourth quarter of 2022; this is required to transpose Monitoring Mechanism Regulation (EU) 525/2013.
National Energy and Climate Plans (NECPs)			As the second Contracting Party, Albania submitted a draft NECP to the Secretariat for formal recommendations in July 2021.

Albania's revised National Determined Contribution (NDC2) was finalized, adopted by the Government and submitted to the UNFCCC. The first Biennial Update Report was also finalized in the course of the year and submitted to the UNFCCC Secretariat. For the first time, it will be accompanied by a National Inventory Report, providing detailed information regarding the national GHG inventory for the years 2010 - 2016 and a revision of the inventory results for the year 2009. The fourth National Communication is expected to be finalized in early 2022. Albania joined the Powering Past Coal Alliance despite having no coal in its national energy mix.

In 2019, the Government endorsed the National Climate Change Strategy, which is the country's low carbon-development strategy within the meaning of the Paris Agreement. A Climate Change Law was adopted in December 2020. A law on

fluorinated gases is currently under preparation and expected to be finalized by December 2021.

Albania is not fully compliant with Regulation (EU) 525/2013. The Ministry of Tourism and Environment currently drafts secondary legislation on a mechanism for monitoring and reporting of GHG emissions to be approved by the Government in the fourth quarter of 2022, including the institutionalization of a national GHG inventory system (currently project-based).

The Climate Change Law establishes the legal basis for the NECP, albeit provisions on its role and function as well as details on updates are missing. The draft NECP was submitted for formal recommendations to the Secretariat in July 2021. The strategic environmental assessment process was started in late summer 2021.



Albania Infrastructure

Infrastructure Implementation

Infrastructure Indicators	Transposition Assessment	Implementation Status	Descriptions
National competent authority			It is unclear whether the Ministry of Infrastructure and Energy, designated as the national competent authority, fulfils all tasks assigned to it.
Manual of procedures			The manual of procedures has not been published to date.
National regulatory authority involvement			The regulator has not published the methodology and evaluation criteria to be used to evaluate infrastructure investments.

There was no progress in the implementation of the Decision on the Approval of Practices for the Promotion of Joint, Regional Investment in the Energy Infrastructure adopted in 2018 that transposed Regulation (EU) 347/2013. The Decision obliges the national competent authority to define and publish the manual of procedures and to annually inform the Electricity and Gas Groups, including the Secretariat, about the realization and current status of Albanian regional PEI/PMI projects. It has failed to do so. It is necessary to update the Law on Power Sector as it currently fails to task the national regulatory authority with defining and publishing the methodology and criteria to evaluate investments in electricity and gas and the higher risks incurred by them.

Full implementation of the Regulation in Albania is important due to its potential to facilitate the realization of ongoing strategic infrastructure projects, particularly the 400 kV OHL interconnection between Albania and North Macedonia (PEI 2018, under construction). The project is expected to improve security of supply and overall operation of the energy system of Albania, as well as positively influence the regional market and its coupling. The same goes for the ongoing preparations for gasification and gas infrastructure projects, especially the ALKOGAP project (PEI 2020) and the Ionian Adriatic Pipeline (PMI 2020).





Albania Statistics

Statistics Implementation

Statistics Indicators	Transposition Assessment	Implementation Status	Descriptions
Annual statistics			The five annual questionnaires and the questionnaire on final energy consumption of households for 2019 were transmitted to EUROSTAT.
Monthly statistics			Monthly data on coal and petroleum products and all short-term data are missing.
Price statistics			Biannual prices of electricity charged to end-users in 2020 as well as the breakdown of price components were not reported to EUROSTAT.

Compliance with the statistics acquis in Albania declined in 2021 due to missing datasets of statistics on electricity prices.

Official statistics in Albania are in the competence of the national institute for statistics (INSTAT). However, by means of a Government decision, the National Agency for Natural Resources (AKBN), established in 2006 under the Ministry of Economy, Trade and Energy, is tasked to collect, compile and disseminate energy statistics in accordance with best international practice.

As regards annual energy statistics, including quality reporting, Albania has implemented the requirements of the acquis. AKBN has been compiling annual energy balances and annual questionnaires and submitting them to EUROSTAT in accordance with the acquis. AKBN has also reported to EUROSTAT the preliminary data for 2020.

The breakdown of energy consumption of households has also been prepared, transmitted to EUROSTAT and published. The quality report is prepared and published in accordance with the acquis.

Concerning monthly statistics, oil, electricity and natural gas data are available and transmitted to EUROSTAT, although the timeliness of transmission is not duly observed. Monthly oil data, except for secondary products and oil stocks, are submitted to

EUROSTAT and to the JODI database through the UN Statistical Division. Monthly oil statistics defined in Annex C of Regulation (EC) 1099/2008, with the view to monitor stock building obligations under the oil acquis, remain unsatisfactory. Monthly coal data are not available yet.

The prices of electricity charged to end-users in 2020 were not transmitted to EUROSTAT in accordance with the acquis. Data was transmitted until first semester 2019 for households and until second semester 2019 for industrial end-users. The breakdown of electricity prices for both households and industry in price components is still missing.

In 2020, AKBN started to collect data on prices charged to industrial end-users, as well as the breakdown of electricity prices per component pursuant to Annex II to Regulation (EU) 2016/1952. The breakdown of price components for 2020 has been prepared, but not transmitted to EUROSTAT for publication on time.

The priority should be given to transmitting the price data to EUROSTAT in the prescribed format and within the defined timelines, as well as completion of monthly data reporting. The responsible institution should be equipped with the necessary human and financial resources in order to fulfil the remaining tasks in a timely manner.



Albania Cybersecurity

Cybersecurity Implementation

Cybersecurity indicators	Transposition Assessment	Implementation Status	Descriptions
Institutions and legislation			Albania has partially transposed the cybersecurity acquis. The responsible authority NAECCS operates as the national CSIRT. Only power system operators are considered as owners of critical information infrastructure. Other energy operators should be included. An energy CSIRT should be established.
Requirements for operators and energy regulatory authority			The Law on Cybersecurity defines security measures and corresponding obligations, while cybersecurity risk assessment is conducted by NAECCS. The obligations are implemented by corresponding acts of both regulators, NAECCS and the energy regulator ERE. Measures for inter-sectoral and regional cooperation and increasing transparency are lacking.

The main legal act relevant for cybersecurity in the energy sector is the Law on Cybersecurity of 2017, which partially transposes Directive (EU) 2016/1148 and Directive 2008/114/EC, with cross-border and regional cooperation missing.

The National Authority for Electronic Certification and Cyber Security (NAECCS) was established in 2017 as a cybersecurity authority responsible for all sectors of the economy, including energy. It acts as a national focal point, cybersecurity regulator and the single Computer Security Incident Response Team (CSIRT). All Critical Information Infrastructure (CII) operators are required by the Law to establish CSIRT teams and adopt minimum security measures, which are reported and audited by NAECCS. An energy-specific CSIRT does not exist.

Based on the Law and the ENISA Methodology, NAECCS maintains a list of CII operators for all public services. In 2020, the list was approved by the Government. The communication and data infrastructures of the operators for electricity (OST, OSSH and KESH) are included.

NAECCS is also responsible for risk assessment and specifies the organizational and technical measures that all CII operators, including for energy, should follow in order to increase

the cybersecurity level. The applied methodology does not distinguish energy-specific risk assessment and management measures from other measures.

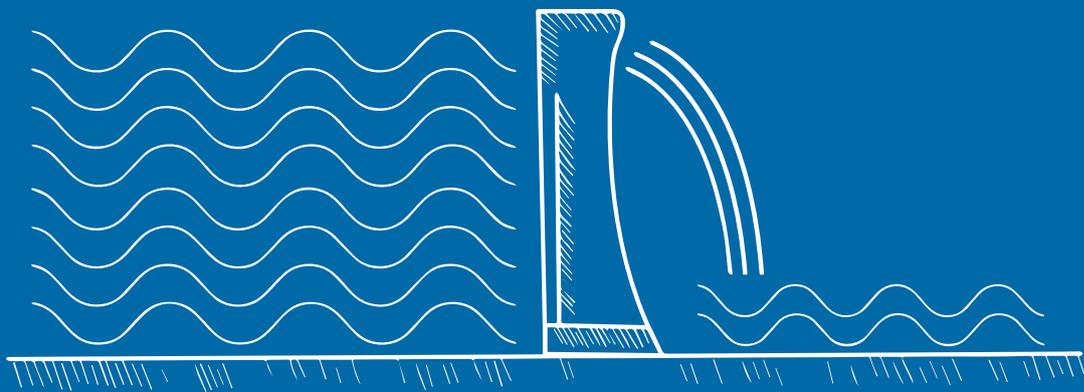
Based on its competence to promote security of energy supply, the energy regulator ERE adopted the Regulation on Cybersecurity of Critical Infrastructures in the Power Sector in 2020. It sets the terms for implementation of the obligations imposed by the Law on Cybersecurity and NAECCS's Regulation on the content and method of documenting security measures, including reporting obligations and establishment of a sectoral CSIRT.

Cybersecurity incidents notification obligations of CII operators are stipulated in the Law on Cybersecurity and subject to penalties. NAECCS has implemented an online system for their management.

A new National Strategy for Cybersecurity, adopted in December 2020, defines policy objectives also for the energy sector and aims to further align the national legal framework with EU directives and regulations. It also envisages strengthening institutional collaboration and international cooperation with strategic partners in cybersecurity and cyber defence.

04

Bosnia and Herzegovina

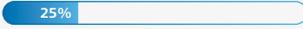
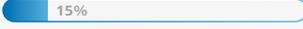
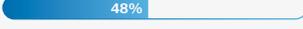






Bosnia and Herzegovina

Summary Implementation

Summary Indicators	Transposition Assessment	Implementation Status	Descriptions
 Electricity			Implementation in the electricity sector of Bosnia and Herzegovina is moderately advanced.
 Gas			Implementation in the gas sector of Bosnia and Herzegovina is still at an early stage.
 Oil			Implementation in the oil sector of Bosnia and Herzegovina is yet to begin.
 Renewable Energy			Implementation in the renewable energy sector of Bosnia and Herzegovina is moderately advanced.
 Energy Efficiency			Implementation in the energy efficiency sector of Bosnia and Herzegovina is moderately advanced.
 Environment			Implementation in the environment sector of Bosnia and Herzegovina is moderately advanced.
 Climate			Implementation in the climate sector of Bosnia and Herzegovina is moderately advanced.
 Infrastructure			Implementation in the infrastructure sector of Bosnia and Herzegovina is yet to begin.
 Statistics			Implementation in the statistics sector of Bosnia and Herzegovina is almost completed.
 Cybersecurity			Implementation in the cybersecurity sector of Bosnia and Herzegovina is still at an early stage.

ECS-1/15 Environment	Overall number of cases: 9		ECS-8/11S Gas
ECS-5/17 Electricity	Procedure by Article 91	Procedure by Article 92	ECS-2/13S Environment
ECS-10/18 State aid			ECS-6/16S Third Energy Package
ECS-1/14 Energy efficiency			
ECS-3/18 Infrastructure			
ECS-9/21 Environment			

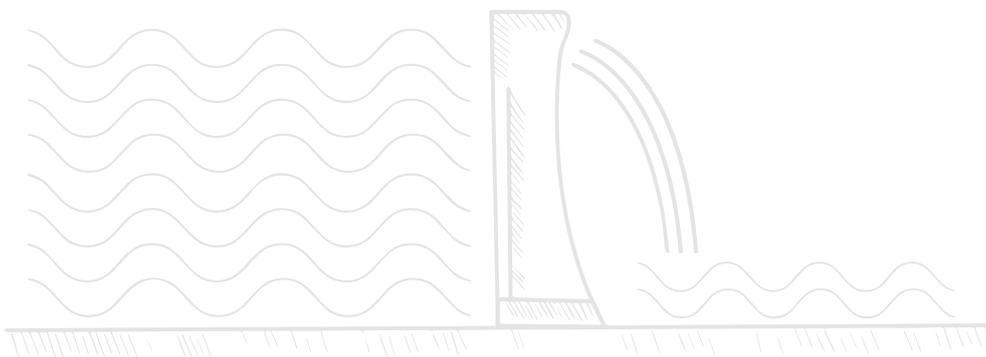


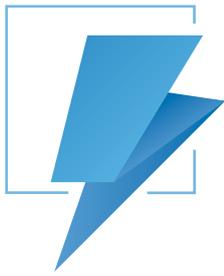
Bosnia and Herzegovina State of Energy Sector Reforms

The gap in absorbing European energy rules between Bosnia and Herzegovina and the other Contracting Parties is widening, with the Second and Third Energy Package still not being transposed on the eve of the Clean Energy Package's incorporation in the Energy Community. Pragmatism makes up for the absence of a consistent legal framework only to a limited extent, as seen by the unbundling and certification of a gas transmission

system operator in one entity and the ongoing efforts to reform the support schemes for renewable energy. Unbundling in the electricity sector and the establishment of an organized power market are blocked by the lack of a compliant law. The level of emissions from coal-fired power plants is concerning, as is the plan to build a new plant in defiance of State aid rules.

Bosnia and Herzegovina's four incumbents generate electricity predominantly from hydropower and lignite. Several projects for construction or reconstruction of lignite-fired power plants are under consideration. The country is a major exporter of electricity to the regional market, including the European Union. It purchases natural gas imported from Russia through the only interconnector with Serbia. Three wind farms are now operational in the country.





Bosnia and Herzegovina Electricity

Electricity Implementation

Electricity Indicators	Transposition Assessment	Implementation Status	Descriptions
Unbundling			Transmission system operator unbundling is not in line with the provisions of the Third Energy Package. Legal unbundling of the distribution system operators in Republika Srpska was completed, but not in Federation of Bosnia and Herzegovina. The infringement case against Bosnia and Herzegovina has not had any effect.
Access to the system			Network access is regulated. Connection Network Codes were transposed and alignment of the transmission grid code is ongoing. The Transparency Regulation is transposed but its implementation is still to be completed.
Wholesale market			The adoption of a new legal act which would enable the establishment of a day-ahead market was postponed. The balancing market and ancillary services auctions are operational. The REMIT Regulation is transposed and implemented. The new law of Republika Srpska provides for the gradual deregulation of generation prices.
Retail market			The market dominance of the three incumbent suppliers has slightly decreased in 2020, however, retail competition is yet to develop.
Regional integration			Cross-border transmission capacity is allocated through SEE CAO (with Croatia and Montenegro), or bilateral auctions (with Serbia). Cross-border cooperation agreements are in place for the exchange of balancing, ancillary services and security arrangements. Market coupling depends on the establishment of a day-ahead market.

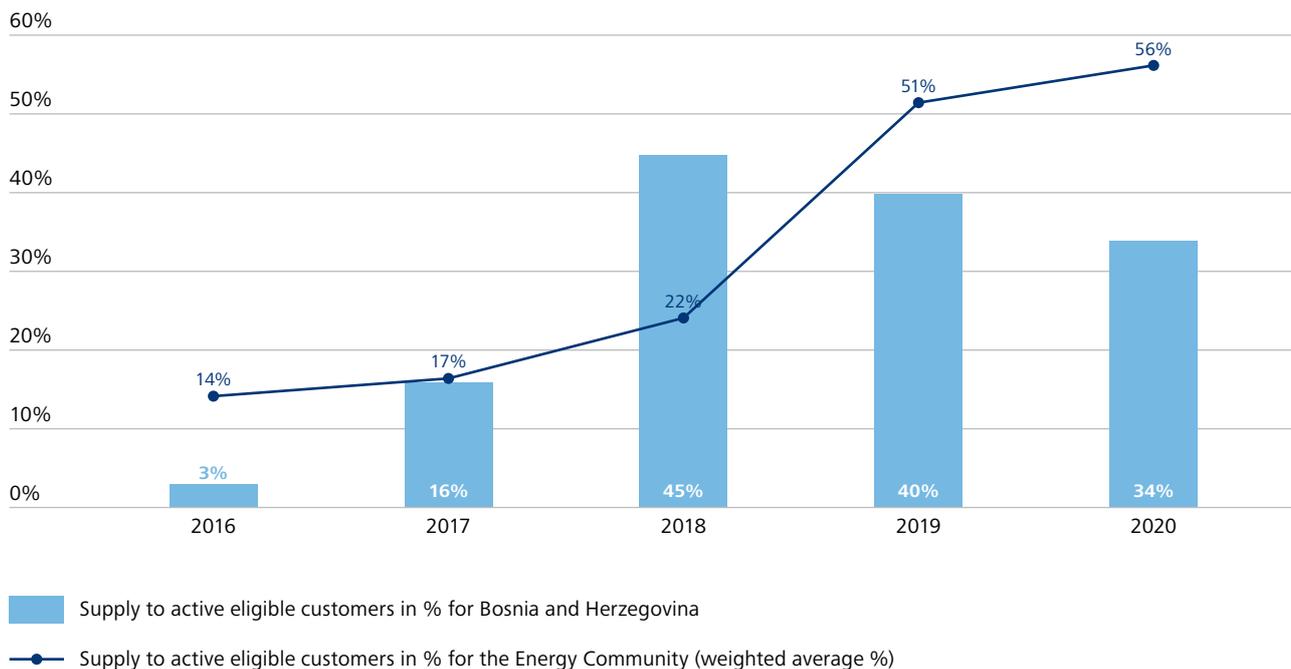
In 2020, the Ministerial Council extended the penalty measures imposed in 2016 and suspended the country's voting rights on account of the country's non-compliance with the Third Energy Package. No steps were taken to adopt a state-level law to rectify the non-compliance during the reporting period. The transmission system operator is not unbundled in a manner compliant with any of the models of the Third Energy Package.

Unbundling of the distribution system operators advanced in Republika Srpska following the adoption of a new Law on Electricity in 2020. Legal unbundling of the distribution system operator from supply activities in the utility Elektroprivreda RS was completed by the deadline of April 2021, whereas separation of distributed generation and functional unbundling are yet to be finalised. In Federation of Bosnia and Herzegovina, the

unbundling provisions are partially transposed by the Electricity Law, but legal unbundling is not implemented by the integrated utilities Elektroprivreda BiH and Elektroprivreda HZHB. The electricity utility of Brčko District, Komunalno Brčko, performs distribution and supply activities. As it serves less than 100.000 customers, it is entitled to an exemption.

Access to networks is implemented in compliance with the Third Energy Package. In October 2021, the State Electricity Regulatory Commission (SERC) adopted amendments to the tariff methodology and approved new market rules prepared by the Independent System Operator to implement guidelines on electricity transmission system operation and guidelines on electricity balancing. The rules should enter into force on 1 January 2022. Connection Network Codes for transmission as

Retail Market Opening



Source: State Electricity Regulatory Commission, compiled by the Energy Community Secretariat

well as decisions on criteria for granting derogations are transposed through decisions of SERC. To implement the Codes, a new transmission grid code was drafted. It is yet to be submitted to SERC for its approval. Publication of data pursuant to the Transparency Regulation is gradually implemented by the Independent System Operator. Full implementation requires improvement of the software.

The draft Law on the Regulator of Electricity and Natural Gas, Transmission and Electricity Market, aimed to transpose the Third Energy Package and overcome all legal obstacles for the set-up and operation of an organized day-ahead market, is being discussed since 2015. The latest initiative of the State Ministry of Foreign Affairs and Economic Relations (MoFTER) of May 2020 to resolve the outstanding disagreements between the entity stakeholders failed to bring any tangible results. This amounts to a refusal to transpose the Energy Community's core legal framework.

The retail markets in both entities are formally open to competition. There are no formal obstacles to supplier switching, the rate of which is slowly increasing. Nevertheless, most customers continue to be supplied by their incumbents, and the three state-owned utilities still dominate the retail market. A

competitive market for balancing energy and ancillary services is established and functional since 2016, including effective cross-border trading within the SHB control block shared with Slovenia and Croatia, and bilateral exchanges of balancing energy with the operators of Serbia and Montenegro.

The new Law on Electricity in Republika Srpska imposed a gradual phase-out of the regulated generation price of electricity sold to the universal supplier in the period from 2022 until 2024.

SERC transposed the REMIT Regulation in May 2020. Implementation was completed by September 2020 through the establishment of a register of participants with reporting mechanisms.

Market coupling of Bosnia and Herzegovina depends on the establishment of an organized day-ahead market which is blocked by the absence of a state-level law.

The interconnection capacities of Bosnia and Herzegovina on the borders with Croatia and Montenegro are allocated through the auction platform of SEE CAO. The intraday auctions on all borders are bilaterally coordinated. The capacities of the interconnectors with the system operator of Serbia are also allocated through bilaterally coordinated auctions.



Bosnia and Herzegovina

Gas

Gas Implementation

Gas Indicators	Transposition Assessment	Implementation Status	Descriptions
Unbundling			Only one of the three existing transmission system operators in Bosnia and Herzegovina, Gas Promet Pale, is unbundled and certified. Distribution of gas is bundled with supply and trade of natural gas as allowed by the Directive's de minimis clause.
Access to the system			Third party access is granted under regulated tariffs for the gas network in Republika Srpska. In the Federation, negotiated third party access still applies to both transmission and distribution networks.
Wholesale market			Bosnia and Herzegovina has a foreclosed gas market, organised in two parallel entity markets. Republika Srpska's wholesale market prices are not regulated, but the market lacks liquidity. In the Federation, the prices are regulated by the Ministry. The REMIT Regulation was not transposed.
Retail market			Customers in Federation of Bosnia and Herzegovina are still captive. In Republika Srpska, only a small portion of the retail market is supplied under regulated tariffs. Switching rules are in place.
Interconnectivity			For the single interconnection point between Serbia and Bosnia and Herzegovina, there is an agreement signed in line with Regulation (EU) 2015/703. Republika Srpska has a security of supply emergency plan.

Bosnia and Herzegovina has still not adopted a State law which would transpose the Third Energy Package in gas. The longest "serious and persistent breach" in the Energy Community continues. In the absence of a single legislative framework, Bosnia and Herzegovina's two entities have adopted two distinct regulatory regimes. Without the implementation of the Third Energy Package in gas on its entire territory, the country will also not be able to deliver the ambitious gas investment agenda which would enable the phasing out of coal.

Republika Srpska transposed the Third Energy Package in the gas sector in its primary law (the Gas Law of 2018), supplemented with several by-laws adopted by the entity regulator, RERS. The distribution system operators supply less than 100.000 customers. Gas Promet Pale, one of the entity's transmission system operators, operates the pipeline sections Šepak-Karakaj and Karakaj-Zvornik. Its system rules adopted by RERS are yet to comply with gas Network Codes. The company signed an interoperability agreement with the Serbian operator. The rules established a virtual trading point for Republika Srpska,

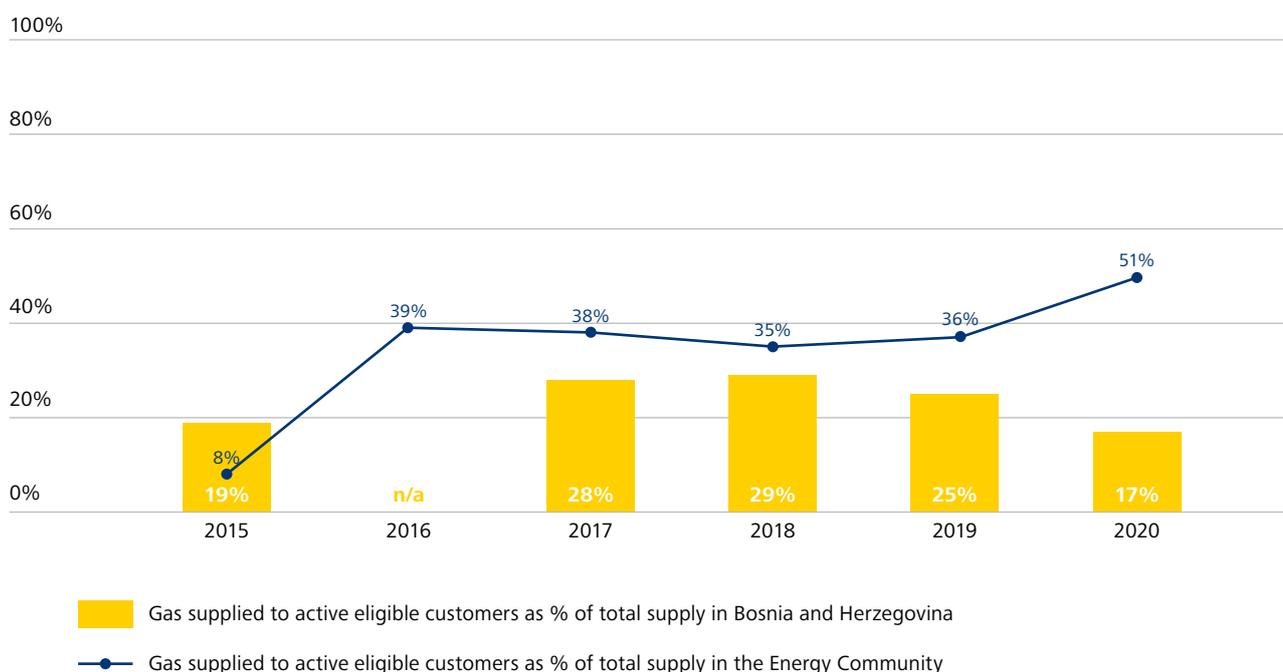
which at present is non-functional. All transactions are based on bilateral contracts.

The entity regulator certified Gas Promet Pale under the ownership unbundling model in November 2020 taking into account the Secretariat's Opinion. The entity regulator obliged Gas Promet to meet all certification conditions fully otherwise any legal decision would be null and void. The other transmission system operator in the entity is Sarajevo-gas a.d. Istocno Sarajevo, a vertically integrated undertaking, acting also as a supplier and distribution system operator, which is still not unbundled and thus breaching the gas acquis. In Republika Srpska, all customers are free to choose their supplier and only households are eligible for public supply, which in 2020 accounted for 7,18% of the retail market. The amendments to the Gas Law of 2021 prescribed that the mandate of the public supplier (selected in a competitive procedure) will be limited to a five-year period. The dominant supplier, the public GAS RES, is the only importer of natural gas for Republika Srpska and serves 83% of the retail market in this entity.

The gas market in Federation of Bosnia and Herzegovina is governed by a decree from 2007, which does not transpose even the most basic principles of the gas acquis such as regulated third party access or market opening and eligibility of all customers. Yet based on this Decree, in April 2021, BH-Gas limited its activity to only transmission system operation, and Energoinvest, the sole gas importer of Russian gas to the Federation, overtook the role of wholesale supplier. In June 2021, the contract between the two companies implementing that decision was signed. The supply contracts with customers were accordingly changed and, as of 1 July 2021, Energoinvest acts as the wholesale supplier and BH-Gas as the transmission system operator on the territory of the Federation. Compliance with the Third Energy Package is still missing in terms of both transposition and implementation.

In the contract between Energoinvest and Gazprom Export, the delivery point was changed on 1 April 2021 from the Ukrainian-Hungarian border to the border between Serbia and Bosnia and Herzegovina. The obligations under the transmission contract, which fall under a “ship or pay” obligation, are subject to court cases between Energoinvest and BH-Gas. Namely, BH-Gas contracted transmission capacity through Hungary until 2023 for the gas imported by Energoinvest, while Energoinvest changed the delivery point in its supply contract with Gazprom, from the Ukrainian-Hungarian border to the border between Serbia and Bosnia and Herzegovina since 2021.

Retail Market Opening



Source: State Electricity Regulatory Commission (SERC), compiled by the Energy Community Secretariat

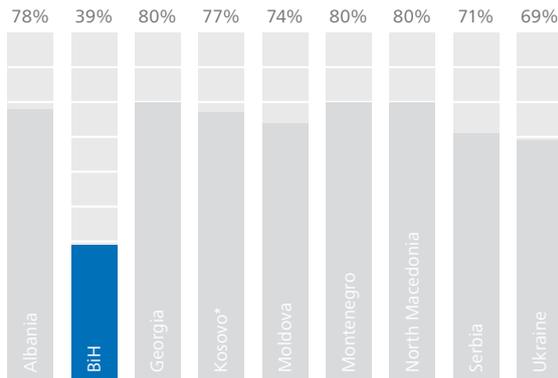


Bosnia and Herzegovina

National Authorities



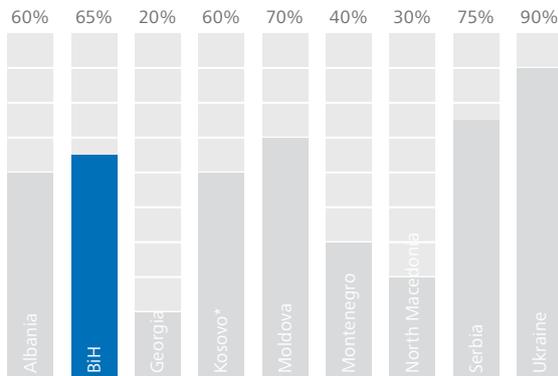
Regulatory Authority



In the reporting period, the State Electricity Regulatory Commission (SERC) continued efforts to implement the acquis within the limits of the powers granted to the regulator by state-level legislation. This proves its commitment to actively design the market despite the fact that SERC is the only Contracting Party regulator whose set-up does not comply with the Third Energy Package requirement for a single regulatory authority for electricity and gas. SERC was the first Energy Community regulator that transposed and implemented the REMIT Regulation in the electricity sector and published criteria based on which derogations from electricity Network Codes can be granted.



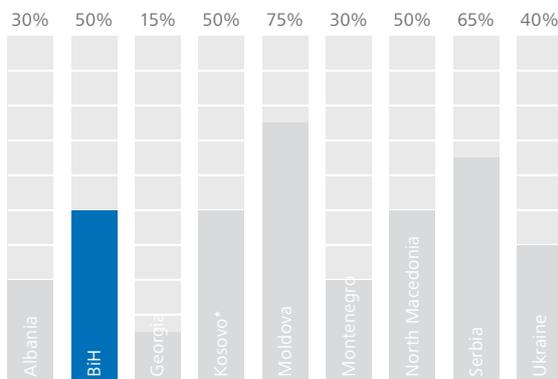
Competition Authority



The Competition Council's enforcement activities in the energy sector are mainly focused on concentrations. In the reporting period, it found that EUROTERM d.o.o. Kiseljak had concluded anti-competitive agreements regarding the supply of heating, for which it was fined EUR 6.300. Furthermore, it opened an ex officio investigation into a potential abuse of dominance in the heating sector by the public company Centralno Grijanje.



State Aid Authority



The State Aid Council (SAC) and its secretariat have become very active, and would benefit from additional human resources. The decision by the SAC finding that the guarantee provided by Federation of Bosnia and Herzegovina for the loan of EUR 614 million from the Chinese Export-Import-Bank to "Elektroprivreda BiH" for the Tuzla 7 project does not entail State aid, however, is subject of an infringement procedure. In the reporting period, the SAC found that the subsidisation of gas prices in Canton Sarajevo to compensate for increased prices constitutes State aid to the beneficiary undertakings. Furthermore, in the context of an assessment of a guarantee by the Government of Republika Srpska for a loan for the rehabilitation of the Gacko mine and power plant, the Government was ordered to correctly assign the beneficiary with a service of general economic interest. Finally, due to the lack of a market-based premium being charged to the beneficiary, the SAC found a guarantee by the Government of Republika Srpska for a loan to Elektroprivreda RS to constitute State aid. The Secretariat will closely monitor the follow-up to these decisions.



Bosnia and Herzegovina Oil

Oil Implementation

Oil Indicators	Transposition Assessment	Implementation Status	Descriptions
Stockholding obligation			Bosnia and Herzegovina does not have legislation on compulsory stocks of oil and petroleum products at the state level. The current state level model has not been harmonized with the requirements of Directive 2009/119/EC.
Emergency procedures			Bosnia and Herzegovina does not comply with Directive 2009/119/EC when it comes to emergency procedures. At present, no procedures are in place.
Fuel specifications of petrol, diesel and gas oil for non-road mobile machinery (NRMM)			A draft Decision on the Quality of Liquid Petroleum Fuels for alignment with the provisions of Directive 98/70/EC on the quality of petrol and diesel fuels and amending Council Directive 93/12/EEC was finalised in August 2021.
Monitoring compliance and reporting including the lay down the rules on penalties			The procedure for determining the conformity of the quality of liquid fuels is carried out according to a conformity assessment programme which prescribes the scope of the quality monitoring and sampling procedures for liquid fuels. Detailed penalty measures are also specified in the draft Decision on the Quality of Liquid Petroleum Fuels.

No progress was achieved during this reporting period. The Ministry of Foreign Trade and Economic Relations continued to support a working group tasked to deliver concrete proposals or actions for an oil stocks model at the state level in compliance with Oil Stocks Directive 2009/119/EC, but this did not result in any outcomes. Members of the working group from the Ministry of Energy and Mining of Republika Srpska did not accept the proposed model of organization of the oil stockholding system for emergency situations in Bosnia and Herzegovina. Republika Srpska opposes the Central Stockholding Entity (CSE). Bosnia and Herzegovina has not been able to harmonize the model of the emergency storage system in accordance with Directive 2009/119/EC.

The draft Decision on the Quality of Liquid Petroleum Fuels is in the process of obtaining the opinion of the relevant institutions in Bosnia and Herzegovina. The draft Decision prescribes the quality requirements that must be met by liquid petroleum fuels used in internal combustion engines (petrol and diesel) and gas oil for NRMM in Bosnia and Herzegovina. With the adoption of the Decision on the Quality of Liquid Petroleum Fuels, Bosnia and Herzegovina would be compliant with the provisions of the Fuel Quality Directive 98/70/EC.



Bosnia and Herzegovina

Renewable Energy

Renewable Energy Implementation

Renewable Energy Indicators	Transposition Assessment	Implementation Status	Descriptions
National Renewable Energy Action Plan			Bosnia and Herzegovina has registered a 37,58% share of renewables in 2019. However, this was still not enough to reach the trajectory of 39,2% in 2019, let alone its 40% target for 2020. The country has reached its sectorial target for heating and cooling but not targets for electricity and transport.
Quality of support schemes			The support scheme is based on administratively set feed-in tariffs in both entities and fixed feed-in premiums in Republika Srpska only. Bosnia and Herzegovina has drafted a legal framework for a market-based support scheme, the adoption of which is pending. In Federation of Bosnia and Herzegovina, renewable energy producers granted with support are released from balancing responsibility, while in Republika Srpska they bear 25% of the balancing costs.
Grid integration			Renewable energy producers have priority access to the grid. Connection to the transmission system is regulated by the state regulator stipulating that renewable electricity producers connected to the grid pay 50% of the fixed part of the connection costs. On the distribution level, producers in Republika Srpska have to fully cover connection costs, while renewable energy producers in the Federation cover 50% of the calculated average value of the connection costs.
Administrative procedures and guarantees of origin			The country is yet to take steps to simplify the complex administrative procedures and establish a single administrative body. Recommendations to that effect were made as part of an analysis for each entity in 2018 but were never followed-up. Bosnia and Herzegovina has expressed interest to join the Energy Community regional initiative to establish an electronic system for guarantees of origin.
Renewable energy in transport			Provisions related to sustainability of bio-fuels are still not transposed and the legal framework remains completely non-compliant with Directive 2009/28/EC. The share of renewables in transport is low, namely below 1%, compared to the objective of 10% in 2020.

No progress was recorded in the renewable energy sector of Bosnia and Herzegovina in the reporting period.

For years, the institutions in Bosnia and Herzegovina have worked on reforming the support scheme for renewable energy projects with the support of international organizations but to no avail. Working groups are preparing amendments to the entity renewable energy laws scheduled to be adopted by the end of 2021. Amendments should enable market-based support schemes.

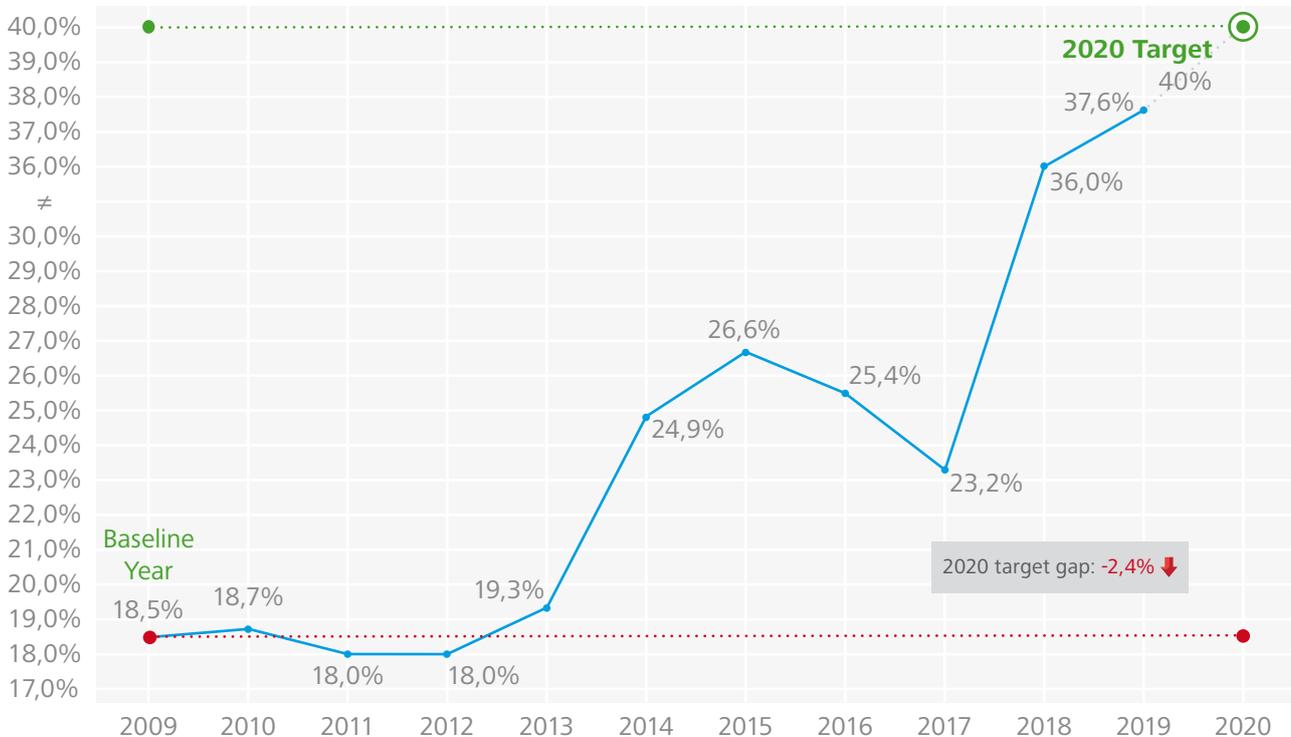
The targets for 2020 have expired. However, it remains unclear if planned quotas were fulfilled due to the lack of transparency on the projects which received the support, as the project list has not been published by the responsible institutions (operator for renewable energy in the Federation, and Ministry of Energy and Mining in Republika Srpska).

While Federation of Bosnia and Herzegovina is yet to allow self-consumption, Republika Srpska enabled net metering for

installations up to 50 kW. However, the issue of taxing natural persons for self-generated electricity that is fed into the grid remains to be resolved.

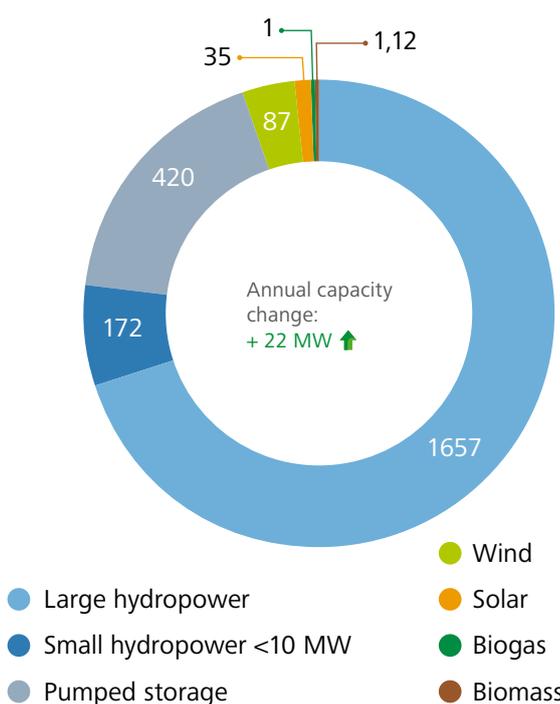
Bosnia and Herzegovina should focus on support scheme reform and transition towards market-based mechanisms. Transposition of provisions related to sustainability of biofuels as well as the establishment of an electronic system for guarantees of origin should also be a priority.

Shares of Energy from Renewable Sources



Source: EUROSTAT

Total Capacities of Renewable Energy 2020 (MW)



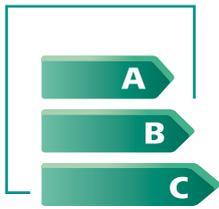
While Bosnia and Herzegovina reported a significant increase in the share of renewable energy in comparison to previous years and reached its sectorial target for the share of renewable energy in heating and cooling due to the revision of biomass consumption data, additional efforts are needed to increase the use of renewable energy in the electricity and transport sectors.

In early 2021, the third wind park in Bosnia and Herzegovina (Podveležje, 48 MW) was commissioned. In addition, 12 MW of solar PV and 10 MW of small hydropower were installed in 2020.

Total capacities of renewable energy (MW):

2373

Source: State Electricity Regulatory Commission of Bosnia and Herzegovina (SERC)



Bosnia and Herzegovina

Energy Efficiency

Energy Efficiency Implementation

Energy Efficiency Indicators	Transposition Assessment	Implementation Status	Descriptions
Energy efficiency targets and policy measures			The energy efficiency targets and policy measures envisaged by the NEEAP 2019 - 2021 and the NECP have not been adopted. The Government of Federation of Bosnia and Herzegovina adopted its EEAP 2019 – 2021 only in February 2021. The fifth Annual Progress Report under the Energy Efficiency Directive has not been submitted to the Secretariat.
Energy efficiency in buildings			Long-term building renovation strategies have been drafted on state and entity levels, but not adopted. The necessary amendments to primary legislation have only been adopted in Republika Srpska. Both entities are currently working on updating existing legislation, including procedures for systems and certification of buildings.
Energy efficiency financing			Each entity has established an energy efficiency and environmental fund, covering monitoring of implementation and reporting on achieved savings. The energy efficiency laws of both entities and the draft law of Brčko District recognize ESCOs and energy performance contracting. However, the ESCO market is not functioning and important implementation gaps remain, e.g. in public procurement, multi-year budgeting and adoption of model ESCO contracts.
Energy efficient products - labelling			Bosnia and Herzegovina did not improve its track record with respect to energy labelling. To date, the regulations were only transposed partially in Republika Srpska back in 2016. During the reporting period, the regional REEP Plus project started to support Bosnia and Herzegovina in the transposition and implementation of the labelling regulations and the Eco-Design Directive.
Efficiency in heating and cooling			Bosnia and Herzegovina has 32 district heating systems, covering around 10% of total heat demand in 2019. They are regulated by local self-governments, and the majority charge lump sums per square meter of heated space (instead of consumption-based billing). Modernisation of district heating systems is ongoing, including several biomass-based district heating projects. The assessment of high-efficiency cogeneration and efficient district heating and cooling potential required by the Energy Efficiency Directive was developed but not adopted.

Little progress was achieved in Bosnia and Herzegovina with respect to implementation of last year's recommendations and improvement of compliance with the energy efficiency acquis.

The utmost priority remains the adoption of the National Energy Efficiency Action Plan (NEEAP) and transposition of the Energy

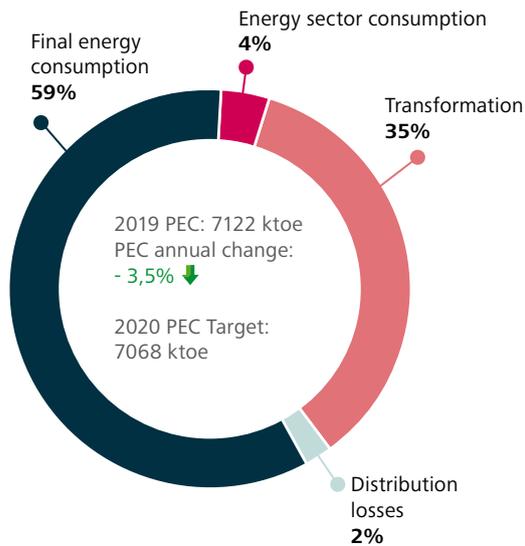
Efficiency Directive and the Energy Labelling Regulation through amendments of the existing primary legislation in the two entities, and the adoption of the draft Energy Efficiency Law in the Brčko District. The fifth Annual Report under the Energy Efficiency Directive should be submitted to the Secretariat without delay.

The second priority remains the adoption of the draft long-term building renovation strategies and the secondary legislation on establishing an energy efficiency obligation scheme and a comprehensive energy management and information system, as well as adoption of the assessment of the potential for the

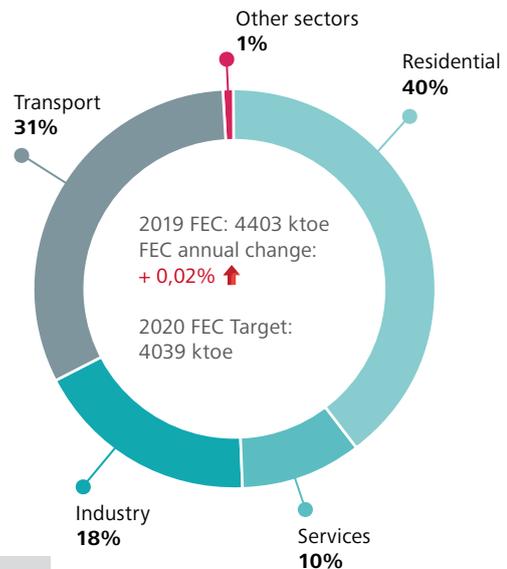
application of high-efficiency cogeneration and efficient district heating. Energy efficiency criteria should be introduced in State public procurement procedures and public private partnership schemes made attractive for energy efficiency projects.

2019 Energy Efficiency Indicators and Trends

Primary Energy Consumption (PEC)



Final Energy Consumption (FEC)



Energy intensity,
2019 value and trends:
0,46 ktoe/mil EUR, -6,0% ↓

Source: EUROSTAT 2021 data and Contracting Party's Reports

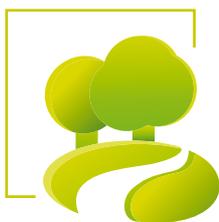
Energy Efficient Products – Overview of Implementation of Labelling Regulation

FRAMEWORK REGULATION*											
Household dishwashers	●										
Fridges and freezers*		●									
Household washing machines			●								
Televisions				●							
Air conditioners and fans*					●						
Household tumble driers						●					
Electrical lamps and luminaires							●				
Solid fuel boilers*								●			
Space heaters*									●		
Water heaters & storage tanks										●	
Domestic ovens and range hoods											●

● Adopted and implemented ● Compliance or implementation issues detected ● No progress with adoption/implementation

* The new labelling package adopted by the Ministerial Council in November 2018 was assessed, as the transposition deadline expired in January 2020.

Source: multiple sources of data (EECG reports, NEEAPs etc.), compiled by the Energy Community Secretariat



Bosnia and Herzegovina

Environment

Environment Implementation

Environment Indicators	Transposition Assessment	Implementation Status	Descriptions
Environmental impact assessment (EIA) and strategic environmental assessment (SEA)			New legislation to transpose amendments introduced by Directive 2014/52/EU was adopted by both entities, but is not fully compliant. Problems related to the quality of the environmental assessments of planned hydropower projects remain. Early and effective public participation in the EIA procedures is missing.
Sulphur in fuels			Transposition of the 1,00% threshold for heavy fuel oil as well as the 0,10% threshold for gas oil is still lacking. The Ministerial Council declared this as a serious and persistent breach.
Large combustions plants and industrial emissions			The National Emission Reduction Plan is not implemented. Bosnia and Herzegovina faces infringement action since March 2021. Two opted-out large combustion plants are expected to reach their time limits in 2022.
Nature protection			Nature protection declarations (like the Declaration on the Protection of Rivers) and other calls for a prohibition of construction of energy projects in nature sensitive areas adopted by various national stakeholders are not reflected in national legislation. Secondary legislation for the proper implementation of the Wild Birds Directive is not in place.
Environmental liability		n/a	The provisions of the Environmental Liability Directive are transposed by one entity.

With the adoption of the new Law on Environmental Protection by Federation of Bosnia and Herzegovina in February 2021, and the earlier adoption of the amendments to the Law on Environmental Protection by Republika Srpska, Bosnia and Herzegovina transposed the amending Directive 2014/52/EU. However, the penalties for breach of the EIA and interlinkage of the EIA consent with the validity of the development consent (the construction permit) are not compliant in both entities. Early and effective opportunities for the public concerned to participate in the assessment procedures and stakeholder dialogue are missing. Particular attention should be given to projects with transboundary impact. In the reporting period, the Secretariat was approached with another complaint concerning the HPP project Buk Bjela.

The new Law on Environmental Protection adopted by Federation of Bosnia and Herzegovina further aligned the national legislation with the Strategic Environmental Assessment (SEA) Directive. The implementation of the SEA procedures is not applied systematically for energy related plans and programmes

prepared on a national level concerning both entities. The “Framework Energy Strategy till 2035” adopted in late 2018 on a national level envisioned preparation of SEA reports for the document by each entity, however, the SEA procedures are not initiated. The obligations for SEA should be taken into account in the preparation of the National Energy and Climate Plan. The coordination among both entities should be strengthened in the upcoming drafting of the National Energy and Climate Plan and the preparation of the SEAs for the plan.

As regards the sulphur content of liquid fuels, the Minister of Foreign Trade and Economic Relations appointed a working group to draft a new state-level Decision on the Quality of Petroleum Liquid Fuels. The draft, if adopted, would address the serious and persistent breach established by the Ministerial Council’s Decision.

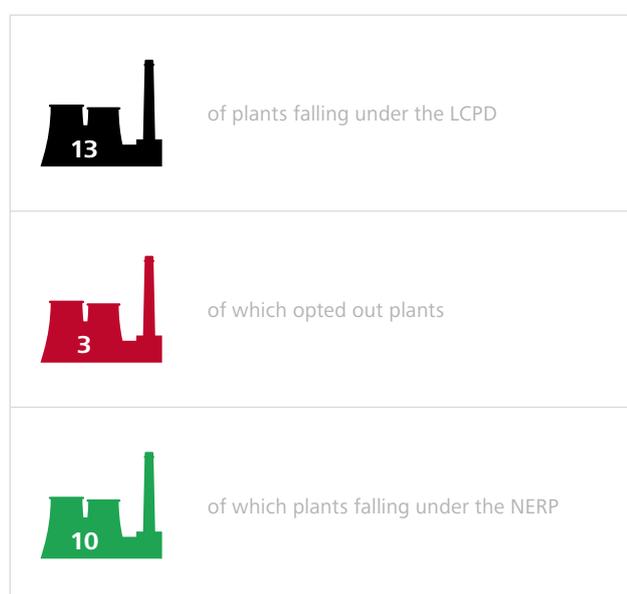
The emission limit values and relevant provisions of the Large Combustion Plants and Industrial Emissions Directives are transposed in both entities. In Federation of Bosnia and Herzegovina,

a new Law on Air Protection is being drafted that is expected to further align the domestic legal framework with the provisions of the Industrial Emissions Directive with regard to integrated permitting. Bosnia and Herzegovina complied with its emission reporting obligations in March 2021. Bosnia and Herzegovina is non-compliant with the National Emission Reduction Plan ceilings for all three pollutants (sulphur dioxide, nitrogen oxides and dust). The absolute amounts of emissions have even increased compared to 2019 levels. Sulphur dioxide emissions, which exceed the allowed limits almost tenfold, are of grave concern. To address this breach, the Secretariat opened dispute settlement procedures in March 2021. Based on their current load factor, two of the three opted-out plants are expected to reach their limit in 2022.

Both entities should further improve national nature protection legislation. In Republika Srpska, internationally recognized areas with high natural values (like Emerald sites) still lack national protection designation and national protection status. Legislation that will impose effective measures against the deliberate killing or hunting of wild birds, deliberate destruction or damaging of nests and eggs and/or removal of their nests is missing in Federation of Bosnia and Herzegovina.

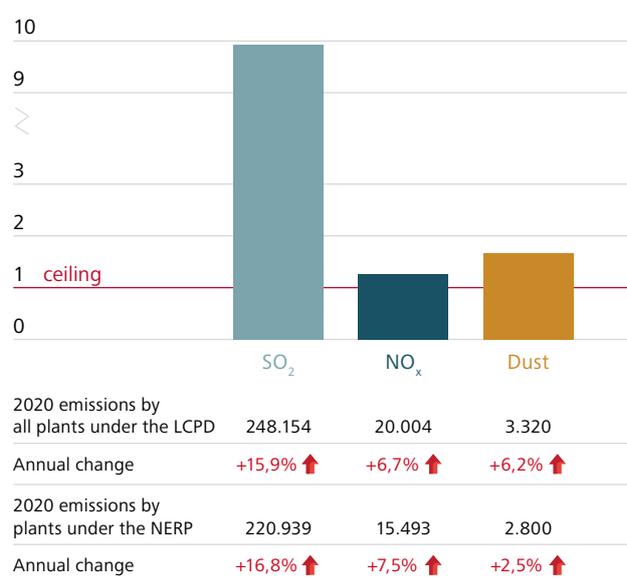
In the Federation, the Law on Environmental Protection, adopted during the last reporting period, was harmonised with the provisions of the Environmental Liability Directive with regard to prevention and elimination of environmental damage. In Republika Srpska, the Directive is not transposed.

Installations under the Large Combustion Plants Directive



Source: compiled by the Energy Community Secretariat

2020 emissions versus NERP ceilings

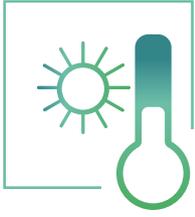


Amount of operational hours used from opt-out period

TPP Tuzla 4 	Expected expiry of opt-out period	March 2022
	Remaining hours	5.761
	Operating hours consumed in 2018 - 2020	14.239
TPP Kakanj 5 	Expected expiry of opt-out period	April 2022
	Remaining hours	6.120
	Operating hours consumed in 2018 - 2020	13.880
TPP Tuzla 3 	Expected expiry of opt-out period:*	December 2023
	Remaining hours	10.196
	Operating hours consumed in 2018 - 2020	9.804

*Calculations for the expected expiry of the opt-out period are based on 2018 - 2020 average load factor.

Source: compiled by the Energy Community Secretariat



Bosnia and Herzegovina

Climate

Climate Indicators	Transposition Assessment	Implementation Status	Descriptions
National greenhouse gas emissions monitoring and reporting systems			Bosnia and Herzegovina is not compliant with Regulation (EU) 525/2013. It still needs to define a system for GHG emission data collection and processing, quality assurance and control of input data. A reporting and monitoring system and the national legislation defining systems for policies, measures and projections have not been established. The process of adoption of the Low Emission Development Strategy has been launched.
National Energy and Climate Plans (NECPs)			Bosnia and Herzegovina submitted draft chapters of the NECP to the Secretariat for informal review in November 2020. Submission of the final draft is expected by the end of 2021.

Bosnia and Herzegovina submitted its NDC2 to the UNFCCC Secretariat in April 2021. The document includes increased investments in coal capacity, with an unconditional GHG emissions reduction target for 2030 of 12,8% compared to 2014, or 33,2% compared to 1990. The conditional target (with more international assistance for the decarbonisation of mining areas) for 2030 is 17,5% compared to 2014, or 36,8% compared to 1990. The fourth National Communication has been drafted but not yet adopted. The third Biennial Update Report to the UNFCCC is to be prepared by February 2022.

Bosnia and Herzegovina is not compliant with Regulation (EU) 525/2013 yet. Rules on the development of GHG emission inventories are primarily stipulated by the air protection laws of the two entities. They are not yet in line with the requirements of Monitoring Mechanism Regulation (EU) 525/2013. The country should strengthen institutional capacities and formally define competences and responsibilities in this area. This includes the establishment of a GHG inventory system at state level, for which legislation is missing. Bosnia and Herzegovina is still de-

pendent on outsourced technical expertise; there is no national agency responsible for gathering GHG emissions data. While for Republika Srpska, the Hydro-Meteo Institute was authorized to create an inventory, there is no responsible institution in Federation of Bosnia and Herzegovina.

As a basis for a future Long-Term Strategy, the first Low Emission Development Strategy (until 2030) and roadmap with an action plan for the period 2020 - 2030 was drafted in 2020. They have still not been approved by the entity governments. After their approval, the state-level Government is expected to adopt the Strategy by April 2022.

The Government has not yet established the legal basis needed for the National Energy and Climate Plan. An early version of the NECP was submitted to the Secretariat in November 2020. The draft NECP is planned to be submitted to the Secretariat for formal comments by the end of 2021, after entity-level energy and climate plans will have been finalized.



Bosnia and Herzegovina

Infrastructure

Infrastructure Implementation

Infrastructure Indicators	Transposition Assessment	Implementation Status	Descriptions
National competent authority		<div style="width: 20%;"><div style="width: 20%;"></div></div> 20%	Bosnia and Herzegovina has not made any progress related to the transposition of Regulation (EU) 347/2013 in the reporting period. A national competent authority has still not been established although discussions between the Ministry and entities are ongoing.
Manual of procedures		<div style="width: 0%;"><div style="width: 0%;"></div></div> 0%	The manual of procedures has not been published.
National regulatory authority involvement		<div style="width: 0%;"><div style="width: 0%;"></div></div> 0%	There is no methodology and criteria used to evaluate investments in electricity and gas infrastructure projects defined by the regulatory authority.

Bosnia and Herzegovina has been working for years to find consensus with the relevant entity institutions on the decision on establishing the national competent authority but without any success. The Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina did not manage to create even a working group that would prepare a legal act transposing Regulation (EU) 347/2013. The Guidelines for Investors in the Electricity Sector, published in November 2018, fall short of properly transposing the Regulation. The infringement based on the non-transposition of the Regulation, established by Ministerial Council Decision 2018/8/MC-EnC, is still not rectified.

The Regulation's transposition is particularly important due to its potential to facilitate the realization of ongoing strategic infrastructure projects, which will improve the security of supply and overall operation of the energy system in both electricity and gas, as well as positively influence the regional market. Bosnia and Herzegovina participates in one PECE electricity project (Transbalkan corridor) and in two PMI gas projects (interconnectors Bosnia and Herzegovina – Croatia North & South), recognized as projects of domestic significance and having a significant regional impact.

PECE/PMI projects (December 2020): **3**

Electricity: **1**

PECE: **1**

PMI: **2**

Gas: **2**



Bosnia and Herzegovina

Statistics

Statistics Implementation

Statistics Indicators	Transposition Assessment	Implementation Status	Descriptions
Annual statistics			The five annual questionnaires for 2019 were transmitted to EUROSTAT, although after the deadline. The questionnaire on final energy consumption of households for 2019 was transmitted to EUROSTAT and published.
Monthly statistics			Monthly reporting for oil and natural gas is missing.
Price statistics			Price statistics for electricity and natural gas for 2020 were compiled and transmitted in accordance with the acquis.

Bosnia and Herzegovina has made slight progress, notably by improving the timeliness of transmission of complete annual statistics for 2019 to EUROSTAT and adding the annual renewables shares questionnaire to the reporting schedule.

Energy statistics are produced by the Agency for Statistics of Bosnia and Herzegovina (BHAS), based on the Law on Statistics and a memorandum on cooperation between the two entities' statistics institutions, responsible for their respective areas. The statistical programme of Bosnia and Herzegovina for the period 2021 - 2024 specifies the task of BHAS to further develop energy statistics to fully comply with the acquis.

The full set of annual energy statistics has been compiled and transmitted to EUROSTAT although with a delay for the renewables questionnaire due to the revision of renewables data. Hence, the five annual questionnaires as well as the SHARES questionnaire were released as a consistent set of data. Preliminary questionnaires with 2020 data were also prepared and transmitted to EUROSTAT on time. The breakdown of energy consumption in households is reported in accordance with the acquis. The quality report for annual statistics was transmitted to EUROSTAT.

BHAS transmits to EUROSTAT monthly reports for electricity and coal only. Monthly data on natural gas and oil data are still missing. In accordance with the national statistical plan for 2020, BHAS drafted a methodology for data collection on monthly oil statistics with a focus on establishing a register of data providers/reporting units. In the national statistical plan for 2021, the focus is on the preparation and implementation of a pilot survey on monthly oil (JODI), as the first step towards establishment of monthly oil statistics. In 2022, BHAS plans to conduct a pilot survey on the full dataset of monthly oil statistics compliant with the acquis and, if funding is provided, to conduct a survey on energy consumption in households.

The prices of electricity and natural gas charged to industrial and household end-users, broken down per consumption band and per taxation level, as well as the breakdown of components of electricity and natural gas prices, are compiled and submitted to EUROSTAT. The respective quality report has also been transmitted.

Completing monthly oil and natural gas statistics and timely dissemination of all monthly statistics requires urgent action, including adequate human, technical and financial resources.



Bosnia and Herzegovina

Cybersecurity

Cybersecurity Implementation

Cybersecurity indicators	Transposition Assessment	Implementation Status	Descriptions
Institutions and legislation			There is no compliant state-level legal framework. Both entities are developing their own legal acts in the area of cybersecurity. A roadmap for transposition of the NIS Directive in the energy sector of Bosnia and Herzegovina is in development. There is a single CERT operating in Republika Srpska.
Requirements for operators and energy regulatory authority			Critical energy infrastructure is defined in Republika Srpska. Some obligations for energy operators come from data protection acts and the entity's law on critical infrastructure. However, no energy-specific act is in place. Federation started developing draft acts on entity level. Energy regulators should build up their cybersecurity competences.

There is no State law on cybersecurity or protection of critical infrastructure. The information security management policy 2017 - 2022 addresses a broad scope of data security risks pertinent to society and promotes the establishment of an information security management system and application of ISO/IEC 27000.

The Law of Republika Srpska on Information Security and the rulebooks on information security measures and standards lay down a set of broad obligations but fail to transpose Directive (EU) 2016/1148 (NIS Directive). The Law on Security of Critical Infrastructure adopted in 2019 transposes Directive 2008/114/EC in this entity. It regulates security competences, obligations of risk assessment, security planning, coordination and protection mechanisms and data security management. The energy sector and in particular the assets for energy production and fuel resource management, systems for transmission, storage and transport of fuel and energy products and systems for distribution are identified as critical infrastructures in Republika Srpska.

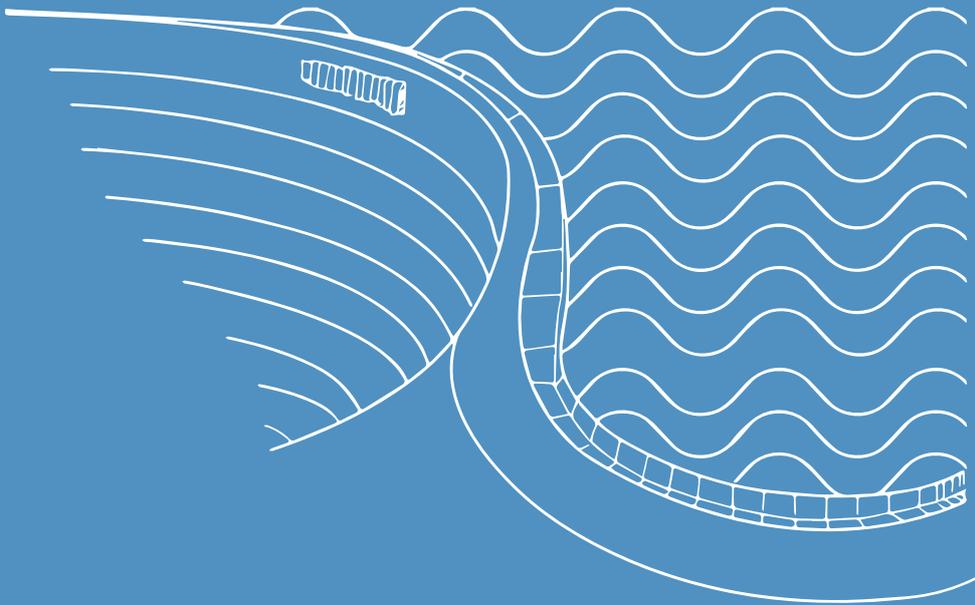
Cybersecurity developments in Federation of Bosnia and Herzegovina are fragmentary and delayed. There is no corresponding strategy in place. Its Law on Electronic Documents of 2013 barely introduced the need of digital data protection. The draft Law on Information Security transposing Directive (EU) 2016/1148 awaits adoption in this entity.

There is no common CSIRT structure in Bosnia and Herzegovina. The computer emergency response structure in Republika Srpska is CERT-RS, established in 2015. It coordinates cybersecurity incident prevention and response, and provides recommendations, notifications of cyber threats and technical assistance to its registered constituents from the entity. In the Federation, based on the draft Law on Information Security, a working group has been assembled to prepare the development of a federal CERT, hosted by the Federal Ministry of Transport and Communications.

There is no overarching cybersecurity strategy in Bosnia and Herzegovina. Protection of critical infrastructure according to the ISO/IEC 27001 standard is applied by the independent system operator NOS BIH. The establishment of a national CERT is a priority in the strategy for preventing and combating terrorism 2015 - 2020. However, the strategy was never implemented. Guidelines for strategic cybersecurity framework developed in 2019 cover the energy sector. They promote the set-up of a cybersecurity management cycle based on the NIS Directive. A task force is currently developing a roadmap for the implementation of the NIS Directive in the energy sector to be completed in 2022. The report on the gap analysis issued by the task force identifies the following objectives: the adoption of a new national strategy relevant for energy and criteria for essential energy services, appointment of competent authorities and CSIRTs, establishment of security plans and reporting obligations and application of cybersecurity standards.

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Georgia

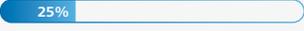
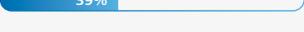
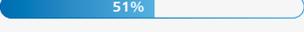






Georgia

Summary Implementation

Summary Indicators	Transposition Assessment	Implementation Status	Descriptions
 Electricity		 66%	Implementation in the electricity sector of Georgia is well advanced.
 Gas		 25%	Implementation in the gas sector of Georgia is at an early stage.
 Oil		 15%	Implementation in the oil sector of Georgia is yet to begin.
 Renewable Energy		 39%	Implementation in the renewable energy sector of Georgia is still at an early stage.
 Energy Efficiency		 51%	Implementation in the energy efficiency sector of Georgia is moderately advanced.
 Environment		 58%	Implementation in the environment sector of Georgia is moderately advanced.
 Climate		 57%	Implementation in the climate sector of Georgia is moderately advanced.
 Infrastructure		 3%	Implementation in the infrastructure sector of Georgia is yet to begin.
 Statistics		 98%	Implementation in the statistics sector of Georgia is almost completed.
 Cybersecurity		 38%	Implementation in the cybersecurity sector of Georgia is still at an early stage.



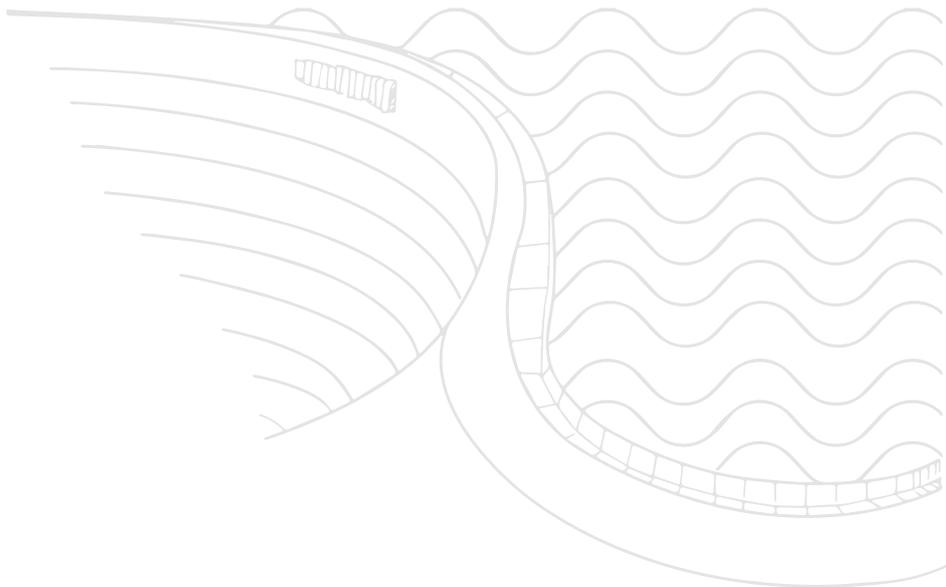
Georgia

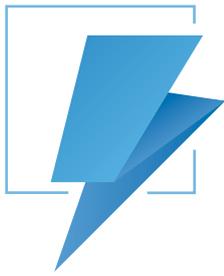
State of Energy Sector Reforms

Georgia's pace of reform in the energy sector is still remarkable, despite certain set-backs during the reporting period. The establishment of an organized power market had to be moved to the end of 2021, and the full unbundling of transmission system operators in both electricity and gas is still pending. Distribution unbundling in the power sector was achieved, however, and

a gas exchange is established following the adoption of a gas market concept. A prominent dispute over the fate of one large hydropower project during 2021 has put the question of the future energy mix of Georgia on the agenda, and investment in hydropower in particular.

Georgia is the only Contracting Party that is not (yet) directly interconnected with other Parties. Its power sector is mainly based on hydropower. The system is synchronized with Azerbaijan and Russia. Depending on the season, electricity is either exported or imported from its neighbours, including Turkey. The country hosts important gas and oil pipelines for the Southern Corridor. It is dependent on gas imports from Azerbaijan (dominantly) and Russia (marginally). In terms of solar and wind energy, the country's potential is yet to be tapped. Georgia also plans to further increase its hydropower capacities.





Electricity Implementation

Electricity Indicators	Transposition Assessment	Implementation Status	Descriptions
Unbundling			The certification of the transmission system operator depends on the proper allocation of management rights by 31 December 2021. Unbundling of distribution system operators was completed.
Access to the system			Connection fees and network tariffs are published. Connection Codes and the Transparency Regulation are transposed and implementation has started. Electricity distribution network rules were adopted during this reporting period.
Wholesale market			The launch of day-ahead, balancing and ancillary services markets was postponed to 2022. GENEX and GSE are running joint testing in preparation for their timely launch. REMIT has been transposed.
Retail market			Deregulation of production (HPPs below 50 MW) and large customers (an average consumption of more than 0,4 million kWh per month and connected to the 35 - 110 kV voltage level) continued as scheduled under the Electricity Market Concept Design.
Regional integration	n/a	n/a	Georgia is not interconnected with other Contracting Parties or EU Member States. Thus, no regional integration at the Energy Community level is taking place at present.

Georgia continues to build on the progress achieved by the adoption of the Law of Georgia on Energy and Water Supply on 20 December 2019.

According to the decision of the Georgian National Energy and Water Supply Regulatory Commission (GNERC) of 1 April 2021, the electricity transmission system operator GSE was certified and licensed by GNERC in May 2021. GNERC took into account the Secretariat's Opinion and gave a deadline to GSE to ensure compliance with the ownership unbundling model by 31 December 2021.

The unbundling of the two distribution system operators has been completed. Energo Pro and Telasi continue performing solely distribution activities, while two universal suppliers EP Georgia Supply and Telmiko, respectively serve customers outside and within Tbilisi. Compliance officers are yet to be appointed. Both suppliers were appointed to act also as suppliers of last resort.

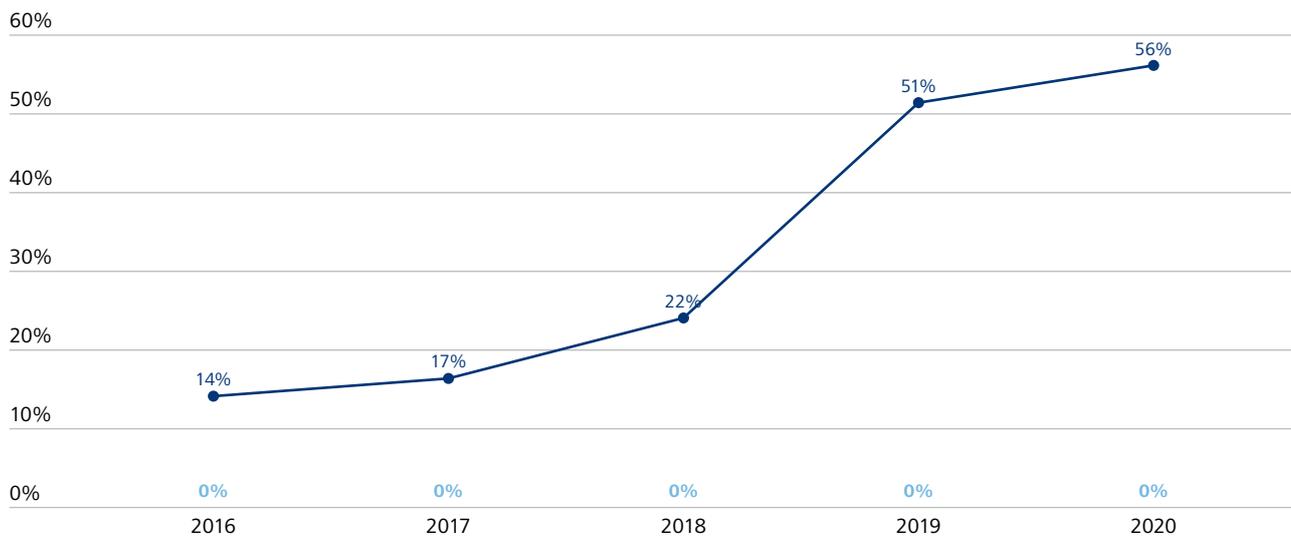
The Connection Network Codes were transposed and entered into force on 1 July 2021. General principles on congestion

management, including the use of congestion revenues, have not been implemented yet. Capacity allocation is implemented only on the borders with Turkey but in a non-compliant manner. In June 2021, GNERC approved the distribution network rules. The Transparency Regulation was transposed, yet so far only a limited number of data is published on the ENTSO-E Transparency Platform.

GNERC approved Rules for Energy Market Monitoring and Reporting on 30 March 2021, thus transposing the REMIT Regulation.

By Resolution of the Government of Georgia of 31 May 2021, the opening of day-ahead, balancing and ancillary services markets was postponed until 1 January 2022. Market operators have developed a joint plan of activities to be implemented from 1 July 2021 to 1 January 2022. GNERC has adopted a resolution approving the measures to be applied in the transitional period until market opening, including necessary simulations of the market. Electricity undertakings that are obliged to trade on the exchange in accordance with the Electricity Market Model Concept Design should be registered as day-ahead market par-

Retail Market Opening



- Supply to active eligible customers in % for Georgia
- Supply to active eligible customers in % for the Energy Community (weighted average %)

Source: Ministry of Economy and Sustainable Development, compiled by the Energy Community Secretariat

participants before 17 December 2021 and arrange their balance responsibility with the electricity transmission system operator by 15 October 2021.

Hydropower plants with capacity below 50 MW were deregulated from 1 January 2021. In addition, from 1 July 2021, large consumers with an average consumption of more than 0,4 million kWh per month connected to the 35 - 110 kV voltage level entered the free market (both wholesale and retail).

The regulation on protection of vulnerable customers in the electricity sector has not been adopted yet.

Until Georgia has a physical interconnection with the EU or the Energy Community electricity markets, a derogation from cross-border cooperation rules applies. At this stage, there is no coordinated capacity allocation of cross-border capacities with neighbouring countries, except bilateral cross-border capacity allocation on the interconnectors with Turkey.



Georgia Gas

Gas Implementation

Gas Indicators	Transposition Assessment*	Implementation Status	Descriptions
Unbundling			In 2021, certification of Georgian Gas Transportation Company was refused by the regulator. Small distribution licensees serving less than 100.000 customers are exempted from unbundling.
Access to the system			The Natural Gas Network Rules adopted in 2018 ensure transparent and non-discriminatory third party access.
Wholesale market			There is no virtual trading point and all contracts are concluded bilaterally for the long term. The Government adopted the Natural Gas Market Concept, which foresees the establishment of a natural gas exchange and an OTC auction platform until December 2022.
Retail market			Eligibility rights are formally granted but competition at retail level depends on unbundling of distribution system operation. End-user gas prices remain regulated for households and thermal generation, and are deregulated for the commercial sector.
Interconnectivity			Georgia is only connected with third countries and exempted from the application of the Energy Community gas acquis at interconnection points. It submitted its first natural gas Security of Supply Statement in August 2021.

Georgia's main progress in reforming the gas sector was the adoption of the Law of Georgia on Energy and Water Supply. Two years later, the country needs to accelerate the adoption of secondary acts and implement the Law in practice. For the regulation of interconnection points, exemptions apply until 2026. They benefit also the South Caucasus Pipeline and the North South Gas Pipeline.

The state-owned transmission system operator, Georgian Gas Transportation Company (GGTC), applied for certification to the regulator GNERC in June 2021 under the independent system operator model. This was followed by the establishment of a daughter company of the incumbent supplier and importer GOGC, Georgian Natural Gas Transmission Network Owner (NGTNO). However, mainly due to the absence of a lease agreement and a failure of Georgia to ensure separation between public bodies controlling competitive and network related activities, GNERC refused to certify GGTC. Delays are expected in the unbundling of distribution system operators.

Georgia is exempt from performing capacity allocation on the interconnection points. However, third party access to the national network is not affected by that exemption. The introduction of an entry/exit tariff methodology is not yet in place. The REMIT Regulation was transposed through the adoption of the Rules for Energy Market Monitoring and Reporting by GNERC.

The Government adopted a Natural Gas Market Concept on 2 September 2021. It envisages market-based price formation, but also the imposition of public service obligations for a limited period of time. The public service obligation mechanism is currently being drafted. Wholesale prices are deregulated for the commercial sector including industry and small enterprises. The commercial sector, although under unregulated prices, suffers from non-transparent price formation which affects its competitiveness. There is no virtual trading point in Georgia.

A Memorandum of Understanding (MoU) between the Ministry in charge of energy, the Secretariat, EBRD, GOGC and GGTC was signed in July 2021 with the goal to establish a natural gas exchange and an over-the-counter (OTC) auction platform. The natural gas market operator company, Georgian Gas Exchange LLC, was established on 15 October 2021 as a subsidiary of GOGC and GGTC. The development of a well-functioning natural gas exchange could diversify Georgia's gas market and provide opportunities for increased trading. Georgia is a net importer of gas, and the intergovernmental agreements keep the wholesale and retail gas markets illiquid and foreclosed.

Households in need of special treatment due to their status or health condition are subject to social programmes and additional protection by the Government. Rules on the protection of vulnerable customers in the natural gas sector are missing.

Georgia is in the process of developing several by-laws at present. It transposed the security of supply acquis in the Law and is expected to adopt the Rules on Security of Natural Gas Supply by the end of 2021. Georgia has also submitted its first Security of Supply Statement to the Secretariat in August 2021.

Retail Market Opening



Source: Georgian National Energy and Water Supply Regulatory Commission (GNERC), compiled by the Energy Community Secretariat

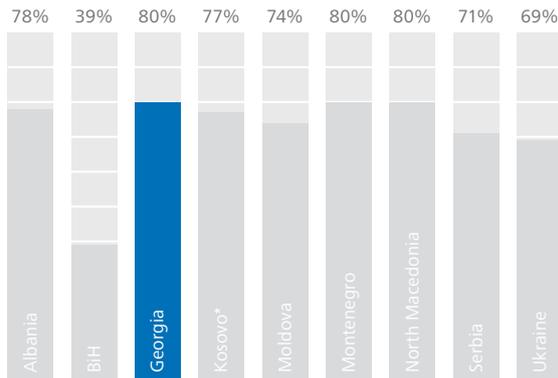


Georgia

National Authorities



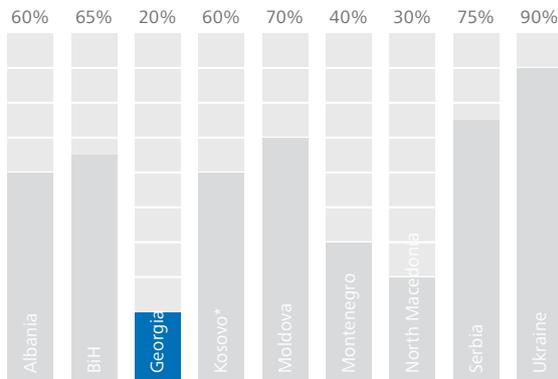
Regulatory Authority



The Georgian National Energy and Water Supply Regulatory Commission (GNERC) demonstrated profound technical expertise and independent execution of responsibilities. The transposition of the REMIT Regulation into the national market rules and adoption of criteria based on which derogations from the electricity Network Codes can be granted prove the regulator's commitment to align the regulatory framework with requirements of the acquis. However, rules for designation of a NEMO are still pending.



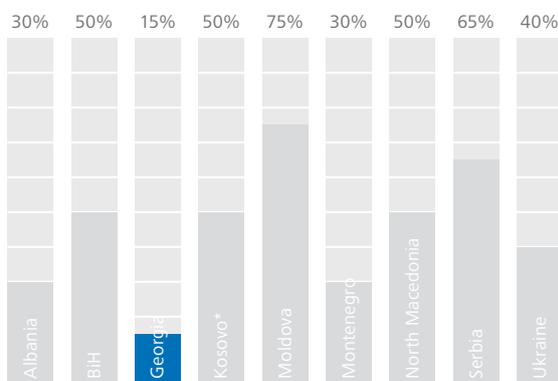
Competition Authority



While the Competition Agency is responsible for the enforcement of competition law in general, the energy regulatory authority, GNERC, is responsible for its enforcement in the electricity and natural gas sectors. In the reporting period, amendments to the Law on Competition were adopted, improving cooperation between the Competition Agency and GNERC and strengthening the effective enforcement of competition law. GNERC has never pursued a case based on infringements of competition law.



State Aid Authority



The amendments to the Law on Competition adopted during the reporting period further aligned the definition of State aid with Article 18 of the Treaty. However, the amendments did not address the lack of obligation to notify any aid measure for approval before it is granted. Furthermore, the authority does not have the power to render a negative decision and require recovery. Also the grounds of compatibility are not fully aligned with the State aid acquis. Enforcement of the State aid acquis in the energy sector is lacking since neither the Competition Agency nor GNERC consider themselves to be competent.



Georgia Oil

Oil Implementation

Oil Indicators	Transposition Assessment	Implementation Status	Descriptions
Stockholding obligation		<div style="width: 0%;"><div style="border: 1px solid blue; border-radius: 10px; padding: 2px;">0%</div></div>	Georgia does not have emergency oil stocks. The remaining open issues with the current draft of the Oil Stockholding Act concern the identification of the commercial operators which should be required to maintain the stocks and lack of storage facilities. If the law is adopted within 2021, Georgia could still partially meet the stockholding obligations by the 1 January 2023 deadline, while full implementation will require a minimum period of five years.
Emergency procedures		<div style="width: 0%;"><div style="border: 1px solid blue; border-radius: 10px; padding: 2px;">0%</div></div>	Currently, there are no procedures in place to release emergency oil stocks. Under the draft Act, the Minister in charge of oil has the authority to release by decree the stocks in case of a supply disruption.
Fuel specifications of petrol, diesel and gas oil for non-road mobile machinery (NRMM)		<div style="width: 60%;"><div style="border: 1px solid blue; border-radius: 10px; padding: 2px;">60%</div></div>	The December 2020 Decree allows sulphur content in petrol of up to 10 ppm and introduces additional specification improvements, including with respect to the sulphur content in diesel fuel. The sulphur content limit was set at 50 ppm in 2019, going down to no more than 50 ppm as of March 2021 and less than 10 ppm as of January 2022. There are no specifications relating to gas oil used for NRMM.
Monitoring compliance and reporting including the lay down the rules on penalties		<div style="width: 40%;"><div style="border: 1px solid blue; border-radius: 10px; padding: 2px;">40%</div></div>	A national fuel quality monitoring system that includes sampling and analyses of fuels is not established. Detailed penalty measures are specified in the Administrative Offenses Code of Georgia.

Georgia showed only slight progress during the reporting period. The submission of the draft Oil Stockholding Act to the Parliament is pending the resolution of remaining open issues, including the process of identifying commercial operators subject to the obligations and storage of the stocks. The latter is most problematic because consultations with commercial operators and research revealed a complete lack of facilities. In order to have a chance to at least partially meet the obligations of the Oil Stocks Directive, the draft Act should be finalized as soon as possible and submitted to the Parliament by the end of 2021 at the latest.

The quality of fuel is regulated by the December 2020 Decree of the Government on the Quality Standards of Motor Gasoline and the January 2021 Decree on Diesel Fuel Composition Norms, Analysis Methods and their Introduction. The Motor Gasoline Decree reflects the current EU standards for petrol, whereas the Diesel Decree allows usage of sulphur content of no more than 50 ppm as of 1 March 2021 and no more than 10 ppm as of 1 January 2022. Specifications for gas oil for non-road mobile machinery (NRMM) should be transposed by amending the 2021 Decree on Diesel Fuel.



Georgia Renewable Energy

Renewable Energy Implementation

Renewable Energy Indicators	Transposition Assessment	Implementation Status	Descriptions
National Renewable Energy Action Plan			Due to its later accession to the Energy Community, Georgia adopted the NREAP only at the end of 2019. The document contains measures to promote renewable energy; however, there is no 2020 target.
Quality of support schemes			The feed-in premium (FiP) scheme, which was previously limited to hydro, was amended in January 2021 to cover all renewable power plants with installed capacity higher than 5 MW. Existing hydro producers, supported through power purchase agreements (PPAs), are exempt from balance responsibility. This should change from January 2022, once new Electricity Market Rules enter into force.
Grid integration			Guaranteed and priority access for renewable energy producers is envisaged by the Law. Connection costs to the distribution grid depend on an offer from the distribution system operator. As this leaves room for interpretation, the regulator is working to establish connection fees.
Administrative procedures and guarantees of origin			No progress has been made to simplify administrative procedures and establish a one-stop shop in the reporting period. Georgia has expressed interest to join the Energy Community regional initiative to establish an electronic system for guarantees of origin.
Renewable energy in transport			Provisions related to sustainability of bio-fuels are still not transposed and the legal framework remains completely non-compliant with Directive 2009/28/EC.

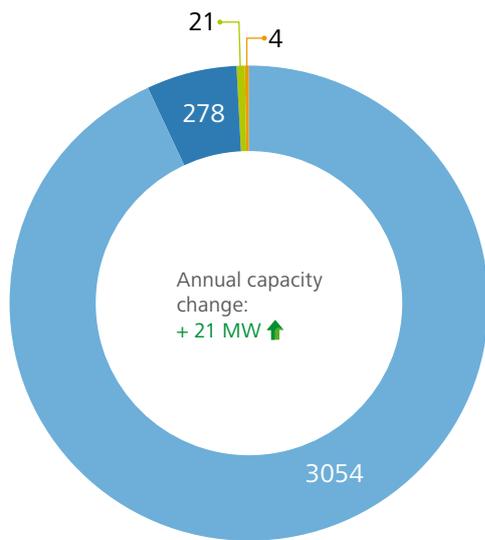
In the reporting period, Georgia did not make significant progress in the implementation of the renewables acquis. Deadlines for the adoption of several acts arising from the 2019 Law on Promoting the Production and Use of Energy from Renewable will expire at the end of 2021. Several acts are under preparation. Georgia currently develops a rule for issuance of guarantees of origin for electricity from renewable sources.

A net-metering system for self-consumption is in place since 2016. The regulator is in charge of managing the scheme. All microgenerators must have a smart meter. Consumers are al-

lowed to group up and jointly own microgenerators. Under the so-called "virtual net metering", it is not required for microgenerators to be connected to the premises of one or all consumers. In summer 2020, the installation limit was increased from 100 kW to 500 kW. The scheme is technology neutral, but most of the existing plants are solar PV.

Georgia should proceed with the adoption of secondary legislation and implementation in line with the Law and Guidelines on State Aid for Environmental Protection and Energy without delay.

Total Capacities of Renewable Energy 2020 (MW)



- Large hydropower
- Small hydropower <10 MW
- Wind
- Solar

Source: Ministry of Economy and Sustainable Development

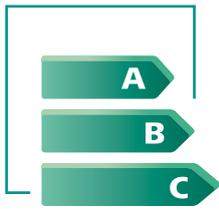
The Georgian renewable power portfolio is mostly based on hydropower. Georgia is putting efforts to diversify its production and promote the use of renewable energy despite not having a binding target for 2020.

On 30 August 2021, the tendering procedure for the implementation of the Udabno solar power project with installed capacity of 5 MW was finalized and on 13 September, a partnership agreement was signed.

Beside more than 3.000 MW of large hydropower and almost 300 MW of small hydropower, Georgia has in operation one wind park (Gori, 20,7 MW) and 4 MW of mostly solar rooftop installations operating under the net-metering scheme.

Total capacities of renewable energy (MW):

3357



Georgia

Energy Efficiency

Energy Efficiency Implementation

Energy Efficiency Indicators	Transposition Assessment	Implementation Status	Descriptions
Energy efficiency targets and policy measures			The general 2020 target was set in the latest NEEAP. The specific targets required by the Energy Efficiency Directive were established by the 2020 Energy Efficiency Law. Georgia submitted the second Annual Progress Report to the Secretariat in 2021.
Energy efficiency in buildings			The Law on Energy Performance of Buildings is in place. The minimum energy performance requirements for buildings or building units and building elements and the national calculation methodology for buildings performance were adopted by the Government in July and September 2021. The adoption of the other key by-laws (certification rules, regulation on inspection of heating and air-conditioning systems) is pending.
Energy efficiency financing			The Energy Efficiency Law promotes the use of ESCOs but does not include a framework to support public financing (i.e. an energy efficiency fund). Nevertheless, a large number of international technical assistance projects and financing programmes support energy efficiency measures, especially in the building sector.
Energy efficient products - labelling			The Law on Energy Labelling was adopted in December 2019. It transposes also Regulation 2017/1369/EU. Nevertheless, the adoption of the fifteen product regulations required by the Law was delayed and some of the drafted product regulations need to be updated to reflect the latest versions. The rest are expected to be adopted by the Government before the end of 2021.
Efficiency in heating and cooling			Georgia has no district heating or cooling systems. An assessment of high-efficiency cogeneration and efficient district heating and cooling potential has not been conducted.

During this reporting period, Georgia made small steps to improve its record in the area of energy efficiency. It adopted a methodology for minimum energy performance of buildings calculation required under the Buildings Directive. The institutional framework benefited from the decision of the Ministry of Economy and Sustainable Development to allocate more staff to the energy efficiency field.

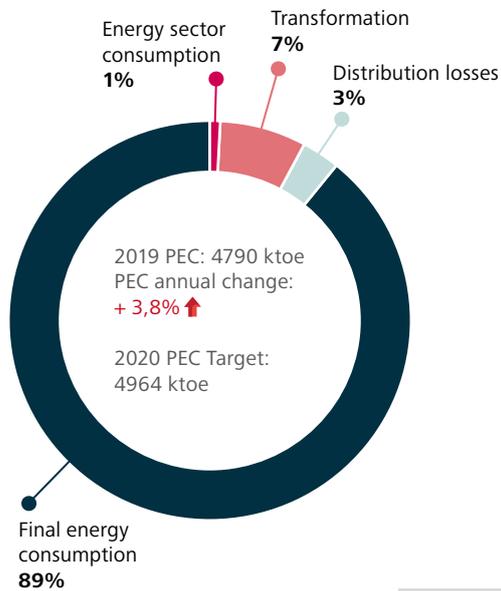
Georgia's focus should be on the adoption of the large number of by-laws needed to implement the Energy Efficiency Law, the

Energy Efficiency in Buildings Law and the Labelling Regulation. Until this has been achieved, Georgia will remain non-compliant in many areas of the energy efficiency acquis.

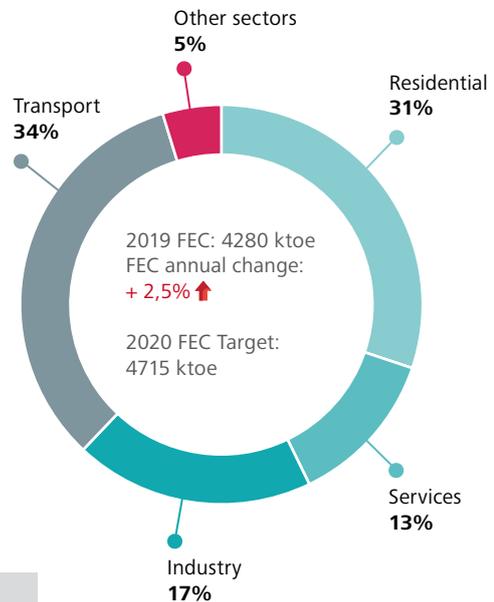
Currently, there is no national fund for energy efficiency, but large grant and lending programmes for energy efficiency in buildings are expected to start in 2021. Adequate engagement of the private sector requires the further development of the ESCO market.

2019 Energy Efficiency Indicators and Trends

Primary Energy Consumption (PEC)



Final Energy Consumption (FEC)



Energy intensity, 2019 value and trends:
0,37 ktoe/mil EUR, -0,9% ↓

Source: EUROSTAT 2021 data and Contracting Party's Annual Reports under Directive 2012/27/EU

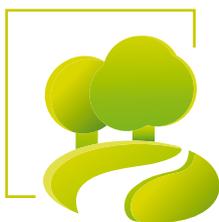
Energy Efficient Products – Overview of Implementation of Labelling Regulation

FRAMEWORK REGULATION*	Household dishwashers	Fridges and freezers*	Household washing machines	Televisions	Air conditioners and fans*	Household tumble driers	Electrical lamps and luminaires	Solid fuel boilers*	Space heaters*	Water heaters & storage tanks	Domestic ovens and range hoods

Adopted and implemented Compliance or implementation issues detected No progress with adoption/implementation

* The new labelling package adopted by the Ministerial Council in November 2018 was assessed, as the transposition deadline expired in January 2020.

Source: multiple sources of data (EECG reports, NEEAPs etc.), compiled by the Energy Community Secretariat



Georgia Environment

Environment Indicators	Transposition Assessment	Implementation Status	Descriptions
Environmental impact assessment (EIA) and strategic environmental assessment (SEA)			The EIA screening of the full project including its associated activities and components are not systematically applied for modified and revised projects. This includes projects approved under previous legislation. The quality mechanism of the EIA reports must be strengthened, in particular for HPPs.
Sulphur in fuels			According to Georgia's Accession Protocol to the Energy Community Treaty, the provisions of the Directive entered into force on 1 September 2021. The rules on land-based fuels, in force since 2017, are compliant with the Directive's provisions. Amendments related to marine fuels sampling and analysis are expected to take place still in 2021.
Large combustions plants and industrial emissions			The preparation of the draft Law on Industrial Emissions, which complies with the provisions of the Industrial Emissions Directive, was finished. Its adoption is foreseen in 2021.
Nature protection			The new draft Law on Biodiversity should be adopted to address the shortcomings of the outdated nature protection legislation. Any further postponement of the adoption of the draft Law might result in serious damage and harm to natural areas, including Special Protection Areas (SPAs) for birds. Management and monitoring plans for SPAs for birds should be prepared and prohibitions concerning the potential disturbance of the birds species should be established and enforced.
Environmental liability		n/a	The Law on Environmental Liability was adopted during the last reporting period and is compliant with the provisions of the Directive.

Further improvements of Georgia's Environmental Assessment Code and its secondary legislation are needed to secure proper enforcement of the EIA provisions for revised or modified projects and projects' cumulative impacts. The shortcomings of the transitional provisions of the Code in particular the provisions concerning projects that were subject to an assessment and approval by previous legislation should be rectified. The quality of the EIA report for one large HPP project – Namakhvani HPP cascade located on the Rioni River, is subject to an environmental review within the mediation process between civil society organizations and the Georgian Government lead by the Secretariat's Dispute Resolution and Negotiation Centre. The role of the EIA/SEA Expert Commission should be strengthened in the decision-making process. Different models for EIA/SEA reviews can be introduced in order to strengthen the quality check of the reports.

Given the increasing cases of conflict between renewable energy development projects and their impacts on nature, in particular hydropower projects, and the lack of SEAs for previous energy plans/programmes that foresee renewables development

(like the National Renewable Energy Action Plan adopted in 2019), the SEA procedure for the National Energy and Climate Plan should be initiated as early as possible in the process.

The requirements and thresholds of the Sulphur in Fuels Directive for heavy fuel oil and gas oil have been transposed by the Government Order on the Establishment of Sulphur Content Limit Values into national law. Amendments on sampling and analysis are planned to be adopted by the end of 2021.

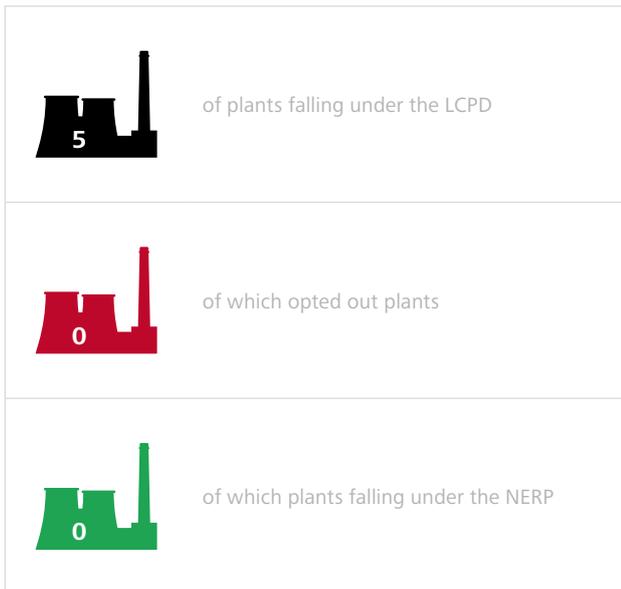
Georgia has five gas-fired installations falling under the scope of the Large Combustion Plants Directive, one of which started its operations in 2020. The emissions of all plants are compliant with the provisions of the Directives (four plants with the Large Combustion Plants Directive and one plant with the Industrial Emissions Directive). Georgia complied with its reporting obligations under the Large Combustion Plants Directive in March 2021. The adoption of the Law on Industrial Emissions and a by-law on special provisions for combustion plants is expected to take place by the end of 2021 and complete the transposition of the Directive.

Georgia identified 24 Special Protection Areas for Birds (SPAs). Management and monitoring plans for each site are not in place. Special focus must be given to the protection of breeding and migratory birds concentrated on migratory corridors and high mountain ranges. Currently, nature conservation legislation in Georgia is outdated. The shortcomings of the nature protection laws, adopted mainly in the 90s, and collisions of these laws and by-laws with other national legislation will be addressed in the new draft Law on Biodiversity. The draft Law will introduce a new approach of “protected and strictly protected species”, meaning that two different lists of species will be adopted,

based on the Birds and the Habitats Directives. The draft Law will also prohibit the deliberate killing or capture of strictly protected or protected wild birds and other wild animal species, as well as destruction, damage or collection of their nests, lairs, burrows, eggs/spawns, deliberate destruction of migration and water access routes or watering places.

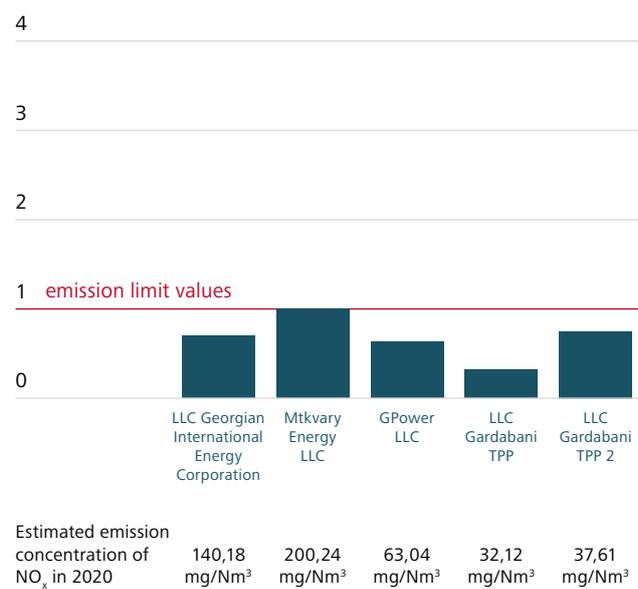
In March 2021, the Law on Environmental Liability was adopted by the Parliament. Its provisions are in compliance with the Directive. By-laws, necessary for the implementation of the new Law, were developed and are currently being finalised.

Installations under the Large Combustion Plants Directive

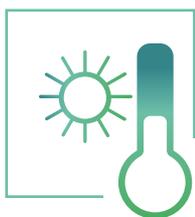


Source: compiled by the Energy Community Secretariat

2020 emissions of NO_x versus applicable emission limit values (ELV)



Source: calculated by the Energy Community Secretariat



Georgia Climate

Climate Indicators	Transposition Assessment	Implementation Status	Descriptions
National greenhouse gas emissions monitoring and reporting systems			The legislative framework and software tool for GHG data management, the Climate Action Plan and the Long-Term Strategy are still under development. Georgia is not fully compliant with Regulation (EU) 525/2013.
National Energy and Climate Plans (NECPs)			Georgia's draft NECP is currently being discussed within wider stakeholder groups based on an agreement under of the Namakhvani mediation process. Finalization is expected in early 2022.

Georgia's NDC2 under the Paris Agreement set an unconditional target of 35% below 1990 level of its total domestic GHG emissions by 2030, and a target of 50 - 57% of its total GHG emissions by 2030 compared to 1990, conditional on international support. Its fourth National Communication, along with its National Inventory Report, was submitted to the UNFCCC in April 2021. For the preparation of the national GHG inventory, Georgia still depends on external assistance and outsourced technical expertise. There is a need for a unified common framework for different sectors, including generally applicable reporting formats and a software tool.

The legal framework for a binding monitoring and reporting greenhouse gas emissions (MMR) system is not complete. The processes related to the development of Georgia's Long-Term Low Emissions Development Strategy has started in the second

half of 2020 and is currently ongoing. Georgia developed a Climate Change Strategy focused solely on mitigation. Since 2019, the country is in the process of creating a national system for policies, measures and projections and updating its legislation to align with EU standards. At national level there are no generally applicable reporting formats. The GHG inventory compilation is project based and conducted according to the IPCC guidelines.

Georgia continued developing its NECP in 2021, with regular meetings of the working groups including public authorities and energy sector stakeholders. Specific meetings with civil society have started in autumn 2021, as agreed under the Namakhvani mediation, followed by a public consultation. Depending on the outcome of the consultations, Georgia plans to finalize the NECP in 2022.



Georgia Infrastructure

Infrastructure Implementation

Infrastructure Indicators	Transposition Assessment	Implementation Status	Descriptions
National competent authority			The national competent authority has not been appointed.
Manual of procedures			The manual of procedures has not been drafted.
National regulatory authority involvement			The methodology and criteria used to evaluate investments in electricity and gas infrastructure projects have not been published.

There has been no progress in the implementation of Regulation (EU) 347/2013 in the last reporting period. A national competent authority is yet to be defined and the related acts are still missing. The Georgian National Energy and Water Supply Regulatory Commission (GNERC) has approved investment evaluation rules and in the course of the last reporting period worked on defining a cost-benefit analysis methodology for the evaluation of investment projects in the transmission system, both in electricity and gas. In July 2021, GNERC has approved a cost-benefit analysis methodology for the evaluation of investment projects in the gas transmission system as an annex

of the investment evaluation rules. GNERC should approve the same for the electricity transmission system and publish the methodology and criteria used to evaluate investments in electricity and gas infrastructure projects. Further progress in this respect is expected.

Georgia should proceed with the Regulation's transposition as soon as possible. This is likely to facilitate the realization of the proposed PMI projects (SCP Georgian Offtake Expansion for EU LNG Swap, Trans-Anatolian pipeline expansion and further expansion of the South Caucasus pipeline).

PECI/PMI projects (December 2020): **3**

Gas: **3**

PMI: **3**



Statistics Implementation

Statistics Indicators	Transposition Assessment	Implementation Status	Descriptions
Annual statistics			The five annual questionnaires for 2019 were transmitted to EUROSTAT. The questionnaire on final energy consumption of households for 2019 was compiled and transmitted. The quality report is submitted to EUROSTAT in 2021 and published.
Monthly statistics			Monthly data are collected and disseminated timely in accordance with Annex C of the Regulation. Short-term monthly gas datasets are missing.
Price statistics			Price statistics for electricity and natural gas were compiled and transmitted in accordance with the acquis.

Georgia maintains a high level of compliance with the acquis on statistics.

Statistics are produced by the national statistics institute, GEOSTAT. The energy balances produced by GEOSTAT are in compliance with Annex B of Regulation (EC) 1099/2008 and the five questionnaires are being transmitted to and published by EUROSTAT since 2013. In addition, disaggregated data on final energy consumption of households are reported to EUROSTAT in the defined questionnaire format. Preliminary questionnaires with data for 2020 were prepared and transmitted on time.

As for the monthly statistics, Georgia has been transmitting all monthly data collections from Annex C of Regulation (EC) 1099/2008 timely. The only shortcoming is completeness of MOS oil data. Short-term monthly data collections for oil pursuant to Annex D of Regulation (EC) 1099/2008 are provided,

whereas there is a break in short-term reporting of natural gas. Natural gas and monthly oil data are reported to the JODI database.

GEOSTAT introduced quality assurance procedures and prepares quality reports for different domains. The quality report with the metadata for transmitted energy statistics is submitted to EUROSTAT for publication, as required by the Regulation.

The transmission of statistics on prices of natural gas and electricity charged to end-users, broken down by consumption band, taxation level and price component, has started from 2018 data onwards and is fully compliant with the acquis.

Georgia is widely compliant with the obligations from the acquis on statistics.



Georgia Cybersecurity

Cybersecurity Implementation

Cybersecurity indicators	Transposition Assessment	Implementation Status	Descriptions
Institutions and legislation			Georgia lacks a comprehensive cybersecurity law or compliant rules for the energy sector. CERT-GOV-GE is responsible for cyber protection in the energy sector. Identification of critical information infrastructure is not specific to critical energy assets.
Requirements for operators and energy regulatory authority			The risk assessment framework is basic and not energy-specific. There are general obligations for security measures to be established and for incident reporting by the operators of critical information infrastructures, with no energy-specific references. GNERC is not mandated for cybersecurity matters.

The Cybersecurity Strategy of 2017 promotes measures to increase the resilience of critical informational systems, analyse threats, prevent cyber incidents or alleviate their impact. There are no energy-specific cybersecurity policies and measures in place. The new draft Strategy 2020 - 2022 is pending adoption.

The Law on Information Security of 2012, as amended in 2021, partially transposes Directive (EU) 2016/1148 (NIS Directive) and the key provisions of Directive 2008/114/EC in the context of critical information and communication infrastructures. The Law defines security criteria for the public and private domains of the economy, including energy, and addresses information security audits, cybersecurity services and the concept of CERT operation. Risk assessment and international cooperation are missing. Legislative and regulatory acts also address some aspects of security and protection of rights in the digital data environment, such as incident reporting obligations and security of e-transactions.

The main cybersecurity authority is the Digital Governance Agency (DGA) established in 2020. DGA is tasked to promote digital governance and provide information security and cybersecurity services and assistance in implementing ISO/IEC 27000 standards to the public administration. The Agency hosts the national CERT of Georgia (CERT-GOV-GE) acting as focal point

for cybersecurity response. It is responsible for handling cybersecurity incidents, providing alerts, raising awareness, training, testing and education. Protection of critical infrastructure is CERT's priority.

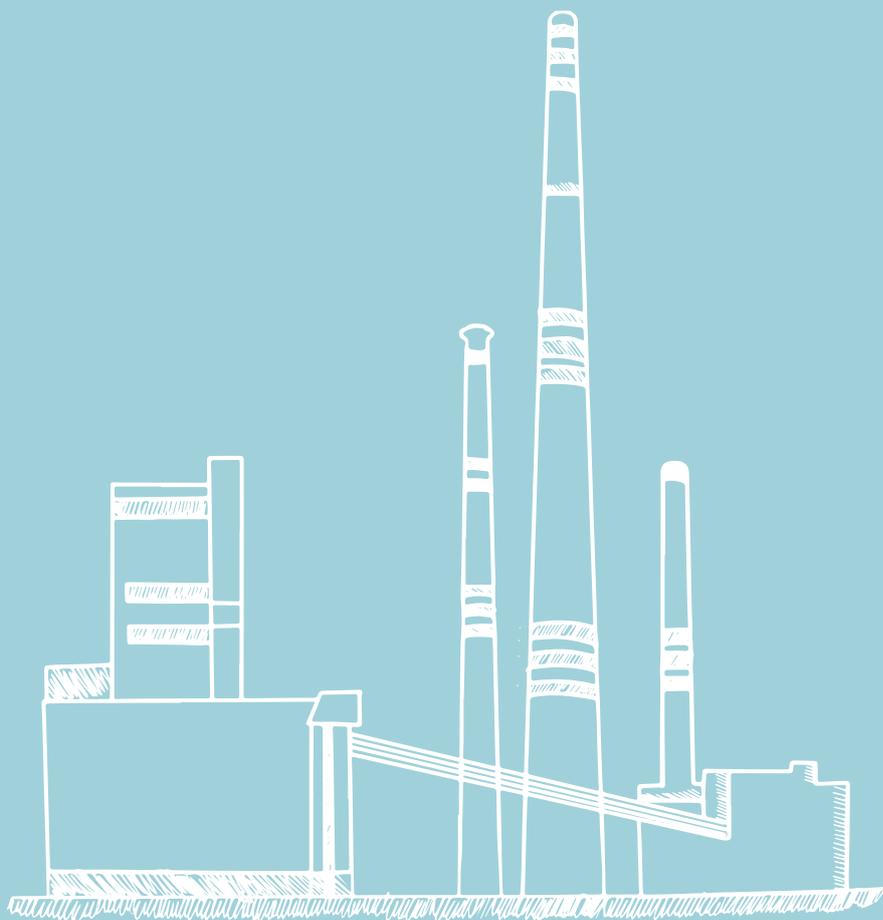
There are no explicit criteria for identification and designation of critical infrastructures in the energy sector. The 2021 amendments of the Law on Information Security define three categories of essential subjects – two for the public and one for the private sector, with identification criteria based on the likelihood of the incidents and severity of impact. A list of specific operators needs to be developed by the DGA and adopted by the Government.

Cybersecurity risk assessment is barely addressed. The Law on Information Security provides only general requirements for security audits and obligations for performing tests. DGA is tasked to set the framework for information security and assess internal rules and status reports that each operator of critical information infrastructure has to submit. Specific criteria for risk assessment in energy are not defined.

The energy regulatory authority GNERC has no specific cybersecurity tasks or powers.

06

Kosovo*

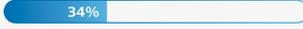
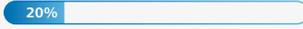






Kosovo*

Summary Implementation

Summary Indicators	Transposition Assessment	Implementation Status	Descriptions
 Electricity		 71%	Implementation in the electricity sector of Kosovo* is well advanced.
 Gas*		 34%	Implementation in the gas sector of Kosovo* is still at an early stage.
 Oil		 20%	Implementation in the oil sector of Kosovo* is yet to begin.
 Renewable Energy		 59%	Implementation in the renewable energy sector of Kosovo* is moderately advanced.
 Energy Efficiency		 62%	Implementation in the energy efficiency sector of Kosovo* is well advanced.
 Environment		 58%	Implementation in the environment sector of Kosovo* is moderately advanced.
 Climate		 50%	Implementation in the climate sector of Kosovo* is moderately advanced.
 Infrastructure		 92%	Implementation in the infrastructure sector of Kosovo* is almost completed.
 Statistics		 80%	Implementation in the statistics sector of Kosovo* is well advanced.
 Cybersecurity		 43%	Implementation in the cybersecurity sector of Kosovo* is moderately advanced.

* Due to the lack of a gas market, implementation of the gas acquis is not taken into account in the overall score of Kosovo*.

Overall number of cases: **2**

Procedure
by Article **91**

ECS-8/21 - Environment

ECS-4/19 State aid



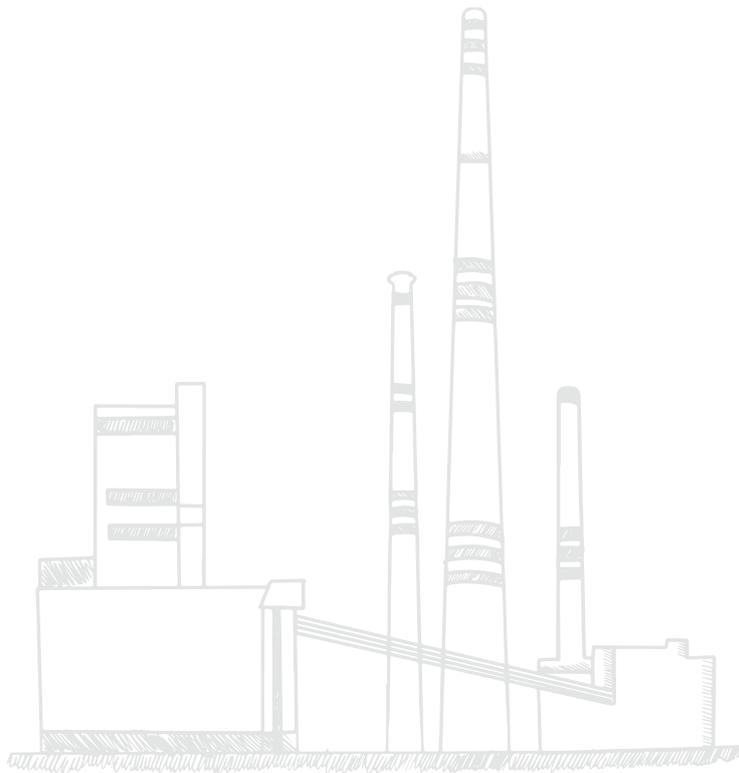
Kosovo*

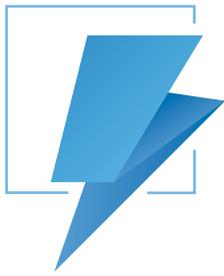
State of Energy Sector Reforms

In Kosovo*, the discussion about the future energy mix has taken centre stage after the previous plans to build a new coal power plant were shelved. Going ahead with further renewable energy deployment is a no-regret solution, as is the more efficient use of interconnection capacity by coupling the market with neighbours. Despite the transmission system operator of

Kosovo* now controlling its area and allocating forward capacities through SEE CAO, capacity on the interconnector with Serbia is still not allocated. As in other Contracting Parties, compliance with the Large Combustion Plants Directive and environmental impact assessment for hydropower are of concern.

Kosovo* depends almost exclusively on two ageing lignite plants for its electricity. The project of building a new one, the Kosovo* e Re project, was cancelled. The dispute with the transmission system operator of neighbouring Serbia came to an end by the signing of the connection agreement of the transmission system operator with ENTSO-E. Kosovo* is not connected to any natural gas system. Electricity generated from wind and solar are underrepresented in Kosovo's* energy mix. The energy intensity of the Kosovo* economy is almost four times higher than the European Union average.





Kosovo* Electricity

Electricity Implementation

Electricity Indicators	Transposition Assessment	Implementation Status	Descriptions
Unbundling			The transmission system operator and the distribution system operator are unbundled.
Access to the system			Third party access to the network is ensured. The Transparency Regulation is transposed and its implementation has started. The Connection Network Codes are implemented through the grid codes approved by the regulator.
Wholesale market			The bulk supply agreement between the state producer and supplier distorts competition. The establishment of a day-ahead market hinges on the establishment of the Albanian day-ahead market, which continues to be delayed. A competitive balancing market exists. The REMIT Regulation is transposed.
Retail market			Only customers connected at high voltage are supplied at unregulated prices. The lack of a decision-making quorum of the regulator was used as a justification to prolong the regulation of prices for medium voltage customers for another year.
Regional integration			Forward and daily cross-border capacities are allocated through SEE CAO, except with Serbia, where capacities are not offered to the market at all. Intraday capacity is allocated bilaterally. The transmission system operators of Albania and Kosovo* implemented a common dimensioning of the balancing reserve as well as a joint provision of secondary control.

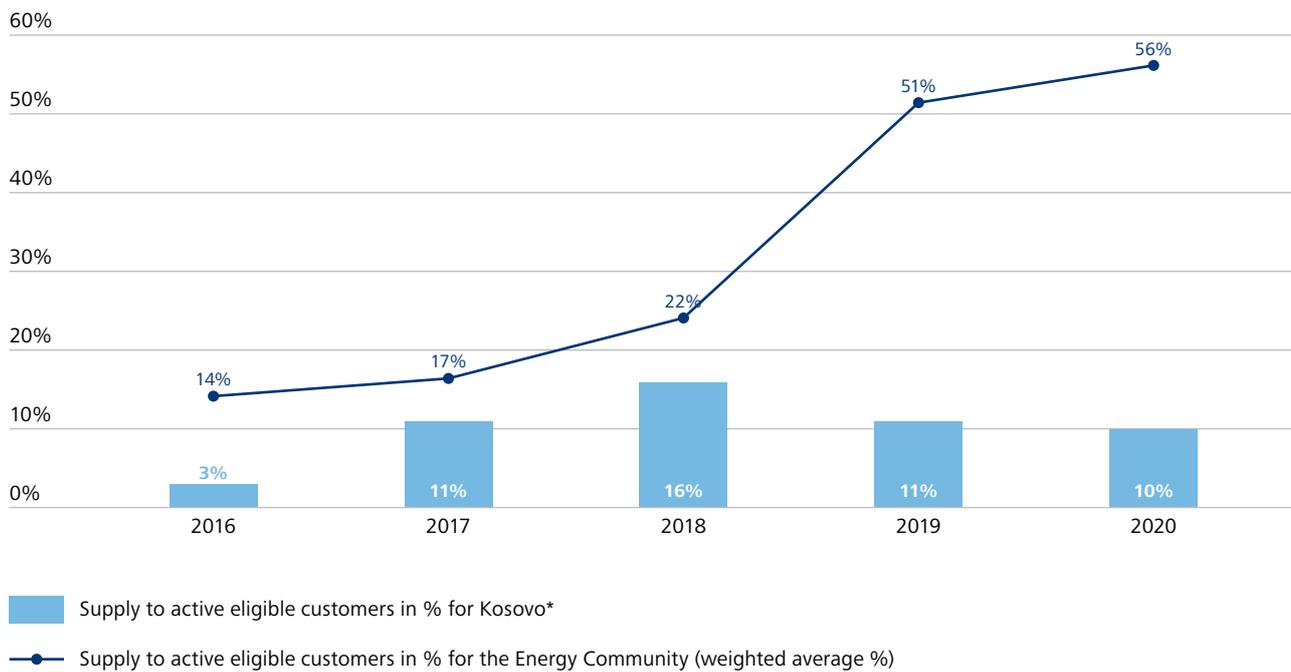
Kosovo* made progress in terms of cross-border cooperation following the entry into force of the connection agreement with ENTSO-E in October 2020. As of 2021, the transmission system operator KOSTT started to allocate cross-border capacities through SEE CAO. Intraday capacity is allocated bilaterally. Rules for the allocation of capacities on the interconnections with Serbia have not been agreed yet and no auctions have been organised. As a result, capacities are not being allocated on these interconnections, which is a concern for market participants.

Cross-border balancing cooperation with Albania was strengthened pursuant to the agreement on the establishment of the Albania - Kosovo* (AK) control block. Common dimensioning of the frequency restoration reserve (FRR) has been implemented. Furthermore, automatic FRR (aFRR) is procured and activated jointly for both transmission system operators, while manually activated FRR is procured separately.

The project on establishing a day-ahead market and its coupling with Albania is in delay. The Albanian power exchange company ALPEX, which is responsible for setting up of the day-ahead and intraday markets both in Kosovo* and Albania as well as market coupling between the two bidding zones, got stuck with procuring an electronic trading platform and services for the power exchange. According to ALPEX's plans, the day-ahead market in Kosovo* and its coupling with Albania should commence two months after the go-live of the Albanian day-ahead market. ALPEX established a branch office in Pristina in May 2021.

Competition in the wholesale market is hindered by the so-called bulk supply agreement between KEK and KESCO, through which KEK sells its output to KESCO to the extent it needs it to supply its public service portfolio. The opening of the retail market was postponed for the fourth consecutive year, this time justified by the lack of a decision-making quorum of the

Retail Market Opening



Source: Ministry of Economy, compiled by the Energy Community Secretariat

regulator's board. Medium voltage customers continue to be supplied by the universal supplier at regulated prices. On 31 March 2021, the regulator requested KESCO to continue to perform universal supply of final customers, including customers connected to the 35 kV and 10 kV.

KOSTT has started publishing some data on the ENTSO-E Transparency Platform. The Connection Network Codes are mostly implemented through the grid code from 2018 and the distribution code of 2020. The Rule transposing the REMIT Regulation of June 2020 and a registration of market participants is on-going.



Kosovo*

Gas

Gas Implementation

Gas Indicators	Transposition Assessment	Implementation Status	Descriptions
Unbundling		<div style="border: 1px solid #ccc; border-radius: 10px; width: 100%; height: 15px; background-color: #e0e0e0; display: flex; align-items: center; justify-content: center;">0%</div>	There is no transmission system operator in Kosovo*; the only applicable model for a future transmission system operator is the ownership unbundling model.
Access to the system		<div style="border: 1px solid #ccc; border-radius: 10px; width: 100%; height: 15px; background-color: #e0e0e0; display: flex; align-items: center; justify-content: center;">0%</div>	Kosovo* does not have a gas network and thus has not adopted rules providing for regulated third party access.
Wholesale market		<div style="border: 1px solid #ccc; border-radius: 10px; width: 100%; height: 15px; background-color: #e0e0e0; display: flex; align-items: center; justify-content: center;">0%</div>	There is no gas market in Kosovo*.
Retail market		<div style="border: 1px solid #ccc; border-radius: 10px; width: 100%; height: 15px; background-color: #e0e0e0; display: flex; align-items: center; justify-content: center;">0%</div>	There are no gas customers in Kosovo*.
Interconnectivity		<div style="border: 1px solid #ccc; border-radius: 10px; width: 100%; height: 15px; background-color: #e0e0e0; display: flex; align-items: center; justify-content: center;"> <div style="background-color: #007bff; width: 12%;"></div> 12% </div>	Kosovo* transposed security of supply rules. There are no gas interconnectors with Kosovo*.

Kosovo* has no gas market access, no infrastructure and no supplies of natural gas. Yet, a possible gas market is regulated by the 2016 Law on Natural Gas.

In a wider debate in Kosovo* on how to decarbonize the country's energy sector that is heavily reliant on lignite, access to gas

supplies via pipeline is not gaining traction with the Government as a viable option for now. The debate is still on-going. The country's regulatory framework remains rudimentary.

The opportunities to provide a supply route from North Macedonia or from Albania via pipelines exist.

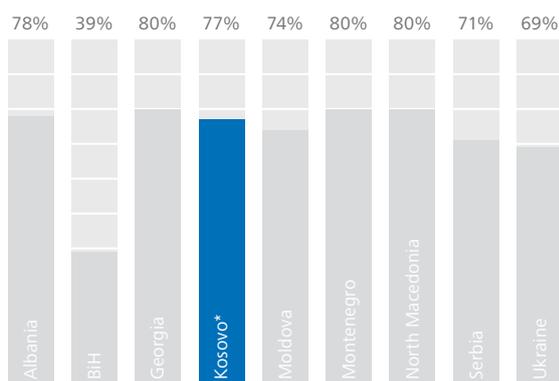


Kosovo*

National Authorities



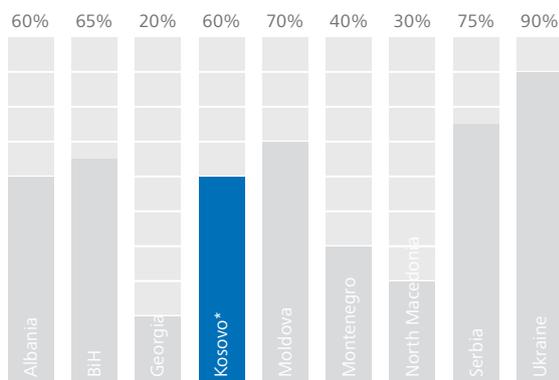
Regulatory Authority



In the reporting period, effective operation and functional independence of the Energy Regulatory Office (ERO) has been blocked by the lack of a decision-making quorum after the expiration of mandates of three Board members in December 2020. This situation was only overcome in August 2021 by the appointment of a new Chairman and two new Board members. Before loss of the decision-making quorum, the regulator proved its commitment to transpose new acquis by including the electricity Network Codes in the national regulatory rules, implementing the REMIT Regulation and adopting rules for NEMO designation. It approved the cross-border capacity allocation rules, which are applied by the transmission system operator as of December 2020. On the other hand, ERO has delayed retail market opening several times since 2018 for customers connected to 35 kV and 10 kV. The regulator has been active in promoting self-consumption of customers by issuing licenses for installation of solar panels.



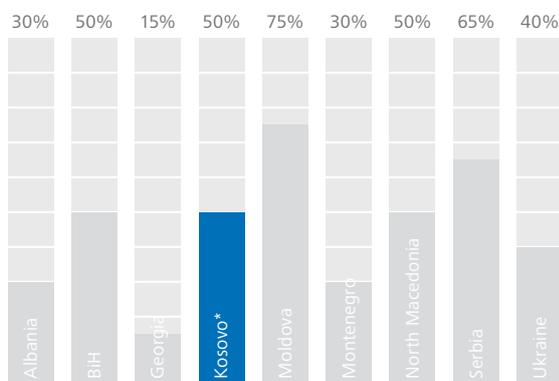
Competition Authority



In the reporting period, the Kosovo Competition Authority opened an investigation into anti-competitive agreements and abuse of dominance by KEDS and KESCO by creating barriers to entry on the market of electricity supply. The Secretariat will closely monitor the outcome of this investigation.



State Aid Authority



The authority responsible for enforcing the Law on State Aid consists of a State Aid Department (SAD), which receives, analyses and monitors notifications, and a State Aid Commission (SAC), the decision-making body. Following the integration of the SAD into the Ministry of Finance, its independence is questionable. Despite its limited human and technical resources, the SAD has started to investigate State support in the energy sectors and rendered its first negative decision finding that the feed-in-tariff granted to producers of energy from solar (20 MW) contains incompatible State aid.



Kosovo* Oil

Oil Implementation

Oil Indicators	Transposition Assessment	Implementation Status	Descriptions
Stockholding obligation			The current legislative framework imposes an obligation on the industry to keep oil stocks in the amount of 5% of the company's oil storage capacity but not for emergency oil stocks purposes. The draft Law on Compulsory Oil Stocks should be adopted as soon as possible.
Emergency procedures			Currently, no procedures are in place to release emergency oil stocks. However, the draft Law foresees that the Government shall, on a proposal of the Minister in charge for oil, adopt a Response Plan with reserves to be released in the case of a supply interruption.
Fuel specifications of petrol, diesel and gas oil for non-road mobile machinery (NRMM)			With the 2017 Administrative Instruction on the Quality of Petroleum-derived Liquid Fuels, Kosovo* has transposed the main requirements of the Fuel Quality Directive. This Instruction applies to petrol and diesel in accordance with European standards. The sulphur content of gas oil for NMRR is not specified and leaves room for misinterpretation.
Monitoring compliance and reporting including the lay down the rules on penalties			The suppliers are obliged to guarantee the quality of petroleum-derived liquid fuels placed on the market. The quality is verified via laboratory tests as set out in the annual quality monitoring programme. There are detailed penalty measures specified in the current legislation. In case the fuels do not meet the technical requirements after testing, they must be withdrawn from the market.

In Kosovo*, the main law governing the oil sector is the Oil Market Law of 2005, as amended in 2009. The Ministry of Trade and Industry (responsible for oil and petroleum products) drafted a new Law on Compulsory Oil Stockholding in March 2014. The draft Law was expected to be adopted in the fourth quarter of 2020 or first quarter of 2021. However, its approval

by the Government and subsequent adoption by the Parliament is still pending.

Kosovo* has transposed the main provisions of the Fuel Quality Directive. Sulphur content in gas oil for non-road mobile machinery (NMRR) should also be specified.



Kosovo* Renewable Energy

Renewable Energy Implementation

Renewable Energy Indicators	Transposition Assessment	Implementation Status	Descriptions
National Renewable Energy Action Plan			Kosovo* has reached 25,69% of renewable energy in 2019, surpassing its 2020 target of 25%. However, only the sectorial target for heating and cooling was overreached, while contributions of renewable energy to electricity and transport are still very low.
Quality of support schemes			The law currently prescribes a support scheme based on administratively set feed-in tariffs, however, since December 2020 the allocation of feed-in tariffs has been suspended. Renewable energy producers under the support scheme are liable for 25% of their total imbalance costs.
Grid integration			The system operator is obliged to give dispatching priority to generating installations using renewable energy sources grounded on transparent and non-discriminatory criteria.
Administrative procedures and guarantees of origin			A one-stop shop supported by an inter-institutional coordination committee made up of all authorities involved in the development of renewable investments is not yet in place, despite the regulation on its establishment being adopted by the Government already in 2018. Kosovo* has expressed interest to join the Energy Community regional initiative to establish an electronic system for guarantees of origin.
Renewable energy in transport			Provisions related to sustainability of bio-fuels are still not transposed and the legal framework remains completely non-compliant with Directive 2009/28/EC.

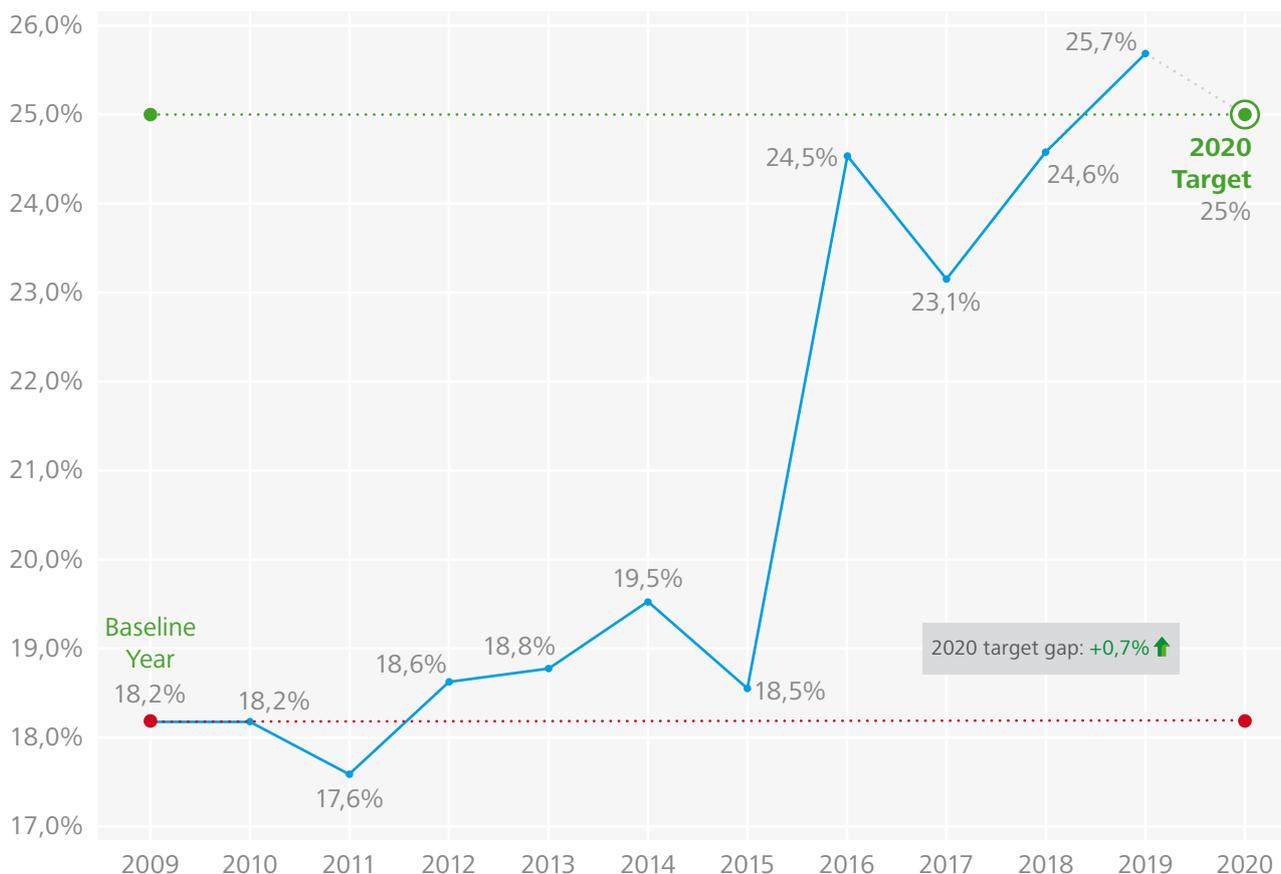
There were no improvements in the transposition and implementation of the renewables acquis during the reporting period in Kosovo*.

In November 2020, the State aid authority of Kosovo* made a decision regarding non-compliant State support to renewables. It found that an administratively set feed-in tariff for photovoltaic projects with a total installed capacity of 20 MW does not comply with the State aid acquis because it has not been notified to the competent State aid authority before it was granted and it is not in line with the Guidelines on State Aid for Environmental Protection and Energy.

In Kosovo*, any electricity customer connected to the low voltage distribution network with installed capacity not higher than 100 kW can apply to its supplier to obtain the status of a self-consumer using a net billing scheme. This seems to function well in practice with 56 self-consumers connected and many new applications in the pipeline.

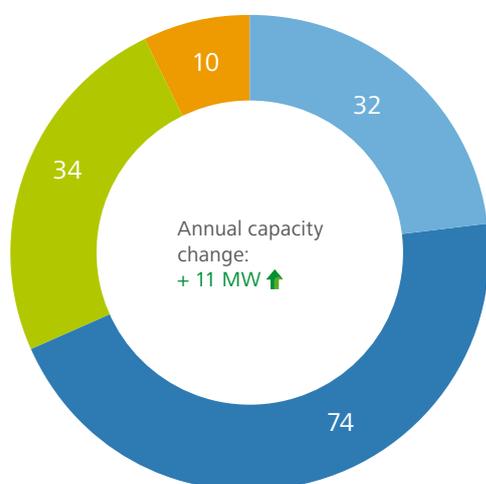
Priorities for Kosovo* should be the introduction of a market-based support scheme in line with the State Aid Guidelines and transposition of provisions related to sustainability of bio-fuels. At the same time, an electronic system for guarantees of origin should be established.

Shares of Energy from Renewable Sources



Source: EUROSTAT

Total Capacities of Renewable Energy 2020 (MW)



- Large hydropower
- Small hydropower <10 MW
- Wind
- Solar

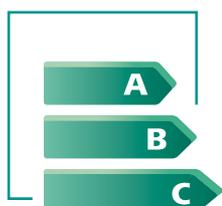
In 2020, only 11 MW of small hydropower capacities were commissioned, resulting in a total of 74 MW of small hydropower, in addition to 32 MW of large hydropower, 34 MW of wind (Kitka wind farm) and only 10 MW of solar in spite of the potential for wind and solar to be deployed cost-effectively. The testing phase of the first part of the Bajgorë wind plant SELAC I (34,47 MW) has started in September 2021 and is expected to enter into commercial operation in October, whereas SELAC II (34,47 MW) is expected to enter into commercial operation by the end of 2021. The project is divided in three phases and the total installed capacity is planned to be 105 MW.

With a 25,69% share of energy from renewable sources in gross final energy consumption in 2019, Kosovo* has reached its 25% target for 2020. However, this is mainly due to the revision of biomass consumption data. Additional measures, including the introduction of a market-based support scheme in the first place, are needed to increase the share of renewable energy in electricity and transport.

Total capacities of renewable energy (MW):

150

Source: Ministry of Economy and Environment/Energy Regulatory Office (ERO), based on ERO Report 2019 and KESCO



Kosovo* Energy Efficiency

Energy Efficiency Implementation

Energy Efficiency Indicators	Transposition Assessment	Implementation Status	Descriptions
Energy efficiency targets and policy measures			The 2018 Law on Energy Efficiency set a final energy cap consumption target for 2020, an energy efficiency obligation with a 0,7% target and a 1% annual central government buildings renovation target. The final version of the National Energy Efficiency Action Plan (NEEAP) 2019 – 2021 was submitted to the Secretariat in December 2020. The fifth Annual Progress Report was not submitted.
Energy efficiency in buildings			Kosovo* adopted the necessary by-laws to implement the Law on the Energy Performance of Buildings. Activities to strengthen expertise and tools for certification of buildings are ongoing. A plan to boost nearly zero-energy buildings and a building renovation strategy have been drafted, but not adopted.
Energy efficiency financing			The Energy Efficiency Fund, with capitalisation of around EUR 20 million and secured financing until 2022, continued public calls for improvement of energy efficiency in municipalities. There are plans to extend financing for the residential sector in 2022. Rules on energy efficient public procurement, ESCOs and energy performance and supply contracts are in line with the acquis. The draft NEEAP includes measures for the development of an ESCO market.
Energy efficient products - labelling			Kosovo* still fails to implement the delegated regulations adopted by the Ministerial Council in October 2014 and November 2018. Only the labelling regulations adopted by the 2010 Ministerial Council have been implemented.
Efficiency in heating and cooling			Kosovo* has district heating systems in four municipalities, which predominately rely on coal (94%) and petroleum products (6%). Most heat consumption is billed without being metered. Gjakova municipality has constructed a biomass cogeneration plant to replace the existing petroleum heating plant. Kosovo* has not assessed its potential for high-efficiency cogeneration and efficient district heating and cooling, as required by the Energy Efficiency Directive.

Kosovo*'s progress during this reporting period includes intensified financing activities linked to the Energy Efficiency Fund (in public buildings and plans for extension to residential sector), finalisation of strategic documents (including the Building Renovation Strategy) and activities to implement the regulation on energy audits and energy performance certification of buildings. However, the adoption of the remaining secondary legislation required for implementation of the Energy Efficiency Law was delayed. The Secretariat was not notified on measures implemented under the energy efficiency obligation scheme.

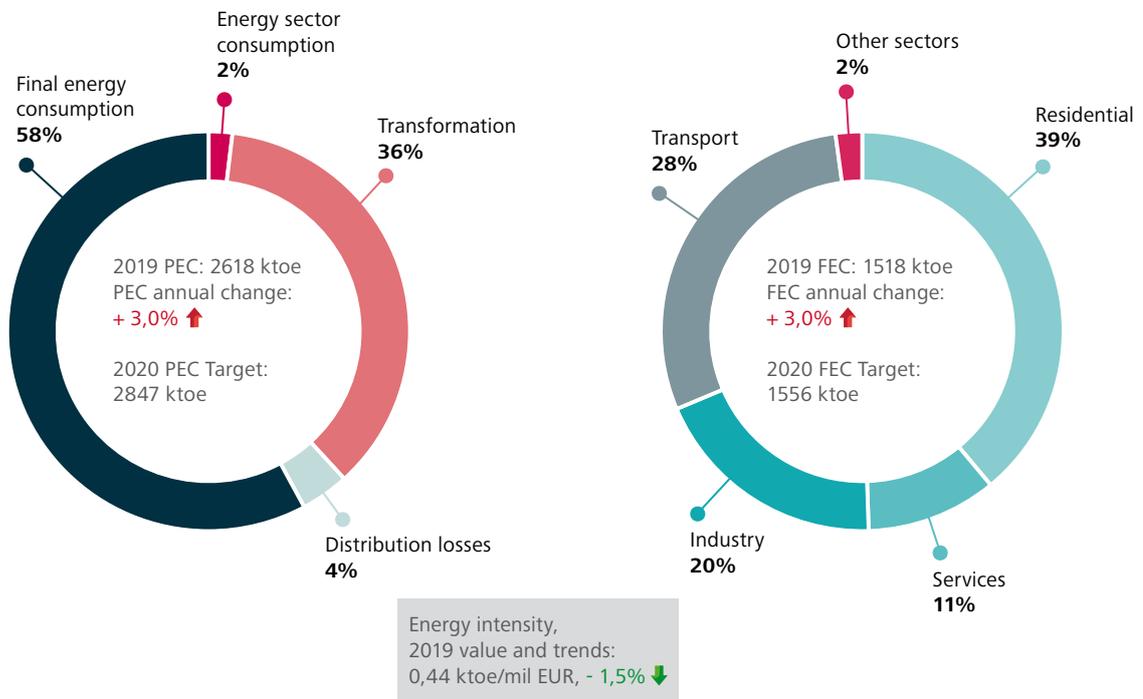
The annual report on the progress in implementation of the Energy Efficiency Directive should be finalised and sent to the Secretariat without delay. A Monitoring and Verification Platform (MVP) for energy savings should be put into operation and used by the Energy Efficiency Agency.

The transposition of the remaining labelling delegated regulations also remains a priority.

2019 Energy Efficiency Indicators and Trends

Primary Energy Consumption (PEC)

Final Energy Consumption (FEC)



Source: EUROSTAT and World Bank 2021 data and Contracting Party's Reports

Energy Efficient Products – Overview of Implementation of Labelling Regulation

FRAMEWORK REGULATION*	Household dishwashers	Fridges and freezers*	Household washing machines	Televisions	Air conditioners and fans*	Household tumble driers	Electrical lamps and luminaires	Solid fuel boilers*	Space heaters*	Water heaters & storage tanks	Domestic ovens and range hoods
	●	●	●	●	●	●	●	●	●	●	●

● Adopted and implemented ● Compliance or implementation issues detected ● No progress with adoption/implementation

* The new labelling package adopted by the Ministerial Council in November 2018 was assessed, as the transposition deadline expired in January 2020.

Source: multiple sources of data (EECG reports, NEEAPs etc.), compiled by the Energy Community Secretariat



Kosovo*

Environment

Environment Implementation

Environment Indicators	Transposition Assessment	Implementation Status	Descriptions
Environmental impact assessment (EIA) and strategic environmental assessment (SEA)			The draft Law on Environmental Impact Assessment is not yet aligned with Directive 2014/52/EU. The capacities of the authorities must be improved in order to secure the Law's proper implementation and enforcement. The Law on Strategic Environmental Assessment is not in compliance with the SEA Directive.
Sulphur in fuels			The legal framework complies with the provisions of the Directive, its systematic implementation is however questionable. The competent authorities have to ensure that quality control of the fuels falling under its scope is carried out in a compliant manner.
Large combustions plants and industrial emissions			New legislation on the limit values for emissions of air pollutants from stationary sources was adopted in the reporting period. With that, Kosovo*'s long-standing non-compliance with emissions legislation was addressed.
Nature protection			Kosovo* should further assess the potential of designating and protecting new wetlands. Up-to-date management plans (including a programme for long-term monitoring) should be prepared for each protected area. The number and administrative capacities of the management bodies as well as the environmental inspectorates must be improved to ensure effective protection.
Environmental liability		n/a	Kosovo* has not transposed the Environmental Liability Directive.

The new draft Law on Environmental Impact Assessment (EIA) falls short of compliance with Directive 2014/52/EU, in particular with Article 5 and Annex IV concerning the content of the EIA report, Article 8(a) concerning the reasoned conclusions and the decision to grant the development consent for the project and Article 9(a) concerning conflicts of interest. The preparation of secondary legislation has not started yet. The provisions for transboundary EIA must be further aligned with Article 7 of the EIA Directive. To secure proper implementation and enforcement, the new draft legislation should be supplemented with a capacity building for public authorities, including at local level. In the reporting period, Kosovo* conducted an EIA procedure for one HPP project, HPP Dukagjini 3 in Deçan. Kosovo* failed to submit the requested information concerning the HPP cascade Decani within the framework of ongoing investigations by the Secretariat.

The current Law on Strategic Environmental Assessment (SEA) should be amended to ensure that SEAs are carried out in parallel with the preparation of the plan or programme, before its submission to the legislative procedure, as stipulated in Article 4 of the SEA Directive. The Government should ensure that the strategic environmental assessment for the NECP is conducted as early as possible, and early and effective opportunities for the public to participate are provided.

Existing legislation in Kosovo* on the sulphur content of liquid fuels, including the administrative instruction on the technical requirements for import, storage, wholesale and retail sale of petroleum fuels, is in line with the provisions of the Directive.

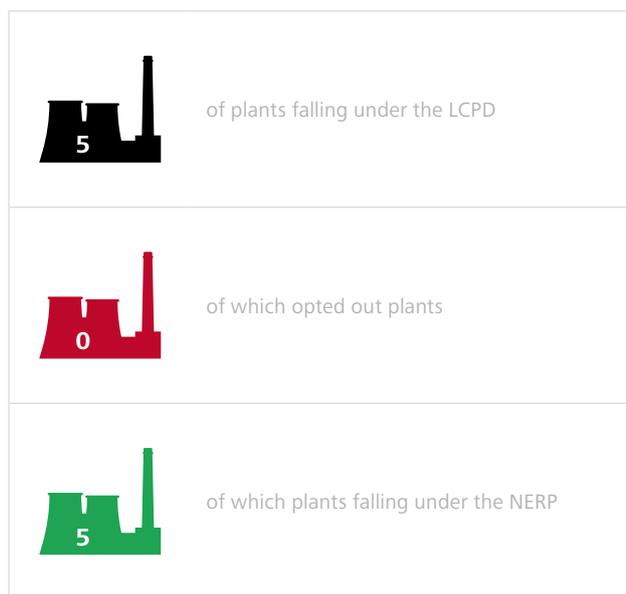
In July 2021, Kosovo* adopted legislation compliant with the provisions of the Large Combustion Plants and Industrial Emis-

sions Directives. With that, Kosovo* addressed the breach stipulated in a Decision of the Ministerial Council. Kosovo* complied with its emissions reporting obligations for the reporting year 2020 in March. Since the NERP ceilings for all three pollutants (sulphur dioxide, nitrogen oxides and dust) are not compliant, and the absolute amount of emissions has even increased compared to 2019 levels, the Secretariat opened dispute settlement procedures in March 2021.

In the reporting period, Administrative Instruction No. 12/2020 on the Proclamation of Wild Species Protected and Strictly Protected was adopted. However, there were no new designations

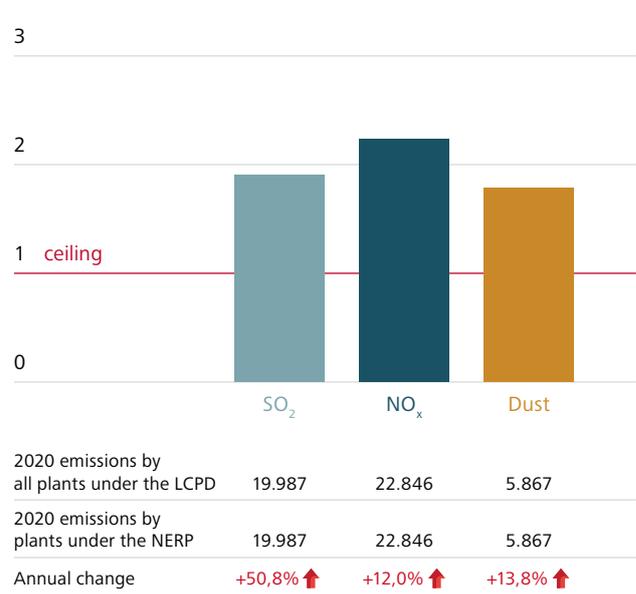
of protected areas. A full inventory of potential wetlands has not been prepared yet. The management plan for the National Park Sharii (Shar) Mountain should be updated and include a long-term monitoring programme. Furthermore, the Sharii (Shar) mountain management authorities in Kosovo* and North Macedonia should cooperate and coordinate joint activities for the proper protection of the cross-border national park. An up-to-date management plan for the Special Area for Birds “Henc” is still lacking. The management bodies of the protected areas are seriously understaffed; in particular, they lack experienced biologists. Furthermore, only one inspector is assigned to deal with biodiversity cases/reports for all protected areas.

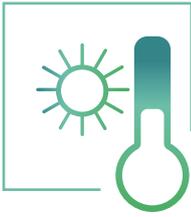
Installations under the Large Combustion Plants Directive



Source: compiled by the Energy Community Secretariat

2020 emissions versus NERP ceilings





Kosovo* Climate

Climate Indicators	Transposition Assessment	Implementation Status	Descriptions
National greenhouse gas emissions monitoring and reporting systems			Legislation defining national systems for policies, measures and projections is missing. Until this is the case, Kosovo* will not be in compliance with Regulation (EU) 525/2013. Compilation of the GHG inventory is progressing. A law on climate change is envisaged to be adopted by end 2022.
National Energy and Climate Plans (NECPs)			Kosovo's* draft NECP has been discussed within the working groups and the Government. There is no deadline for submitting the draft NECP to the Secretariat.

Kosovo* is not a signatory party of the United Nations Framework Convention on Climate Change (UNFCCC). There is currently no legal basis for drafting Nationally Determined Contributions. No targets are set for 2030 and no regular reporting is undertaken. However, Kosovo* compiled the Greenhouse Gas Inventory for the years 2008 – 2019. The reports are published on the Kosovo Environmental Protection Agency (KEPA) website. KEPA is the institution responsible for collecting data and reporting them to the European Environment Agency.

Efforts have been made to align Kosovo*'s legislation and policy framework to the EU climate acquis. The 2019 – 2028 National Strategy and Action Plan on Climate Change has been approved by the Government and a climate change concept paper was approved in December 2020. An Administrative Instruction for Monitoring Greenhouse Gas Emissions of 2016 defines the governance, inter-institutional arrangements and deadlines for providing data on GHG emissions.

Kosovo* is not compliant with Regulation (EU) 525/2013. Although it has some climate legislation in place and compilation of the GHG inventory is progressing, legislation defining national systems for policies, measures and projections is missing. Missing provisions of Regulation (EU) 525/2013 are planned to be included in a future Law on Climate Change, to be drafted by 2021 and adopted by 2022.

In the absence of a law on climate change, there is still no legal basis for an NECP. The current, almost complete, working draft has been discussed within the NECP working groups involving representatives of government institutions, regulators and operators as well as representatives of civil society, universities and businesses. The Government initiated discussions on the policy scenarios in summer 2021. No initial drafts have been shared with the Secretariat. There is no date for when the final draft will be submitted to the Secretariat.



Kosovo* Infrastructure

Infrastructure Implementation

Infrastructure Indicators	Transposition Assessment	Implementation Status	Descriptions
National competent authority			The national competent authority was established by a decision of the Minister of Economic Development in 2017. The authority has recently submitted the first progress report on the current PECE projects to the Secretariat. The report should be submitted annually within the timeframe defined by the Regulation (end of March).
Manual of procedures			The Ministry of Economic Development published the manual of procedures, as defined by Regulation (EU) 347/2013.
National regulatory authority involvement			Kosovo*'s regulatory authority published the methodology and criteria required by the Regulation on 10 May 2017.

Kosovo* is one of the few Contracting Parties that have transposed Regulation (EU) 347/2013. The Minister of Economic Development adopted the Administrative Instruction on the Promotion of Joint Regional Investments in the Energy Sector in February 2017. The national competent authority was also designated.

The authority has started to report to the Secretariat on the PECE projects development. This is particularly important since Kosovo* participates in two actual PECE projects (ALKOGAP and North Macedonia – Albania interconnector).

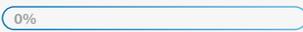
PECE/PMI projects (December 2020): **2**

Gas: **2**

PECE: **2**



Statistics Implementation

Statistics Indicators	Transposition Assessment	Implementation Status	Descriptions
Annual statistics			The annual questionnaires for 2019 were transmitted to EUROSTAT in accordance with the acquis, including the breakdown of energy consumption in households.
Monthly statistics			There is no monthly data yet.
Price statistics			Price statistics on electricity for 2019 were compiled and transmitted in accordance with the acquis.

The main non-compliance issue with respect to the statistics acquis in Kosovo* is linked to the lack of monthly statistics as well as a legal basis for their compilation. A first step towards compliance was made by the commitment of the Kosovo Agency for Statistics (KAS) to begin monthly electricity, coal and oil reporting from 2022. This is yet to be translated into officially adopted documents (plan, programme and methodology).

The KAS is established within the Ministry of Finance and Transfers' office with the task to coordinate the statistical system of Kosovo*. Whereas KAS is responsible for energy statistics, it is not obliged to collect and publish any monthly data yet.

Since 2015, the annual questionnaires have been submitted to and published by EUROSTAT and the International Energy Agency. The breakdown of energy consumption of households is compiled by KAS and transmitted to EUROSTAT. Preliminary questionnaires with 2019 data and the SHARES questionnaire were prepared and transmitted on time. The quality report was also prepared and submitted to EUROSTAT.

No monthly data are compiled or disseminated yet. KAS planned to begin implementation of the acquis related to monthly statistics in 2020 through a pilot project supported by the EU's Instrument for Pre-Accession Assistance, but this was put on hold due to the Covid-19 pandemic. The statistical survey plan for 2022 is expected to include activities to implement obligations from Annex C and Annex D of Regulation (EC) 1099/2008.

Electricity prices per consumption band broken down by taxation level are submitted to and subsequently published by EUROSTAT. Price components for industrial end-users are reported in accordance with the acquis. The established compilation procedure enables regular price data reporting in compliance with the acquis.

Monthly data collection, as the only serious non-compliance issue, has to be tackled without delay. Priority has to be given to monthly data collection for oil in order to meet obligations under the oil stocks acquis.



Kosovo*

Cybersecurity

Cybersecurity Implementation

Cybersecurity indicators	Transposition Assessment	Implementation Status	Descriptions
Institutions and legislation			The Cybersecurity Strategy needs follow-up, including policies for the energy sector. Transposition of the NIS Directive should be completed. The protection of critical infrastructure lacks energy-specific criteria. KOS-CERT implicitly covers the energy sector.
Requirements for operators and energy regulatory authority			The general aspects of risk assessment, data security management and threat reporting obligations are in place. Energy-specific cybersecurity competences still need to be introduced.

The National Cybersecurity Strategy of Kosovo* 2016 - 2019 roughly outlines the responsible parties and objectives in cybersecurity management, threat assessment, protection of critical information infrastructure, building institutional capacity for incident response. The Concept Paper on Network and Information Systems Security Measures, adopted by the Government in 2019, defines the responsibilities of different administrative bodies and promotes cross-sectoral cooperation.

The Law on Critical Infrastructure of 2018 transposes Directive 2008/114/EC in detail and provides broad criteria for identification and designation. It appoints the Ministry of Interior as the main focal point and coordinator in critical infrastructure protection. The energy sector is recognized as relevant, with infrastructures used for production, transmission, distribution and storage of electricity, oil and gas identified as critical. There are no provisions for designation of individual companies and their information and communication systems.

The Energy Strategy 2017 - 2026 does not provide specific criteria for identification of critical infrastructures, risk assessment or security measures for information and communication systems in the energy sector. Cybersecurity-related policies are

foreseen in the new Energy Strategy currently in drafting stage. The Ministry of Economy has taken steps to transpose Directive (EU) 2016/1148 (NIS Directive) in the draft Law on Network and Information System addressing public utilities governed by the Ministry.

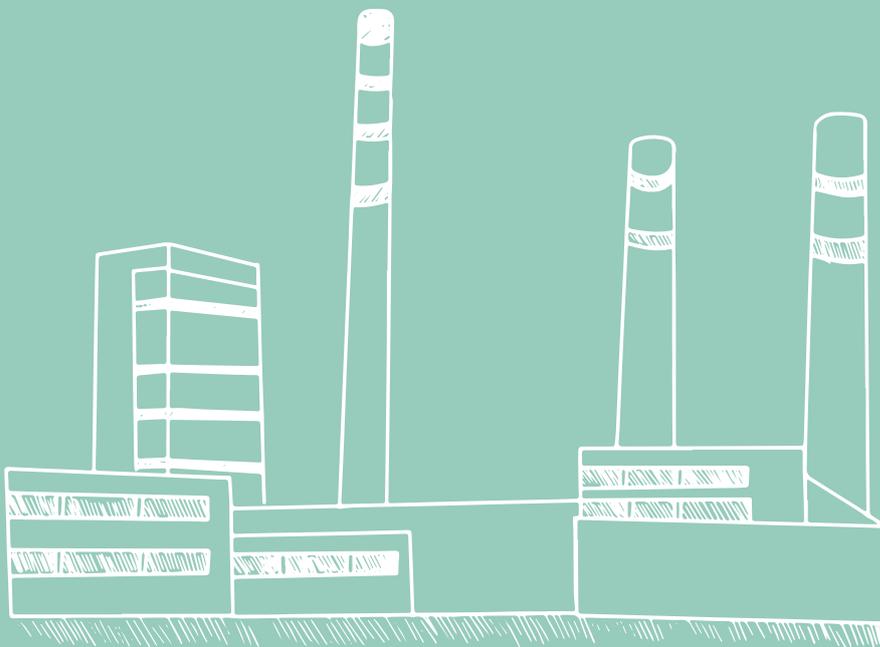
The Regulatory Authority for Electronic and Postal Communications (ARKEP) hosts the national KOS-CERT, acting as the main computer emergency response unit, providing support, notification and exchange of information related to cyber events, also covering the energy sector.

The Law on Critical Infrastructure provides an indicative framework for risk assessment based on range and severity of impact, without addressing specific threats in energy. Obligations for identification of critical assets and development of security plans are included, along with requirements for establishment of incident prevention plans and risk mitigation systems and reporting of security concerns. Cybersecurity in the energy sector requires a specific risk management framework.

The Energy Regulatory Office ERO is not empowered for any specific cybersecurity activities.

07

Moldova

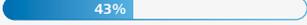






Moldova

Summary Implementation

Summary Indicators	Transposition Assessment	Implementation Status	Descriptions
 Electricity		 43%	Implementation in the electricity sector of Moldova is moderately advanced.
 Gas		 43%	Implementation in the gas sector of Moldova is moderately advanced.
 Oil		 15%	Implementation in the oil sector of Moldova is yet to begin.
 Renewable Energy		 59%	Implementation in the renewable energy sector of Moldova is moderately advanced.
 Energy Efficiency		 78%	Implementation in the energy efficiency sector of Moldova is well advanced.
 Environment		 68%	Implementation in the environment sector of Moldova is well advanced.
 Climate		 55%	Implementation in the climate sector of Moldova is moderately advanced.
 Infrastructure		 8%	Implementation in the infrastructure sector of Moldova is yet to begin.
 Statistics		 98%	Implementation in the statistics sector of Moldova is almost completed.
 Cybersecurity		 43%	Implementation in the cybersecurity sector of Moldova is moderately advanced.

Overall number of cases: **5**

Procedure by Article **91**

ECS-14/16 Energy efficiency

ECS-9/17 Electricity

ECS-7/18 Environment

ECS-18/21 Electricity

ECS-24/21 Environment



Moldova

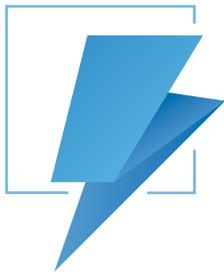
State of Energy Sector Reforms

Moldova's reform process has almost stalled during the reporting period. Necessary updates of all energy-related laws have not taken place, and the unbundling of both incumbent transmission system operators has failed. The next step towards opening up the wholesale power market, the establishment

of a functioning balancing mechanism, has been postponed. The gas market is even more foreclosed. Nevertheless, a new gas interconnector with Romania was completed and certified. Further progress in the areas of renewable auctions and energy efficiency depends on the adoption of new legislation.

Moldova's electricity sector is characterized by dependence on one source, a thermal power plant in the Transnistria region, while still not being interconnected with its Western neighbour Romania. Development of the interconnection project is slow. Asynchronous interconnection (through back-to-back stations) is expected to be completed by 2024. Dependence in the gas sector, where Gazprom controls the national gas incumbent, is equally high. The Romanian system operator Transgaz built a pipeline connecting Moldova's key consumption centres to the Romanian system, thus providing alternative infrastructure. The country has a high potential for renewable energy projects, which is yet to be exploited.





Moldova Electricity

Electricity Implementation

Electricity Indicators	Transposition Assessment	Implementation Status	Descriptions
Unbundling		<div style="width: 55%;"><div style="width: 55%;"></div></div> 55%	The lack of unbundling of electricity transmission is subject to an infringement case. Unbundling of the distribution system operators is compliant.
Access to the system		<div style="width: 48%;"><div style="width: 48%;"></div></div> 48%	Tariffs are approved and published. The Connection Network Codes are implemented since January 2020. The Transparency Regulation is transposed by the wholesale electricity market rules, which are not yet in force.
Wholesale market		<div style="width: 38%;"><div style="width: 38%;"></div></div> 38%	The entry into force of the wholesale electricity market rules, initially envisaged for 2 October 2021, is expected to be postponed until 1 January 2022. The transposition and implementation of REMIT depends on amendments to the Laws on Electricity and Energy.
Retail market		<div style="width: 58%;"><div style="width: 58%;"></div></div> 58%	Though all customers are formally eligible, they still have access to regulated service supply until 2026. Despite that, market opening reached 9,7% in 2020 compared with 7,4 % in 2019.
Regional integration		<div style="width: 15%;"><div style="width: 15%;"></div></div> 15%	The Moldovan and Ukrainian transmission system operators have made progress towards joint allocation of cross-border capacities and settlement of unintentional deviations. The delays in adoption of the wholesale electricity market rules in Moldova impede further progress.

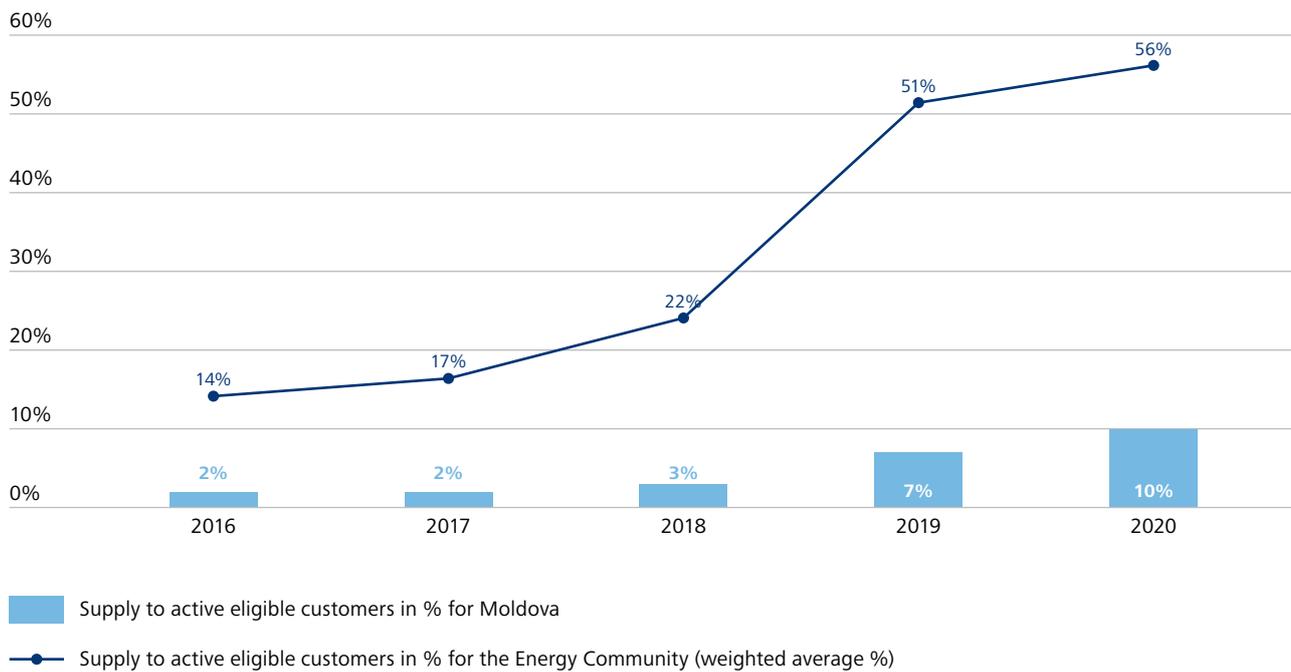
There was little progress in the electricity sector during this reporting period. Five years after the legal deadline, unbundling of the transmission system operator still needs to be achieved. None of the Third Energy Package unbundling models can be implemented under the current legislative framework. There has been no progress in transposing the independent system operator model in the Law on Electricity. The Secretariat opened dispute settlement proceedings against Moldova for lack of unbundling in May 2021. The two distribution system operators, on the other hand, are fully unbundled.

Further reform of the electricity market also hinges on the implementation of the wholesale electricity market rules. The energy regulator ANRE, the Moldovan transmission system operator and Moldavskaya GRES, the power plant located in the region of Transnistria, are working on an agreement on balancing issues regarding the left bank of the Dniester river.

The 2021 electricity procurement was affected by the lack of a balancing mechanism, which prevented improvements compared to previous years. The alleged impossibility to import the balancing electricity needed from Ukraine made Moldavskaya GRES win the tender organised by system operators and universal suppliers. Smaller suppliers or foreign suppliers could not enter the market. The Ukrainian company D.Trading is contesting the compliance of the procedure with the acquis.

Lack of competition in the retail market mirrors the situation in the wholesale market. On the positive side, the last reporting period saw the market share of suppliers at unregulated prices increase to around 10% of total consumption. The Electricity Law provides that regulated prices must be gradually eliminated in line with a timeline to be established by the regulatory authority ANRE following an assessment of competition in the market. This assessment has not been carried out and no timeline was set.

Retail Market Opening



Source: National Agency for Energy Regulation of Republic of Moldova, compiled by the Energy Community Secretariat

The implementation of joint cross-border capacity allocations on the Moldovan-Ukrainian border has been agreed in principle by the transmission system operators. Agreements and allocation rules are expected to be finalised and implemented in the first quarter of 2022. The transmission system operators of Moldova

and Ukraine entered into an agreement on the financial settlement of unintended deviations. Its implementation, however, depends on the introduction of a proper balancing mechanism in Moldova.



Moldova

Gas

Gas Implementation

Gas Indicators	Transposition Assessment	Implementation Status	Descriptions
Unbundling			Certification of Moldovatrangaz was rejected by the national regulatory authority in August 2021. ANRE certified Vestmoldtrangaz in September 2021.
Access to the system			ANRE adopted a list of entry/exit points and established a provisional tariff for those. Gas Network Codes have been transposed formally. Third party access is not ensured - Moldovatrangaz has signed a transmission service contract only with its owner, the incumbent Moldovagaz. Moldovatrangaz has not yet started to allocate capacity at any capacity booking platform.
Wholesale market			Moldova's gas market is still monopolised and without a virtual trading point. The REMIT Regulation is not transposed.
Retail market			The retail market is still heavily regulated with a public service obligation and a supplier of last resort universally applying to all customers without eligibility criteria for such gas supply.
Interconnectivity			With the construction of the Vestmold-gastrans pipeline, Moldova has access to another route and source of supply. The Trans-Balkan route remains untapped in the absence of reverse flow.

Despite the regional pattern of gas flows, the implementation of the Third Energy Package remains limited in practice. The only notable positive development is the finalisation of the interconnector operated by the certified transmission system operator, Vestmoldtrangaz.

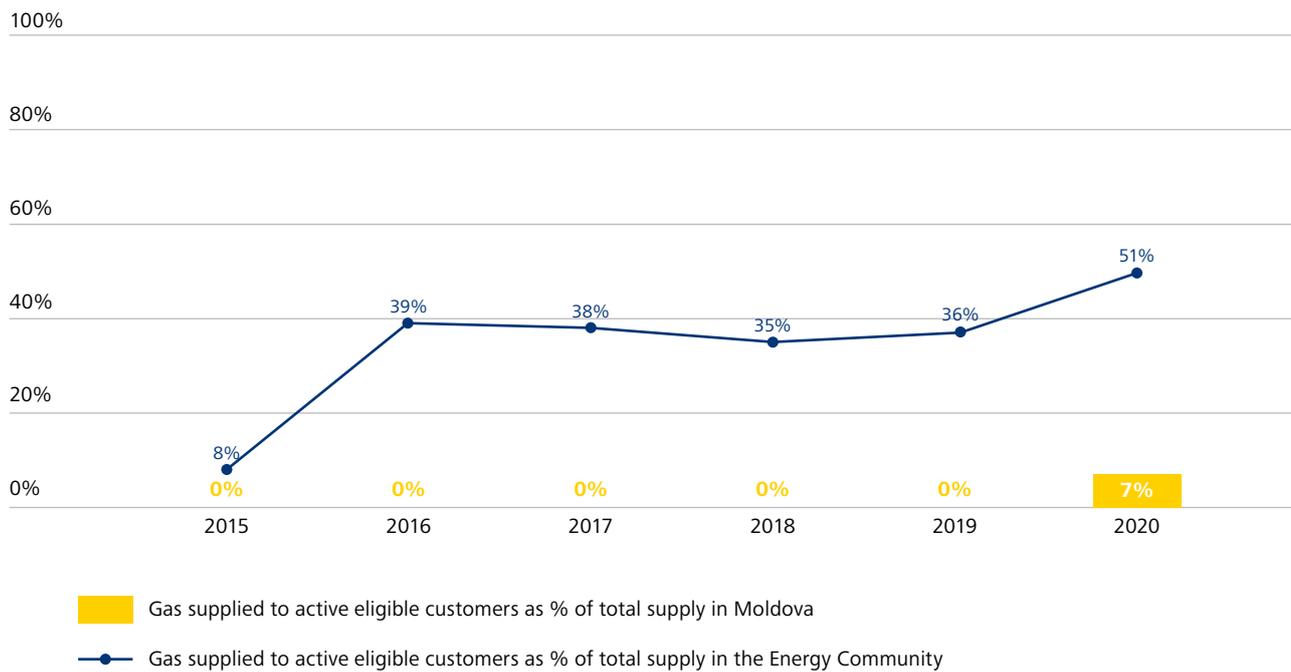
ANRE transposed all relevant gas Network Codes, but they are not implemented by Moldovatrangaz. The same goes for the Network Code on tariffs, which has not yet been implemented in the national tariff methodology. Amendments to the Gas Law and other related legislative acts are being drafted to enable comprehensive market reforms but the Government remained inactive throughout the entire reporting period.

Although numerous acts have been prepared by Moldovagaz and Moldovatrangaz, in cooperation with the Secretariat, to enable an independent transmission operator unbundling model to be applied, none of them were adopted. ANRE had to reject the certification request of Moldovatrangaz. Under the inde-

pendent transmission operator model, the gas supply activities of Moldovagaz should be transferred to a newly set up affiliated company, Moldovagaz-Furnizare LLC.

Third party access to the transmission system is not in place, as Moldovatrangaz holds a transmission service contract only with its owner - Moldovagaz. Third party access to users which do not belong to Moldovagaz' shareholders is impossible. Backhaul (contractual reverse flow) is still not offered by Moldovatrangaz. To bring Moldovatrangaz' transmission network in line with the Capacity Allocation Mechanism Network Code, a contract was signed for the use of the capacity booking platform (RBP) in November 2020, under which the capacity auctions should have started by 30 June 2021, but did not. The capacity auctions should start after the new tariffs are approved by ANRE, which is anticipated by the end of 2021. Once in place, they are expected to benefit the bookings along the Trans-Balkan route and stimulate trading activity in the South-Eastern European region.

Retail Market Opening



Source: National Energy Regulatory Agency (ANRE), compiled by the Energy Community Secretariat

The other infrastructure company, Vestmoldtransgaz, owned by the Romanian transmission system operator Transgaz, has received a positive Opinion on certification by the Secretariat and was certified by ANRE in September 2021.

According to the Natural Gas Market Rules, the transmission system operators of Moldova, Vestmoldtransgaz and Moldovatrangaz, took a common decision on the role of a balancing entity in the common balancing zone. Moldovatrangaz was designated by ANRE as the balancing entity. However, the Balancing Network Code has not been implemented in practice.

At the wholesale level, Moldova's gas market remains illiquid and foreclosed. Moldovagaz is responsible for gas imports from Gazprom, and in turn exercises control over Moldovatrangaz and Tiraspoltransgaz, a natural gas undertaking operating on the left bank of the river Dniester. Attempts have been made to transfer to Moldovatrangaz the right to represent Tiraspoltransgaz at the interconnection points Grebeniky, Ananyiv and Limanskoe, but no clear solution has emerged yet. Any arrangements will have to be in line with the Third Energy Package unbundling requirements.

On 31 December 2020, Moldovagaz signed a new supply contract from 1 January to 30 September 2021 with Gazprom, ensuring gas supply through the traditional route from Ukraine, but it no longer transits gas through the Trans-Balkan Pipeline to the Balkans and Turkey. A new supply contract concluded with Gazprom covers only the month of October.

Gas flows in the South-Eastern Europe markets have changed, which offers the possibility for new network users to become active on the Moldovan market from two new directions – reverse flow on the Trans-Balkan Pipeline and directly via the new connection from Romania (operated by the newly certified transmission system operator, Vestmoldtransgaz). However, due to lack of unbundling of the gas incumbent Moldovagaz and non-implementation of the current regulatory framework, this is still not reality.

The retail market is still heavily regulated under a public service obligation scheme, under which Moldovagaz is responsible for the supply of households, appointed by an act of ANRE without transparent or competitive procedures. Provisions on supply of last resort universally apply to all customers without adequate eligibility criteria for such gas supply. The security of supply regulatory framework is well established.

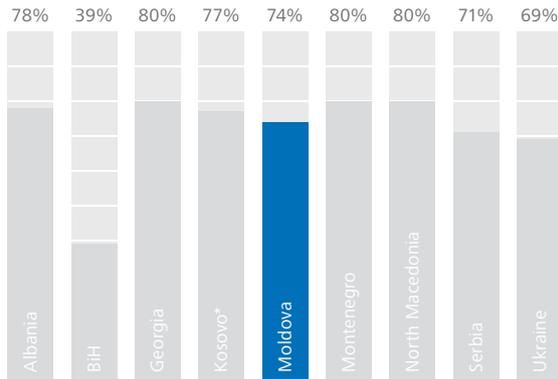


Moldova

National Authorities



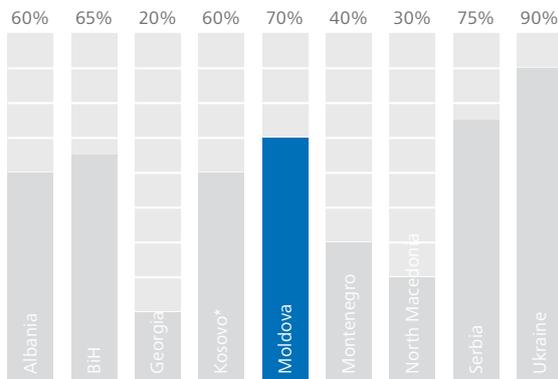
Regulatory Authority



In the reporting period, the National Agency for Energy Regulation (ANRE) was again exposed to serious interventions in its functional and financial independence. Legislative proposals filed in December 2020 targeted the dismissal of ANRE's Board and a cap of salaries. Following increases in petroleum prices in March 2021, the Parliament gave ANRE a no-confidence vote for its alleged inefficient activity in monitoring the petroleum market. The Parliament's attempt to undermine ANRE's independence was in conflict with the *acquis*, under which regulators must be independent from political pressure. The Secretariat's intervention put an end to this process. In October 2021, however, a law introducing new reasons for the dismissal of Board members, including "unsatisfactory fulfillment of tasks", was adopted by the Parliament, despite the Secretariat's warning that this constitutes a breach of the *acquis*. In the gas sector, ANRE's decisions are constantly challenged by the incumbent company, blocking ANRE in performing its tasks. These developments are alarming. ANRE has improved its technical performance, including its certification of Vestmoldtransgaz and rejection of the application of Moldovatransgaz for unbundling. ANRE adopted the gas and electricity Network Codes. Adoption of the REMIT Regulation is pending due to lack of legal competences.



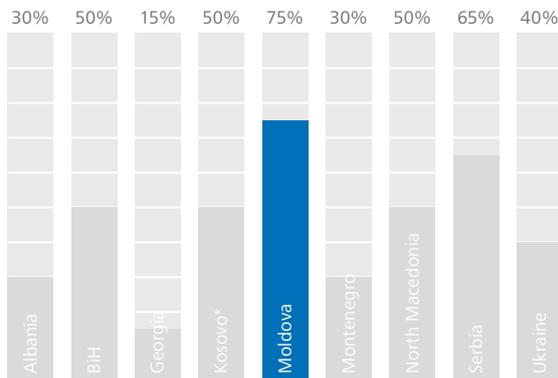
Competition Authority



In the reporting period, the Competition Council conducted an investigation into the signs of a breach of competition law by Premier Energy Distribution on the application of unequal conditions to the provision of electricity distribution services, and an investigation into the national energy regulatory agency's actions on the approval of tariffs for electricity produced from wind. Additionally, the Competition Council initiated an investigation into potential anti-competitive price setting for the sale of petroleum products and liquefied gas. The Competition Council is conducting a sector inquiry into the wholesale electricity market, in particular the organization and implementation of a tender for the purchase of electricity and balancing electricity.



State Aid Authority



In the reporting period, the Competition Council rendered a decision finding that the support measure for projects in the field of energy efficiency and improving the use of renewable energy constitutes State aid, which is compatible with the proper functioning of the market.



Moldova Oil

Oil Implementation

Oil Indicators	Transposition Assessment	Implementation Status	Descriptions
Stockholding obligation		<div style="border: 1px solid blue; border-radius: 10px; width: 100%; height: 15px; margin-bottom: 2px;"></div> <div style="border: 1px solid blue; border-radius: 10px; width: 0%; height: 15px; margin-bottom: 2px;"></div> <div style="border: 1px solid blue; border-radius: 10px; width: 0%; height: 15px;"></div>	At present, Moldova has no emergency oil stocks. The country has drafted a law on creating and maintaining a minimum level of oil product stocks.
Emergency procedures		<div style="border: 1px solid blue; border-radius: 10px; width: 100%; height: 15px; margin-bottom: 2px;"></div> <div style="border: 1px solid blue; border-radius: 10px; width: 0%; height: 15px; margin-bottom: 2px;"></div> <div style="border: 1px solid blue; border-radius: 10px; width: 0%; height: 15px;"></div>	There are no emergency procedures in place. The draft law envisages that only the Government has the authority to release and put into circulation, at the market price for oil, the oil stocks located in Moldova or kept outside its territory.
Fuel specifications of petrol, diesel and gas oil for non-road mobile machinery (NRMM)		<div style="border: 1px solid blue; border-radius: 10px; width: 100%; height: 15px; margin-bottom: 2px;"></div> <div style="border: 1px solid blue; border-radius: 10px; width: 80%; height: 15px; margin-bottom: 2px;"></div> <div style="border: 1px solid blue; border-radius: 10px; width: 0%; height: 15px;"></div>	Moldova's legal framework sets the requirements for the quality of petrol and diesel, which meet the Fuel Quality Directive's specifications. Gas oil used for NRMM is not covered.
Monitoring compliance and reporting including the lay down the rules on penalties		<div style="border: 1px solid blue; border-radius: 10px; width: 100%; height: 15px; margin-bottom: 2px;"></div> <div style="border: 1px solid blue; border-radius: 10px; width: 20%; height: 15px; margin-bottom: 2px;"></div> <div style="border: 1px solid blue; border-radius: 10px; width: 0%; height: 15px;"></div>	The first report on monitoring the quality of petrol and diesel is not completed and there is no clearly defined timeframe when it could occur. Fines for not meeting the quality standards are defined in the Penalty Code of 2008.

Moldova does not maintain emergency oil stocks as required by the Oil Stocks Directive. The country has drafted a law on creating and maintaining a minimum level of oil product stocks in 2017. The draft Law was adapted to meet the new requirements of Directive (EU) 2018/1581 as regards the methods for calculating stockholding obligations. It is expected that the draft Law will be submitted for adoption to the Government and subsequently the Parliament during the fourth quarter of 2021 or first quarter of 2022.

The quality of fuels on the Moldovan market is regulated by the Government Decision of 2019, which amended a previous decision from 2002. The legal framework conforms with the Fuel Quality Directive to a large extent. If gas oil for non-road mobile machinery (NRMM) would be introduced in the domestic market, an additional governmental decision, amending the 2002 Decision, should follow.



Moldova

Renewable Energy

Renewable Energy Implementation

Renewable Energy Indicators	Transposition Assessment	Implementation Status	Descriptions
National Renewable Energy Action Plan			Moldova exceeded its overall 2020 target of 17% by reaching 23,84% of renewable energy in 2019. However, the total share of renewable energy in gross final energy consumption decreased significantly compared to the previous year. Only the sectorial target for heating and cooling was overreached, while contributions of renewable energy to electricity and transport are still very low.
Quality of support schemes			The 2018 Renewable Law sets the legal basis for renewable energy support schemes. Administratively set feed-in tariffs (FIT) for small producers are implemented, while an auctioning scheme is still under discussion. Renewable energy producers are liable for imbalances. Standard balance responsibility was expected to be extended to renewables producers after the entry into force of new Electricity Market Rules on 2 October 2021, however, it is delayed until January 2022.
Grid integration			Non-discriminatory grid connection and priority dispatch for renewable energy producers is prescribed by the Law. The Electricity Market Rules detail procedures for priority dispatch of electricity produced from renewable energy sources. The methodology for setting the costs for connection to the transmission and distribution system is approved by the regulatory agency.
Administrative procedures and guarantees of origin			The Energy Efficiency Agency acts as an informal one-stop shop, providing all the needed assistance to potential investors in the fields of renewable energy and energy efficiency. Moldova has expressed interest to join the Energy Community regional initiative to establish an electronic system for guarantees of origin.
Renewable energy in transport			Provisions related to sustainability of biofuels are still not transposed and the legal framework remains completely non-compliant with Directive 2009/28/EC. The share of renewables in transport was only 0,17% compared to the objective of 10% in 2020.

The development of renewable energy is stagnating and there has been almost no progress compared to the previous reporting period. Moldova overreached its 17% target for the share of renewable energy in gross final energy consumption by 2020 due to the revision of biomass data and increasing the use of biomass in the heating sector. However, additional efforts are needed to increase the share of renewable energy in electricity and transport.

A new draft of the Government Decision on approving capacity limits, maximum quotas and capacity categories in the field of electricity from renewable sources for the period 2021 - 2025,

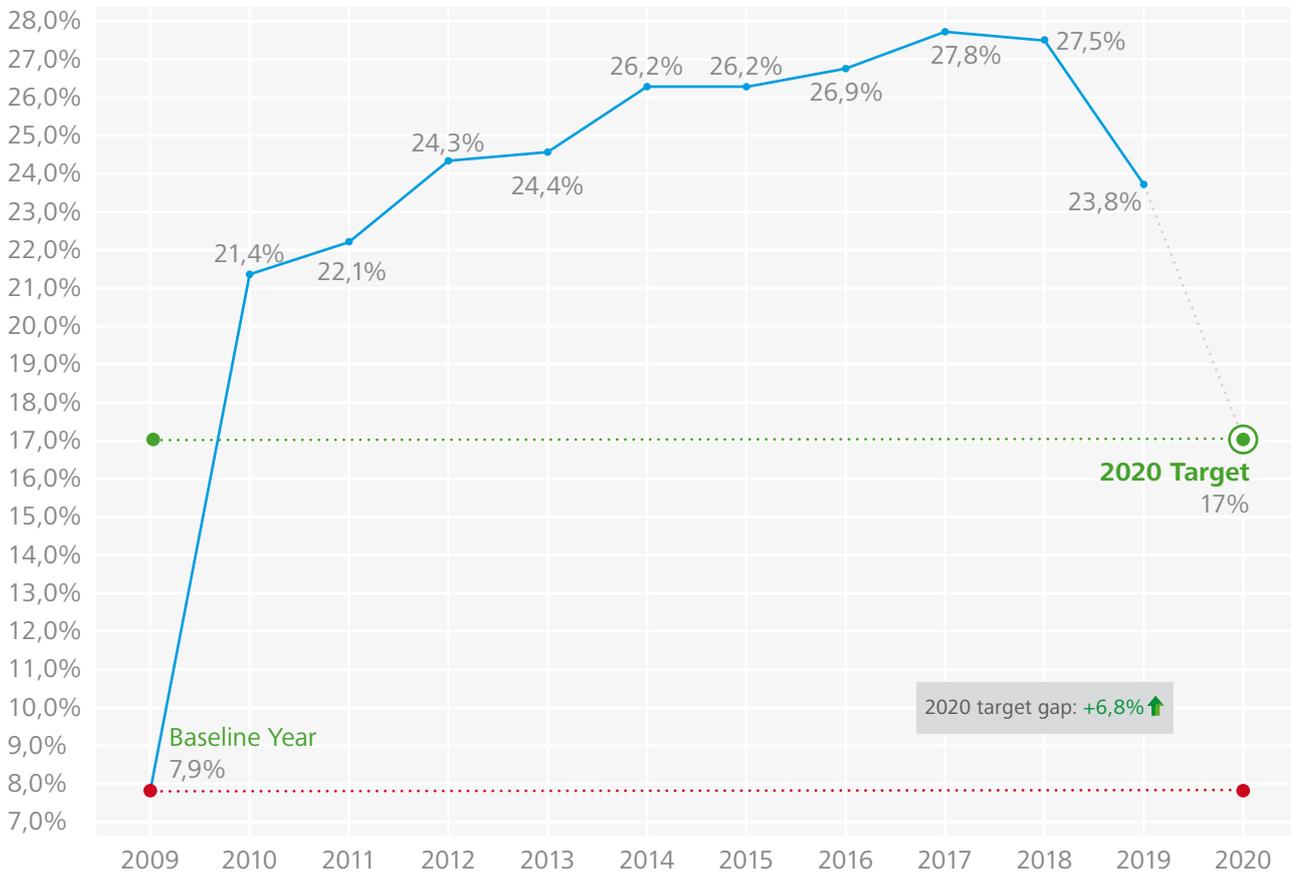
currently under public consultation, is expected to be approved in November 2021. According to the Decision, intermittent capacities will be increased and a considerable emphasis will put on investments in biogas-based cogeneration.

Moldova enabled a net-metering scheme for self-consumption through the Renewable Law resulting in 269 solar PV applications with 4,85 MW of installed power at the end of 2020. The scheme is currently being revised to align with provisions of the new Renewable Energy Directive 2018/2001/EU and attract even more users.

The designation period of the off-taker for electricity produced from renewables, the Central Electricity Supplier, was extended in December 2020 for the period of validity of the license for the supply of electricity (until 2028).

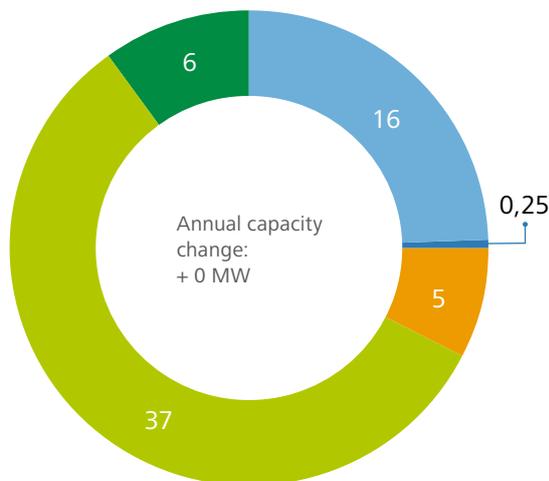
Priority for Moldova should be the preparation of a market-based support mechanism and adoption of the needed enabling secondary legislation. The country should also focus on the transposition of provisions related to the sustainability of biofuels and implement an electronic system for guarantees of origin.

Shares of Energy from Renewable Sources



Source: Ministry of Economy and Infrastructure based on the Short Assessment of Renewable Energy Sources 2018 report

Total Capacities of Renewable Energy 2020 (MW)



- Large hydropower
- Small hydropower <10 MW
- Solar
- Wind
- Biogas

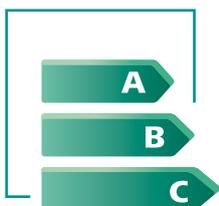
Source: National Agency for Energy Regulation of Republic of Moldova

In 2020, no renewable energy capacities were added in the electricity sector. Therefore, renewable capacities remain the same as reported in 2020, namely one hydropower plant (Costești, 16 MW) constructed in the late 1970s, 37 MW of wind, 5 MW of solar PV and around 6 MW of biogas.

Due to the revision of biomass data, Moldova exceeded its overall 2020 target for renewable energy in gross final energy consumption already in 2010. While the use of bioenergy, as the main renewable energy source, remains a national priority, it is important to note that the biomass, mostly firewood, is used in inefficient boilers and stoves. The recent installation of several solar water heaters in public institutions is a cost-effective and environmentally friendly solution for high hot water demand.

Total capacities of renewable energy (MW):

65



Moldova

Energy Efficiency

Energy Efficiency Implementation

Energy Efficiency Indicators	Transposition Assessment	Implementation Status	Descriptions
Energy efficiency targets and policy measures			In 2019, Moldova was already very close to reaching the 2020 cap consumption target. In the reporting period, the fifth Annual Progress Report was submitted to the Secretariat in line with the Energy Efficiency Directive. The Government adopted the new Regulations on energy audits and energy auditors. The Energy Efficiency Agency has drafted the template for energy audit reports in buildings, industry and transport, and the guides for quality checking of the energy audit reports.
Energy efficiency in buildings			The implementation of the Buildings Directive is still incomplete. Progress in 2020 included the preparation of by-laws on an updated national methodology for minimum energy performance of buildings as well as a long-term strategy for mobilising investments, albeit they were not adopted. The national action plan to increase the number of nearly zero-energy buildings has been developed with the support of the Energy Efficiency Agency. The Government also approved a EUR 1,2 million programme for the renovation of central government buildings till 2022.
Energy efficiency financing			In the reporting period, the EUR 75 million national Energy Efficiency Project for renovation of public buildings was prepared with international donors. Its implementation is expected to start in 2022.
Energy efficient products - labelling			In the reporting period, Moldova prepared a law to transpose Regulation (EU) 2017/1369 with regard to energy labelling.
Efficiency in heating and cooling			Moldova has two towns (Chisinau and Balti) with district heating systems, using combined heat and power based on natural gas. New efficient internal combustion engines are being built in both systems with donors' support. Biomass-fired heating systems are used in 144 rural public buildings. Moldova has prepared and updated the national assessment of its high-efficiency cogeneration and efficient district heating potential as required by the Energy Efficiency Directive.

Moldova made good progress, including by drafting several missing energy efficiency regulations.

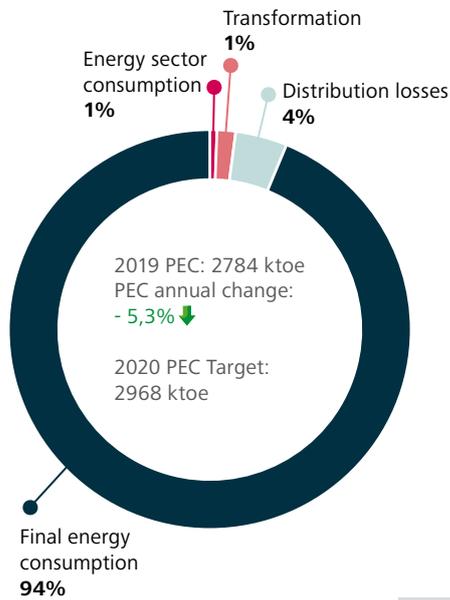
In the next reporting period, Moldova's first priority is the full implementation of the Energy Efficiency Law to bring the country into full compliance with new Directive 2012/27/EU, by adopting the by-laws on mandatory energy audits for large enterprises and the long-term building renovation strategy, both

already drafted.

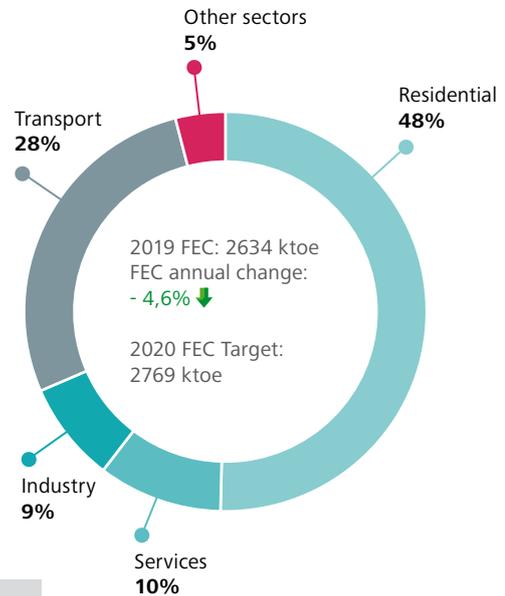
The second priority is to achieve full compliance of the Law on Energy Performance of Buildings with Directive 2010/31/EU by implementing the building certification system, including the calculation tool for building performance certificates. The relevant by-law is already drafted.

2019 Energy Efficiency Indicators and Trends

Primary Energy Consumption (PEC)



Final Energy Consumption (FEC)



Energy intensity,
2019 value and trends:
0,38 ktoe/mil EUR, -8,8% ↓

Source: EUROSTAT 2021 data and Contracting Party's Annual Reports under Directive 2012/27/EU

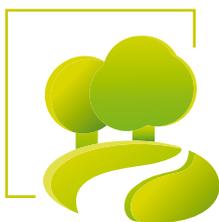
Energy Efficient Products – Overview of Implementation of Labelling Regulation

FRAMEWORK REGULATION*											
Household dishwashers	●	●	●	●	●	●	●	●	●	●	●
Fridges and freezers*	●	●	●	●	●	●	●	●	●	●	●
Household washing machines	●	●	●	●	●	●	●	●	●	●	●
Televisions	●	●	●	●	●	●	●	●	●	●	●
Air conditioners and fans*	●	●	●	●	●	●	●	●	●	●	●
Household tumble driers	●	●	●	●	●	●	●	●	●	●	●
Electrical lamps and luminaires	●	●	●	●	●	●	●	●	●	●	●
Solid fuel boilers*	●	●	●	●	●	●	●	●	●	●	●
Space heaters*	●	●	●	●	●	●	●	●	●	●	●
Water heaters & storage tanks	●	●	●	●	●	●	●	●	●	●	●
Domestic ovens and range hoods	●	●	●	●	●	●	●	●	●	●	●

● Adopted and implemented ● Compliance or implementation issues detected ● No progress with adoption/implementation

* The new labelling package adopted by the Ministerial Council in November 2018 was assessed, as the transposition deadline expired in January 2020.

Source: multiple sources of data (EECG reports, NEEAPs etc.), compiled by the Energy Community Secretariat



Moldova Environment

Environment Implementation

Environment Indicators	Transposition Assessment	Implementation Status	Descriptions
Environmental impact assessment (EIA) and strategic environmental assessment (SEA)			Moldova has not transposed Directive 2014/52/EU. Further alignment and improvements of the SEA law are needed in order to secure monitoring of the environmental effects from the implementation of the plans and programmes. Early and effective opportunities for participation in the decision-making process should be secured both at project and plan/programme level.
Sulphur in fuels			Moldova has transposed the provisions of the Sulphur in Fuels Directive into its domestic legal framework in a compliant manner.
Large combustions plants and industrial emissions			The Large Combustion Plants and Industrial Emissions Directives are still not transposed, which is subject to an infringement procedure. Existing combustion plants meet the emission limit values of the Large Combustion Plants Directive on an individual basis.
Nature protection			The designation of special protected areas for wild birds is at an early stage and measures for the protection of wild birds have also not been established yet.
Environmental liability		n/a	Moldova has not transposed the Environmental Liability Directive into its domestic legal framework.

Moldova failed to transpose the amendments introduced by Directive 2014/52/EU. The EIA process and quality control mechanisms of the EIA reports need further improvement. In particular, further efforts are needed in the EIA screening procedures for small wind power projects. None of the 16 small wind development projects approved in the reporting period were made subject to an EIA.

The initially planned amendments to the SEA law were not adopted and the shortcomings related to the lack of proper monitoring mechanisms for the environmental effects of the plans/programmes as stipulated in Article 10 of the SEA Directive still remain. The limited capacities of the national authorities responsible for SEA reports quality control should be properly addressed. In the SEA procedure for the National Energy and Climate Plan, Moldova should secure early and effective participation of the designated authorities and the public.

The Government Decision on the Reduction of the Sulphur Content of Certain Liquid Fuels transposes the provisions of the Directive into national law. The sulphur limits for heavy fuel oil and

gas oil are compliant with those required by the Directive. The State Environmental Inspectorate is in charge of implementing the provisions of the transposing legislation in accordance with the standards stipulated therein.

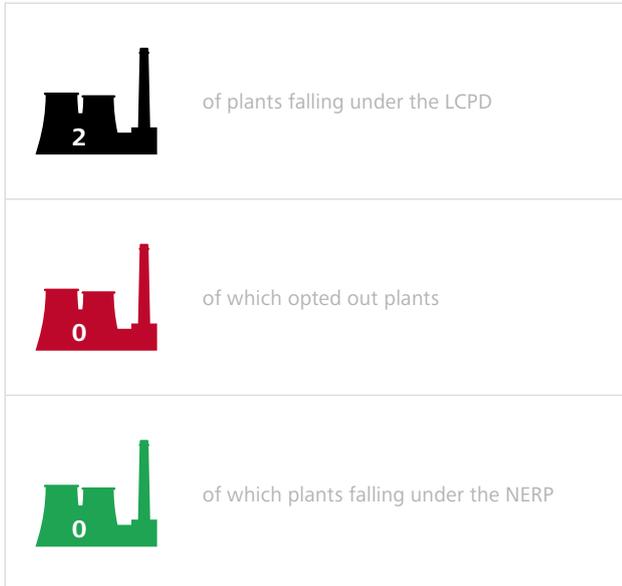
Moldova has still not transposed the requirements of the two Directives regulating the emissions of large combustion plants into national law. Infringement proceedings against Moldova have been launched in September 2018. The draft Law on Industrial Emissions, to be adopted by the end of 2021, would address the non-compliance. Moldova complied with its reporting obligations for 2020, which confirmed that the emissions for all pollutants remained close to 2019 levels. Based on the technical characteristics of Moldova's two gas-fired plants falling under the scope of the Large Combustion Plants Directive (with a total of eight units), the emission limit values of the Directive are complied with on an individual basis.

The adoption of the draft law amending and supplementing the Law on Wildlife, which is to transpose Article 4(2) of the Wild Birds Directive, was postponed again. Temporary protection

status should be introduced for the identified important nature conservation areas (including the eleven Important Bird Areas) until the legislation is fully aligned. Measures against prohibited means and methods of killing, capture and other forms of ex-

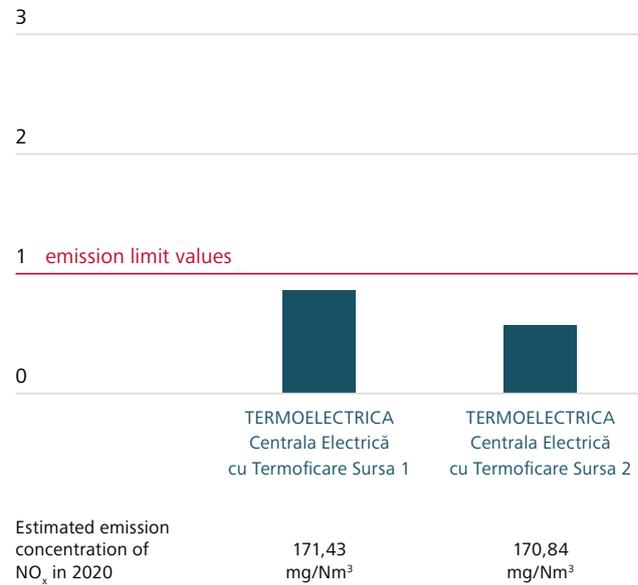
ploitation of protected species (e.g. by closed seasons or temporary or local prohibition of exploitation) must be introduced and enforced.

Installations under the Large Combustion Plants Directive

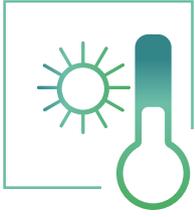


Source: compiled by the Energy Community Secretariat

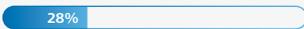
2020 emissions of NO_x versus applicable emission limit values (ELV)



Source: calculated by the Energy Community Secretariat



Moldova Climate

Climate Indicators	Transposition Assessment	Implementation Status	Descriptions
National greenhouse gas emissions monitoring and reporting systems			Legislation transposing Regulation (EU) 525/2013 and a system for policies, measures and projections was adopted in a compliant manner in 2019. The Low Emissions Development Strategy has been revised based on the NDC2 and publicly consulted. The strategic environmental assessment is to be launched by the end of 2021.
National Energy and Climate Plans (NECPs)			Moldova still needs to adopt a legal basis for NECP adoption. A first informal draft of the NECP is expected by the end of 2021.

Moldova updated and submitted its NDC2 under the Paris Agreement to the UNFCCC Secretariat as the fourth country in the world on 4 March 2020. The country increased the ambition level and committed to unconditionally reduce its GHG emissions by 70% below its 1990 level in 2030, and by up to 88% when receiving technical, financial and technological support. Moldova is currently developing its third Biennial Update Report and updating its National Inventory Report.

The Regulation on the Organisation and Functioning of the National Monitoring and Reporting of Greenhouse Gas Emissions and Other Information relevant to Climate Change transposed Regulation (EU) 525/2013 in a compliant manner. According to Governmental Decision No. 1277/2018 on establishing the National System for Monitoring and Reporting Greenhouse Gas Emissions and Other Information Relevant to Climate Change, the Environment Agency of the Republic of Moldova was designated as the single national entity responsible for the national

inventory. However, due to the Agency's lack of capacity, an external expert team was tasked to develop the GHG inventory reports. A software for gathering GHG emissions data, based on Annex 1 of the Governmental Decision, was not yet developed. The Government is expected to amend the Decision based on the enhanced transparency framework requirements of the Paris Agreement by the end of 2021.

The Government updated its Low Emissions Development Strategy 2030 based on the more ambitious targets established in the NDC2. The document was publicly consulted on 17 June 2021. The evaluation report is under development.

The drafting of the narrative component of four NECP chapters and the development of different policy scenarios took place in 2021. The energy-related parts are discussed internally every two weeks. Work on the non-energy related parts has to commence. The legal basis for the NECP is yet to be adopted.



Moldova Infrastructure

Infrastructure Implementation

Infrastructure Indicators	Transposition Assessment	Implementation Status	Descriptions
National competent authority		<div style="width: 20%;"><div style="width: 20%;"></div></div> 20%	The adoption of the draft Law on amending the Law on Energy, which would transpose at least elements of Regulation (EU) 347/2013, is still pending.
Manual of procedures		<div style="width: 0%;"><div style="width: 0%;"></div></div> 0%	There is no manual of procedures for the permitting process of Projects of Energy Community Interest or Projects of Mutual Interest. According to the draft Law, a guide on the procedures for the permit granting process shall be elaborated and published on the website of the Ministry of Economy and Infrastructure.
National regulatory authority involvement		<div style="width: 0%;"><div style="width: 0%;"></div></div> 0%	The methodology and criteria to be used to evaluate infrastructure investments shall be defined and published by the regulatory authority after the approval of the draft Law on amending the Law on Energy.

Moldova has initiated the transposition of Regulation (EU) 347/2013 by preparing an amendment to the Law on Energy, which was scheduled for adoption by the end of 2020, but has not progressed. The Ministry of Economy and Infrastructure was designated to act as the national competent authority. Until the amending law is adopted, Moldova will continue to be in breach of the Energy Community infrastructure acquis.

The transposition of the Regulation will facilitate the realization of future strategic infrastructure projects in gas and electricity. Particularly important is the facilitation of the infrastructure projects related to the integration of Moldova into the Continental Europe power system in order to upgrade the country's security of energy supply.





Moldova Statistics

Statistics Implementation

Statistics Indicators	Transposition Assessment	Implementation Status	Descriptions
Annual statistics			The five annual questionnaires and the questionnaire on final energy consumption of households for 2019 were transmitted to EUROSTAT.
Monthly statistics			Monthly collections were compiled and disseminated and transmitted to EUROSTAT, including short-term monthly oil data.
Price statistics			Price statistics for electricity and natural gas for 2019 were compiled and transmitted in accordance with the acquis.

Moldova transposed the general requirements on energy statistics and complies with all key obligations of the statistical acquis.

In accordance with the Law on Official Statistics, the National Bureau of Statistics of the Republic of Moldova (NBS) is responsible for the coordination of the Moldovan statistical system. With the Law on Ratification of the Energy Community Treaty, the Energy Community acquis is also part of the legal framework.

NBS transmits annual questionnaires to EUROSTAT on time and publishes them on its website. Annual questionnaires for 2019 are compiled and transmitted in full compliance with the acquis, as well as the preliminary data for 2020. Disaggregated data on energy consumption in households are compiled and transmitted to EUROSTAT within the set deadlines. NBS also prepares information for calculating the renewables share. The established quality system has allowed NBS to timely prepare and transmit the quality report on its annual statistics in accordance with the Regulation.

The reporting scheme for monthly data has been established and NBS publishes monthly datasets for coal, oil and petroleum products, natural gas and electricity and transmits them to EUROSTAT. Natural gas and monthly oil data are also reported to the JODI database. Short-term monthly oil data, including oil stocks, are transmitted to EUROSTAT. Short-term reporting of natural gas to EUROSTAT is not completed yet. NBS has begun reporting the COIR questionnaire (crude oil import and production), although this is still not mandatory for the Contracting Parties.

NBS has established a methodology and a reporting system to collect electricity and natural gas prices, per consumption band and breakdown per price component. The price data are transmitted to EUROSTAT.

NBS has only to continue with the steady improvement of the timeliness of its energy statistics.



Moldova Cybersecurity

Cybersecurity Implementation

Cybersecurity indicators	Transposition Assessment	Implementation Status	Descriptions
Institutions and legislation			Cybersecurity policies are adopted with no energy-specific components. Cyber defence mechanisms are implemented through the national CERT (CERT-GOV-MD). There is no complete transposition of the cybersecurity acquis in the law. Critical infrastructure identification mechanisms include energy transportation.
Requirements for operators and energy regulatory authority			Minimum mandatory security obligations for energy operators are defined in a basic and general manner only. The energy regulatory authority ANRE has no cybersecurity-related powers.

The 2013 Strategy “Digital Moldova 2020” aims at boosting security in the digital space and improving the cybersecurity level of critical information infrastructures including those used by the energy networks. The Cybersecurity Programme 2016 - 2020 is the basic policy act addressing provisions of Directive (EU) 2016/1148 (NIS Directive). The main targets are creation of a cybersecurity management system for safety of data processing and security and integrity of electronic communication networks and services, establishment of a CERT, preventing cybercrime, education and international cooperation.

Directive 2008/114/EC on critical infrastructures is partially transposed in the Law on Preventing and Combating Terrorism of 2017 but with no specific references to cyber threats. It defines the concept of critical infrastructure based on potential impact on vital functions in society applicable to energy transport facilities. The follow-up Government Regulation provides quantitative criteria for identification of critical infrastructures and outlines indicative domains including electricity, gas and oil transport and storage. The identity of the designated critical infrastructure operators is classified.

The Information Technology and Cybersecurity Service (STISC) is the national competent authority responsible for developing information and communication infrastructure of the public ad-

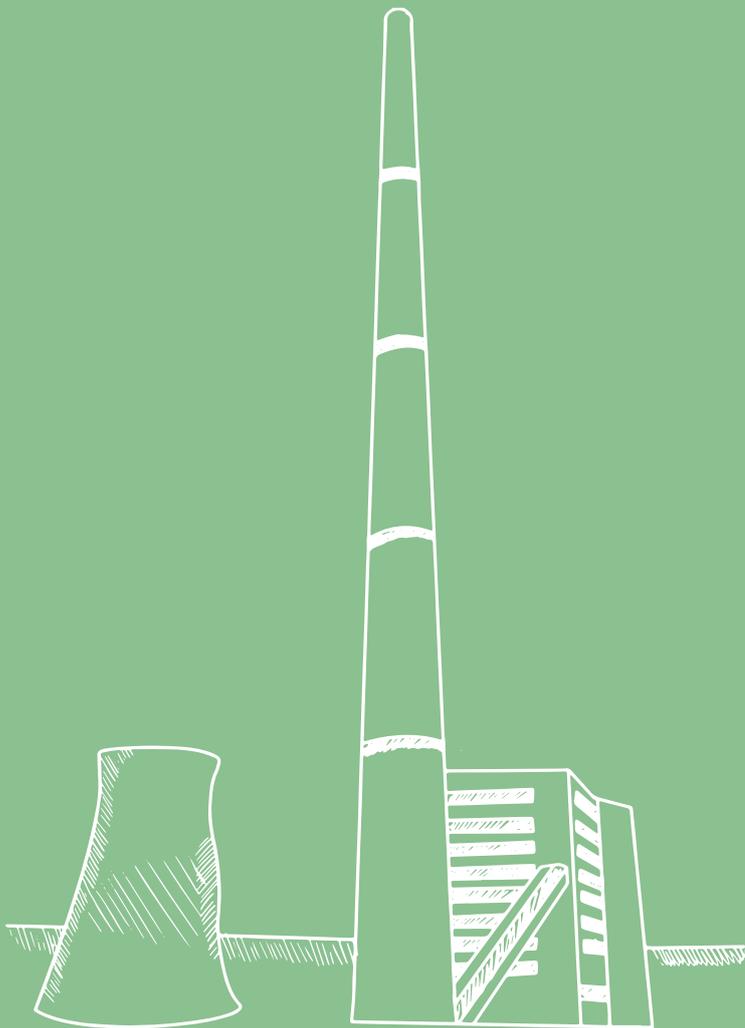
ministration and implementing cybersecurity policies. It hosts the national CERT (CERT-GOV-MD), acting as a contact point for reporting, coordinating and assisting in the response to incidents and providing cybersecurity services to the public administration including the energy sector. It takes part in implementing measures for risk mitigation, exchange of information and best practices, capacity building and raising security awareness.

The Cybersecurity Guidelines for Civil Servants published by CERT-GOV-MD provide a basic framework for risk management and impose security measures applicable to the operators of critical infrastructures in the energy sector. The Mandatory Minimum Cybersecurity Requirements adopted by the Government apply to governmental bodies, the public administration and state institutions including state-owned operators of information and communication infrastructures, including in the energy sector. The requirements define security measures including the establishment of internal cybersecurity mechanisms for data protection, access to information and communication technology infrastructure and incident recovery and notification.

The energy regulator ANRE is authorised to approve the expenses for anti-terrorism protection in the energy sector. However, the current legislation fails to grant the regulator competences over specific aspects of cybersecurity.

08

Montenegro

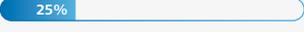
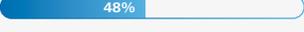






Montenegro

Summary Implementation

Summary Indicators	Transposition Assessment	Implementation Status	Descriptions
 Electricity		 78%	Implementation in the electricity sector of Montenegro is well advanced.
 Gas*		 34%	Implementation in the gas sector of Montenegro is yet to begin.
 Oil		 25%	Implementation in the oil sector of Montenegro is moderately advanced.
 Renewable Energy		 69%	Implementation in the renewable energy sector of Montenegro is well advanced.
 Energy Efficiency		 81%	Implementation in the energy efficiency sector of Montenegro almost completed.
 Environment		 73%	Implementation in the environment sector of Montenegro is well advanced.
 Climate		 73%	Implementation in the climate sector of Montenegro is well advanced.
 Infrastructure		 38%	Implementation in the infrastructure sector of Montenegro is still at an early stage.
 Statistics		 73%	Implementation in the statistics sector of Montenegro is well advanced.
 Cybersecurity		 48%	Implementation in the cybersecurity sector of Montenegro is moderately advanced.

* Due to the lack of a gas market, implementation of the gas acquis is not taken into account in the overall score of Montenegro.

Overall number of cases: **2**

Procedure by Article **91**

ECS-3/21 Electricity

ECS-15/21 Environment



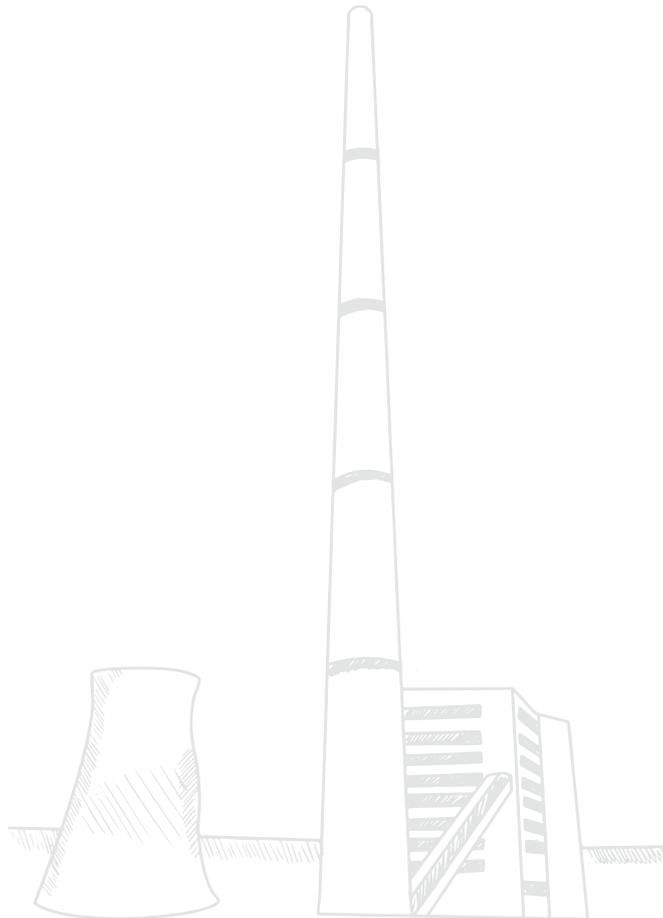
Montenegro

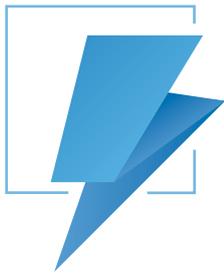
State of Energy Sector Reforms

Montenegro has made another decisive step towards opening its electricity market by signing a service agreement for setting up a day-ahead market. To boost renewables deployment, secondary legislation clarifying the support scheme mechanism is needed. The transposition of the REMIT Regulation is pending

due to necessary legislative changes. In the area of environment, though, the non-compliance by the only coal-fired power plant Pljevlja with the Large Combustion Plants Directive impairs the otherwise successful implementation record of the country.

Montenegro's power sector is mainly based on hydropower and one lignite-fired power plant in Pljevlja. The country is not connected to natural gas systems but could provide facilities for small quantities of LNG to be further transported by railway. In recent years, Montenegro supported investments in wind power plants, however, its high solar potential is not yet utilized.





Montenegro Electricity

Electricity Implementation

Electricity Indicators	Transposition Assessment	Implementation Status	Descriptions
Unbundling			The transmission and distribution system operators are unbundled in accordance with the acquis.
Access to the system			Access to the system is ensured by published tariffs for connection and use of the network. The Connection Network Codes are transposed but not implemented. The Transparency Regulation is transposed and partially implemented.
Wholesale market			The wholesale market is open for competition. The balancing market is competitive and functional, save for the balancing reserve. The day-ahead market is not functional yet. The REMIT Regulation is not transposed.
Retail market			Although the retail market is deregulated, only the incumbent is supplying final customers, including as the supplier of last resort for small customers, households and vulnerable customers.
Regional integration			Capacities are allocated through SEE CAO for all interconnections except with Serbia where bilateral auctions apply. The transmission system operator exchanges balancing energy on a bilateral basis with Bosnia and Herzegovina and Serbia. Market coupling is conditioned on the establishment of a day-ahead market.

The transmission operator CGES, a joint stock company with majority shares owned by the State and the Italian transmission system operator Terna, was unbundled and certified. Distribution is performed by CEDIS, an unbundled undertaking owned by the power utility EPCG. Compliance reports are prepared yearly and submitted to the regulatory authority REGAGEN for approval. In 2021, REGAGEN's monitoring related to the conditions and requirements of distribution system operator independence resulted in a procedure against EPCG before the Misdemeanour Court.

Transmission and distribution tariffs for the regulatory period 2020 - 2022 were last set in December 2019. The transmission tariff charged to generators connected to the transmission network exceeds the ceiling set by Regulation (EU) 838/2010. Following the request of Montenegro, an exemption to the ceiling is proposed to the Permanent High Level Group for adoption.

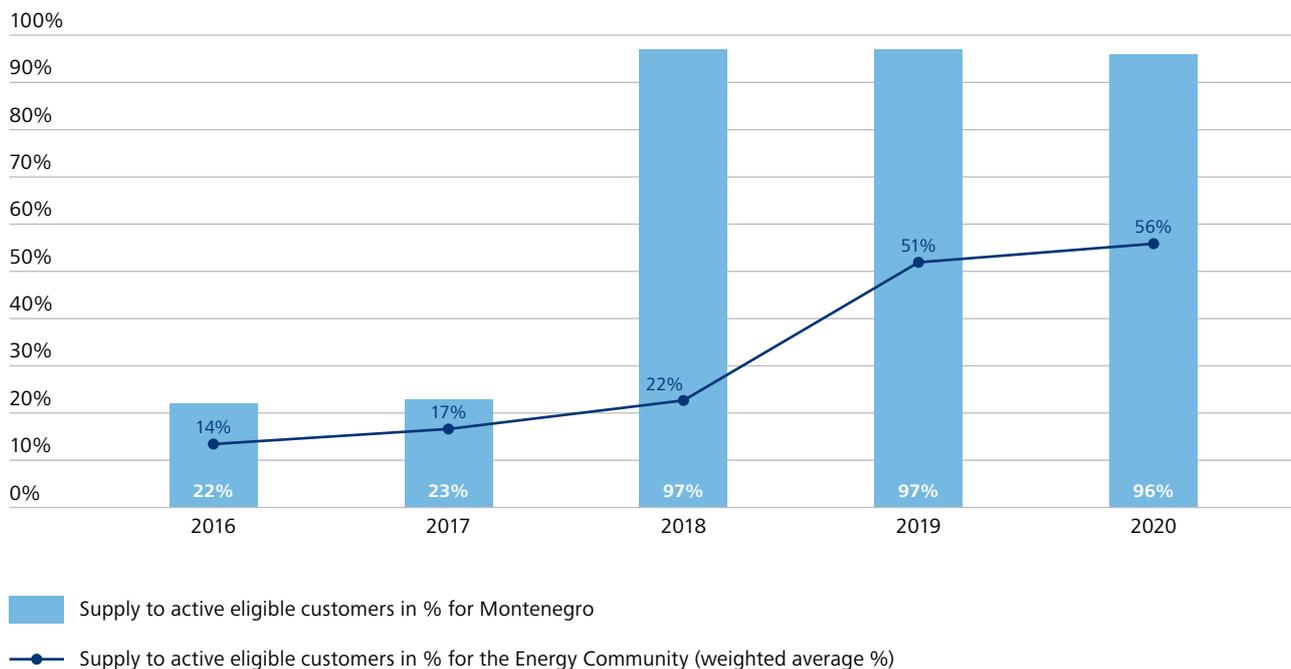
The Government adopted the decrees ensuring the transposition of the Connection Network Codes. However, the implementing

rules for network operators have not yet been amended accordingly, despite the deadline having expired. The Transparency Regulation is transposed and largely implemented. The publication of the remaining missing data will require modifications of the IT system.

The wholesale market is formally deregulated. Montenegro has an open market without regulatory obstacles for new entrants and competition. However, market concentration remains very high with the incumbent covering the whole retail market. This is despite the fact that a seat requirement for trade does not exist.

Operations on the wholesale market are managed by the electricity market operator COTEE. The Energy Law establishes the power exchange and defines the roles and responsibilities of the nominated electricity market operator, the transmission operator and the regulator in the market coupling process. The power exchange company BELEN has awarded a contract for providing of day-ahead trading, clearing and settlement platform services to a consortium of EPEX SPOT and BSP.

Retail Market Opening



Source: Ministry of Capital Investments, compiled by the Energy Community Secretariat

The balancing market functions. In addition to EPCG, which is obliged to act as a balancing service provider, a contract for providing balancing services was signed with an industrial customer. The balancing reserve price is determined by the regulator until sufficient competition is in place. The price of balancing energy is not regulated. A market-based cross-border exchange of balancing energy is implemented for the time being only with the transmission system operators of Serbia and Bosnia and Herzegovina on a bilateral basis.

The REMIT Regulation has not been transposed yet, which is subject to an infringement case. The Government drafted a largely compliant Law on Surveillance on the Wholesale Market of Electricity and Natural Gas and proposed it to Parliament for adoption.

Montenegro is participating in a market coupling project with Albania, Italy and Serbia (AIMS), which has been stalled for years.

In the retail market, all customers are eligible to choose their supplier. Yet all final customers are still supplied by the incumbent EPCG. EPCG offers to its customers the choice of different price models with the aim to encourage energy efficiency and reduce energy costs. EPCG is also a supplier of last resort to households and small customers, as well as vulnerable customers. A government decree from 2018 defined the status of vulnerable customers and set up a protection mechanism for customers entitled to it, including a 50% subsidization of monthly bills for consumption up to 600 kWh per month.

SEE CAO performs joint capacity allocation for CGES for the interconnections with Italy, Albania, Kosovo* and Bosnia and Herzegovina, while bilateral auctions are applied with Serbia.

The agreement on the grid control cooperation in the control block of Serbia, Montenegro and North Macedonia is expected to commence with imbalance netting between Serbia and Montenegro in the first phase.



Montenegro

Gas

Gas Implementation

Gas Indicators	Transposition Assessment	Implementation Status	Descriptions
Unbundling		<input type="text" value="0%"/>	Montenegrobonus d.o.o. was appointed by the Government as the future transmission system operator. Montenegrobonus will have to be unbundled under the ownership unbundling model.
Access to the system		<input type="text" value="0%"/>	Montenegro does not have a gas network. The regulatory authority REGAGEN has adopted tariff methodologies for access to the grids and LNG.
Wholesale market		<input type="text" value="0%"/>	Montenegro does not have a gas market.
Retail market		<input type="text" value="0%"/>	REGAGEN adopted supply rules for natural gas in spite of the lack of a gas market.
Interconnectivity		<input type="text" value="0%"/>	A pipeline connecting Montenegro with neighbouring countries via the so-called Ionian Adriatic Pipeline or LNG supplies could bring gas to the country.

Montenegro does not have access to any gas market. The gas sector is regulated by the 2020 Energy Law and the 2016 Law on Cross-Border Exchange of Electricity and Natural Gas. A number of provisions are still missing or lack clarity.

In addition to adopting the first gas by-law in 2020, related to the general conditions of gas supply, the regulatory authority adopted methodologies for the future natural gas network operators in distribution, transmission and LNG. All three acts are compliant with the Third Energy Package, save for the transmission methodology which is not aligned with the Network Code on tariffs.

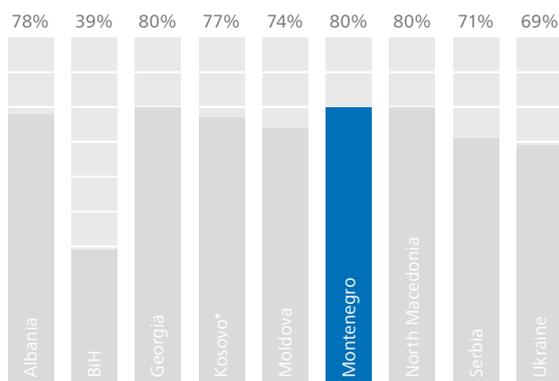


Montenegro

National Authorities



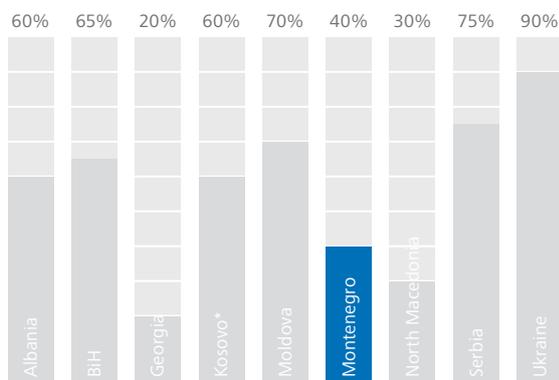
Regulatory Authority



The Energy and Water Regulatory Authority of Montenegro (REGAGEN) proved its independence and commitment to pro-actively design the electricity market. Electricity Network Codes have been transposed into national legislation but their integration into the national grid code is still to be initiated by the system operators. Transposition of the REMIT Regulation is pending due to lack of necessary legislative changes. Independence of the regulator has been challenged by the lack of approval of REGAGEN's annual report by the Parliament. Staff salaries are limited by the Law on Salaries of Employees in the Public Sector, which poses a barrier to full organisational independence since many years.



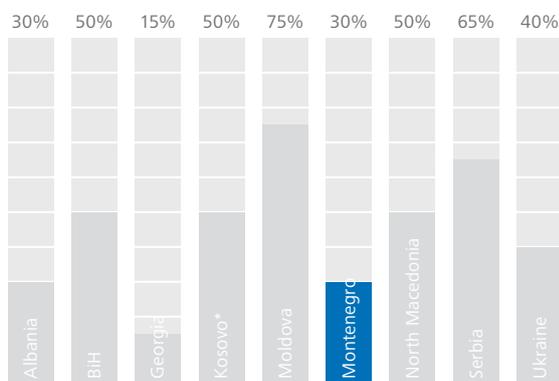
Competition Authority



Since its establishment in 2013, the Agency for Competition Protection (ACP) has not applied competition law to the energy sector, except for the review of mergers. More intense enforcement of competition law, in particular with regard to anticompetitive agreements and the abuse of dominance, is needed in order for Montenegro to fully live up to the requirements of the Energy Community Treaty.



State Aid Authority



In the reporting period, the ACP has not rendered any decisions or recommendations regarding State aid in the energy sector.



Montenegro Oil

Oil Implementation

Oil Indicators	Transposition Assessment	Implementation Status	Descriptions
Stockholding obligation			There is no emergency oil stockholding obligation. The draft Law on Security of Supply of Oil Products, which meets all provisions of the Oil Stocks Directive, was finalised in 2016 but not adopted yet.
Emergency procedures			There is no procedure in place to release quickly, effectively and transparently some or all of the country's emergency oil stocks. The draft Law foresees that the Government, upon a proposal of the Ministry, shall release the emergency stocks on the market according to procedures set out in the contingency plan.
Fuel specifications of petrol, diesel and gas oil for non-road mobile machinery (NRMM)			The 2017 Regulation on Limited Values of Contents of Pollutant Materials in Liquid Oil Fuels applies to petrol, diesel fuel and gas oil used as fuel for construction and other machinery, agricultural tractors, river vessels and vessels used for sports, recreation and leisure in accordance with the Fuel Quality Directive's provisions. The sulphur content does not exceed 10 ppm.
Monitoring compliance and reporting including the lay down the rules on penalties			Montenegro publishes an annual programme for fuel quality monitoring. It specifies a programme development methodology; method of sampling, number and frequency of fuel sampling at gas stations; method of sampling, number and frequency of sampling of diesel fuel in warehouses; and laboratory analysis of fuel samples. There is a penal provision in the Law on Air Protection for placing on the market fuel which is not compliant with the prescribed standards.

Montenegro did not make any progress during the reporting period. No emergency oil stockholding policy is in place. The adoption of the draft Law on Security of Supply of Oil Products, which will regulate the manner of establishing and managing emergency oil stocks and the procedure in case of disruption of supply of petroleum products in line with the Oil Stocks Directive, is pending since 2016.

The standards contained in the 2017 Regulation on Limited Values of Contents of Pollutant Materials in Liquid Oil Fuels is fully compliant with the specifications set out in the Fuel Quality Directive. There were no changes in the reporting period to the Montenegrin Law on Air Protection, which would have introduced more precise provisions on fines.



Montenegro Renewable Energy

Renewable Energy Implementation

Renewable Energy Indicators	Transposition Assessment	Implementation Status	Descriptions
National Renewable Energy Action Plan			In 2019, Montenegro registered a 37,37% share of renewable energy, exceeding its overall 2020 target. Sectorial targets for electricity and heating and cooling were also overreached, however, the share of renewables in transport remains low.
Quality of support schemes			Based on the Energy Law, administratively set feed-in tariffs are applicable for projects up to 1 MW, while support has to be awarded in a competitive process for larger projects. Secondary legislation needed to provide clarity and predictability for the implementation of auctions is lacking. Currently, renewable energy producers receiving support are exempt from payment of imbalance costs.
Grid integration			Renewable energy producers enjoy priority dispatching. System operators are obliged to provide a detailed estimate of connection costs of renewable energy projects based on the methodology issued by the regulator.
Administrative procedures and guarantees of origin			No progress has been made to simplify administrative procedures and establish a one-stop shop in the reporting period. An electronic mechanism for issuing, transfer and cancellation of guarantees of origin is not in place.
Renewable energy in transport			Sustainability criteria for biofuels and bioliquids are transposed. However, the verification body prescribed by the Energy Law and the Decree is yet to be established. The share of renewables in the transport sector remained below 1% in 2020.

There were no improvements in the transposition and implementation of the renewable energy acquis in the reporting period.

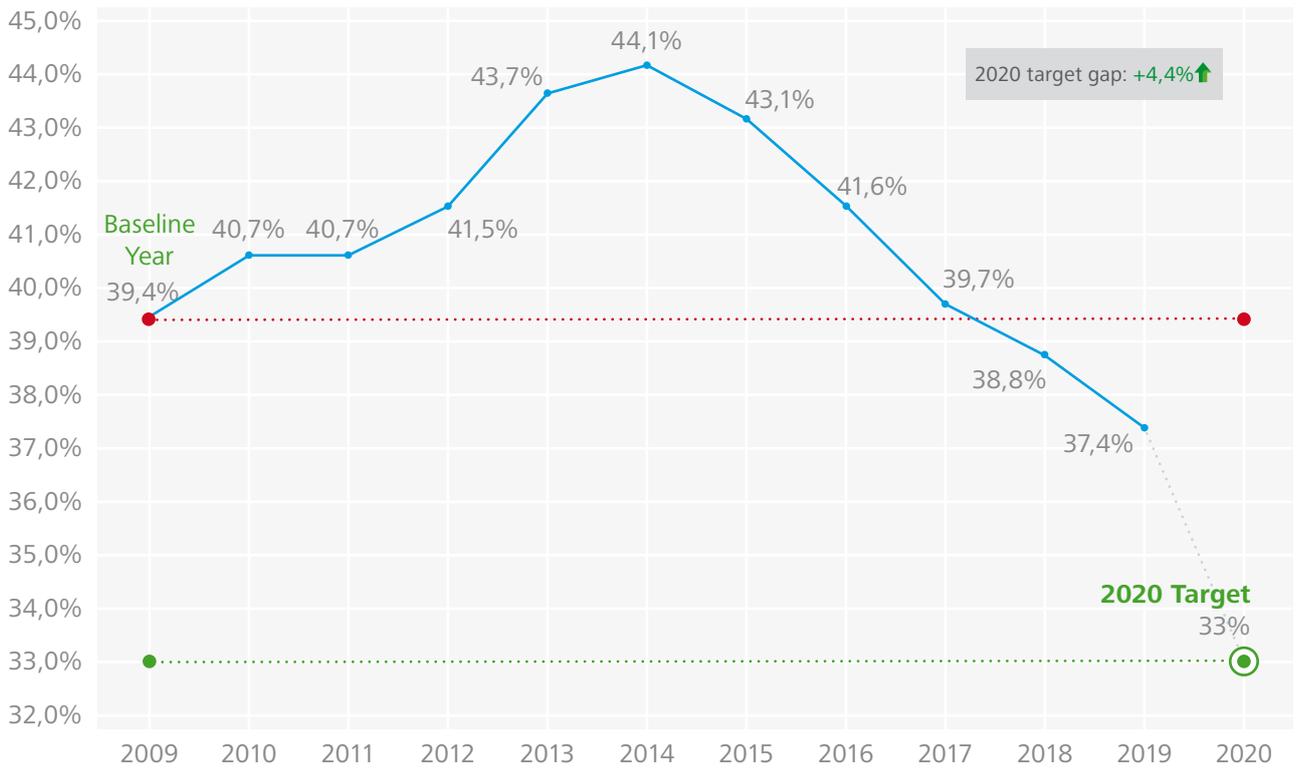
As an obligation arising from the amendments to the Energy Law adopted in July 2020, the Montenegrin Electricity Market Operator adopted Rules for the Register of Guarantees of Origin in December 2020.

In the amendments to the Energy Law, Montenegro defined a netting scheme for self-consumption, obliging suppliers to purchase the surplus of electricity produced after the annual

settlement at the price of energy indicated in the supply contract. It resulted in nine self-consumers by September 2021.

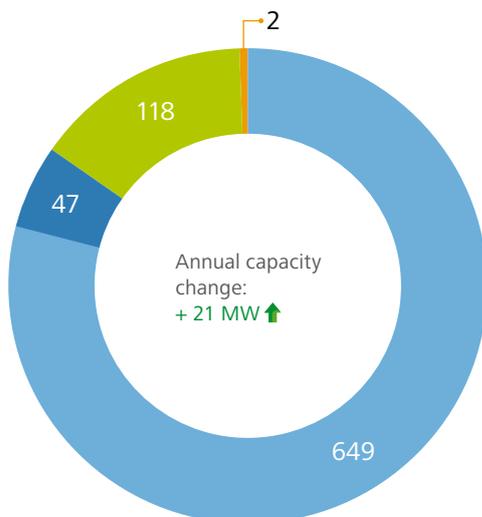
Despite the progress made in conducting locational auctions based on the Law on State Property, Montenegro should focus on adopting secondary legislation to provide clarity on the auctions for projects above 1 MW that are prescribed as obligatory by the Energy Law. Administrative procedures should be streamlined and simplified by the establishment of a one-stop shop. Moreover, the transposed sustainability criteria for biofuels and biodiesel should be implemented in practice in order to support the achievement of the renewables in transport target.

Shares of Energy from Renewable Sources



Source: EUROSTAT

Total Capacities of Renewable Energy 2020 (MW)



- Large hydropower
- Small hydropower <10 MW
- Wind
- Solar

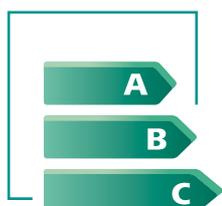
Montenegro overreached its 33% target for the share of renewable energy in gross final energy consumption by 2020 mostly due to revision of biomass data. A continuous decline in the share of renewable energy sources in gross final consumption is the result of a decrease in the share of renewables in the heating and cooling sector.

Despite great potential for the use of solar PV technology, only 2 MW were installed by the end of 2020. In 2020, 12 MW of small hydropower capacities were added. No new wind capacities were commissioned since 2019 when the full capacity of wind park Možura, 46 MW, was put into operation.

Total capacities of renewable energy (MW):

816

Source: Ministry of Capital Investments



Montenegro

Energy Efficiency

Energy Efficiency Implementation

Energy Efficiency Indicators	Transposition Assessment	Implementation Status	Descriptions
Energy efficiency targets and policy measures			The 2019 - 2021 NEEAP includes the overall 2020 target, a 1% annual target for central government buildings and alternative measures for achievement of the energy efficiency obligation target. Amendments to the Law on Efficient Use of Energy were drafted in July 2021. They introduce the 2030 energy efficiency policy framework and integrated planning through the country's draft NECP.
Energy efficiency in buildings			The Buildings Directive and implementing rulebooks were transposed already in 2015. Montenegro finalised updates on the cost-optimality calculations and a new software for energy performance calculations and certification of buildings. Several building renovation programmes are ongoing, albeit a long-term strategy is still missing.
Energy efficiency financing			The national Eco Fund finances energy efficiency and environmental projects. Several projects related to the public and residential sector are ongoing, supported either by state subsidies or international loans. An ESCO enabling framework is incorporated in the Law on Efficient Use of Energy. The NEEAP envisages measures and financial mechanisms for ESCO projects.
Energy efficient products - labelling			A package of twelve energy labelling rulebooks was adopted. To be fully compliant, Montenegro is still to adopt three regulations adopted by the Ministerial Council in November 2018.
Efficiency in heating and cooling			The relevant requirements of the Energy Efficiency Directive (Article 14) have been transposed by the 2020 Energy Law. Montenegro does not have district heating. The majority of buildings use individual heating systems supplied by either biomass or electricity. The Žabljak municipality will start a pilot biomass district heating project. The draft assessment of high-efficiency cogeneration and efficient district heating and cooling potential of 2018 is expected to be updated.

Montenegro has achieved a relatively high level of transposition of the energy efficiency acquis. It submitted the Annual Progress Report under the Energy Efficiency Directive in June 2021. Progress in implementation has also been recorded in the reporting period (work on updates of the primary law, regulation and tools improving energy performance of buildings, financing, etc.).

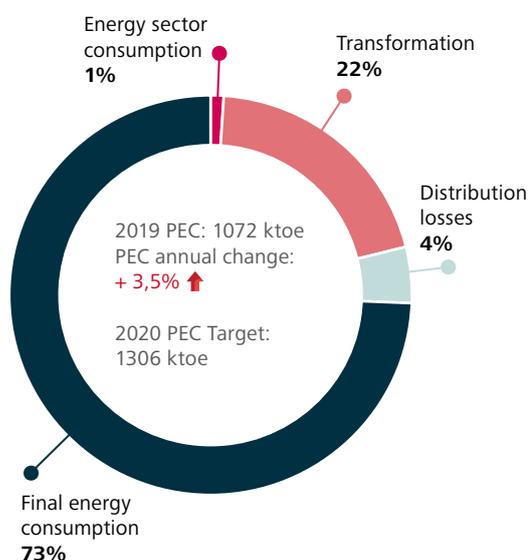
Montenegro should continue with the adoption of the remaining secondary legislation on energy labelling of energy-related products and adopt an updated regulation and tools enabling effective certification of the energy performance of buildings.

Notification on implementation of Article 7 (energy efficiency obligation scheme) should be submitted to the Secretariat without further delay.

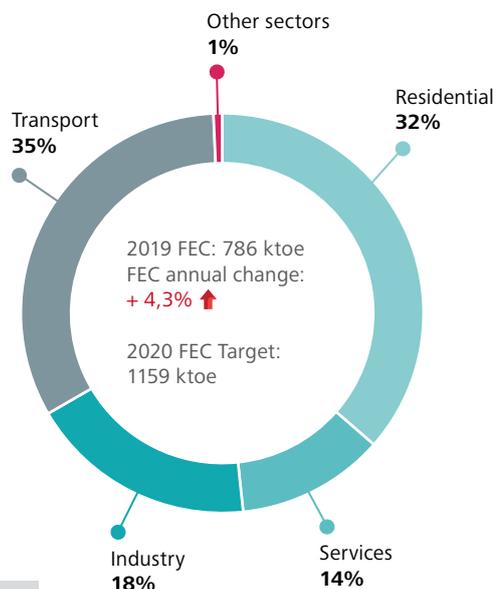
After the Eco Fund's establishment, Montenegro should focus on increasing state financing for energy efficiency measures in cooperation with the Ministry of Capital Investments and local administrations. Finally, Montenegro should put in place a functional information system for energy efficiency indicators, energy management and monitoring of NEEAP implementation.

2019 Energy Efficiency Indicators and Trends

Primary Energy Consumption (PEC)



Final Energy Consumption (FEC)



Energy intensity,
2019 value and trends:
0,28 ktoe/mil EUR, -0,5% ↓

Source: EUROSTAT 2021 data and Contracting Party's Annual Reports under Directive 2012/27/EU

Energy Efficient Products – Overview of Implementation of Labelling Regulation

FRAMEWORK REGULATION*	Household dishwashers	Fridges and freezers*	Household washing machines	Televisions	Air conditioners and fans*	Household tumble driers	Electrical lamps and luminaires	Solid fuel boilers*	Space heaters*	Water heaters & storage tanks	Domestic ovens and range hoods
	●	●	●	●	●	●	●	●	●	●	●

● Adopted and implemented ● Compliance or implementation issues detected ● No progress with adoption/implementation

* The new labelling package adopted by the Ministerial Council in November 2018 was assessed, as the transposition deadline expired in January 2020.

Source: multiple sources of data (EECG reports, NEEAPs etc.), compiled by the Energy Community Secretariat



Montenegro Environment

Environment Implementation

Environment Indicators	Transposition Assessment	Implementation Status	Descriptions
Environmental impact assessment (EIA) and strategic environmental assessment (SEA)			National legislation is in line with the EIA and SEA Directives. Sufficient administrative capacity with adequate financial resources, in particular concerning quality checks of the EIA and SEA reports as well as inspections, is lacking. The SEA report and the comments by the public and the national authorities gathered within the SEA procedure should be fully taken into account in the drafting of the National Energy and Climate Plan.
Sulphur in fuels			Implementation of the provisions of the Directive (including those on marine fuels) is ensured by national legislation and the Annual Fuel Quality Monitoring Programme. Amendments to the Law on Air Protection and the Law on Protection of the Sea from Pollution Caused by Ships will strengthen the enforcement procedures.
Large combustions plants and industrial emissions			The thermal power plant Pljevlja reached the end of its 20.000 limit of opt-out hours in the last reporting period. Infringement procedures were opened.
Nature protection			A national action plan for protection of birds is under development. Special focus should be put on the protection of Lake Skadar National Park. The number of inspections concerning obligations under the Wild Birds Directive is not sufficient.
Environmental liability		n/a	Montenegro has transposed the Environmental Liability Directive into national law and the national legal framework is being implemented.

Montenegro fully aligned its national legislation with the Environmental Impact Assessment (EIA) Directive, including the amendments introduced by Directive 2014/52/EU. However, more efforts are needed to foster public participation and public engagement early in the decision-making process, especially for the planned strategic hydropower projects (e.g. HPP Komarnica). The capacities of the national authorities for proper quality control of the EIA report must be improved and include a biologist on the team. Also, the insufficient number of environmental inspectors must be addressed.

The national legislation is in line with the Strategic Environmental Assessment Directive. The SEA procedure for the first draft of the National Energy and Climate Plan was initiated in August 2021. A combination of various traditional and modern tools should be used in order to secure early and effective public participation in the process. Furthermore, consultations with

all relevant public authorities are to be carried out.

With regard to the Sulphur in Fuels Directive, implementation is ensured for sampling and analysis of all fuels falling under the scope of the Directive. The provisions on marine fuels are also transposed into national legislation and the marine fuels used by vessels in Montenegrin waters and ports are regularly sampled.

Montenegro complied with its reporting obligations under the Large Combustion Plants Directive for the reporting year 2020. Emissions of all pollutants showed an increase compared to 2019 data, with the increase in sulphur dioxide emissions being most significant, followed by dust and nitrogen oxides emissions. The ecological reconstruction of the thermal power plant Pljevlja (which was opted out) is delayed. Since the plant exceeded its 20.000 hour limit, the Secretariat launched infringement procedures against Montenegro. Further delay in bringing the

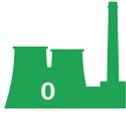
plant in line with the emission limit values for new plants under the Industrial Emissions Directive must not take place.

Montenegro designated its first protected marine area, the Platamuni Nature Park. Procedures for designation of the two other identified areas, Katici islands and the Old Ulcinj island, are announced. Until all identified areas for marine protection are designated, the objective of protecting marine areas should be taken into account in particular when approving projects and developing plans for offshore drilling of hydrocarbons. A national action plan for protection of birds is under development, led by the Center for Research and Protection of Birds together with the relevant national institutions. Additional efforts are

needed to ensure proper protection of Lake Skadar National Park. Thirty people were prosecuted throughout 2018 - 2020 for crimes involving almost 30 bird specimens. Nevertheless, an increase in the number of inspections and further capacity building are prerequisites for proper and effective protection by the competent authority.

Montenegro is implementing the Law on Environmental Liability. During the reporting period, six procedures were initiated, four of which were approved, one is ongoing and one was refused by the competent authority. One of the approved cases relates to water pollution from TPP Pljevlja.

Installations under the Large Combustion Plants Directive

	of plants falling under the LCPD
	of which opted out plants
	of which plants falling under the NERP

Source: compiled by the Energy Community Secretariat

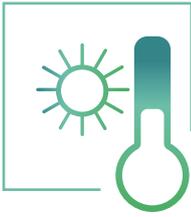
Total emissions from Large Combustion Plants in 2020

	Total SO ₂ emissions from LCPs in 2020 63.922
	Total NO _x emissions from LCPs in 2020 4.989
	Total dust emissions from LCPs in 2020 381

Amount of operational hours used from opt-out period

 TPP Plevlja	Expected expiry of opt-out period:	EXPIRED
	Remaining hours	0
	Operating hours consumed in 2018 - 2020	21.003

Source: compiled by the Energy Community Secretariat



Montenegro Climate

Climate Indicators	Transposition Assessment	Implementation Status	Descriptions
National greenhouse gas emissions monitoring and reporting systems			Although a Law on Protection against Negative Impacts of Climate Change has been adopted, the country's national GHG inventory system, Low-Carbon Development Strategy and national systems for policies, measures are still not operational.
National Energy and Climate Plans (NECPs)			Montenegro shared draft chapters of the NECP with the Secretariat for an informal review in May 2021 and has refined the document since then.

The Montenegrin NDC2 was submitted to the UNFCCC in June 2021. It puts forward a target of 35% GHG emission reduction by 2030 compared to 1990. The document includes both mitigation and adaptation measures and focuses on disaster risk reduction and calculation of GHG emissions for land use, land-use change and forestry (LULUCF). Measures on gender equality and vulnerable groups are also included. In October 2019, Montenegro began work on its third Biennial Update Report on Climate Change, which is expected to be adopted by the end of 2021. Work on the fourth National Communication is expected to be completed by 2024.

The Law on Protection against Negative Impacts of Climate Change sets the basis for the establishment of the National System for Monitoring, Reporting and Verification of GHGs, the obligation to develop a Low-Carbon Development Strategy together with an action plan and the definition of national systems for policies, measures and projections, all of which are required for implementation of the Monitoring Mechanism Regulation.

The development of the Low-Carbon Development Strategy will support the country in the process of establishing a national inventory system in accordance with the MMR Regulation. Activities will begin in early 2022. For the time being, the national GHG inventory is still developed based on external support. Montenegro joined the Twinning light project, which will enable

experts from the Environment Protection Agency, in charge of the GHG inventory compilation, to independently set up a national GHG inventory.

Montenegro - as the first Contracting Party - has introduced a cap and trade scheme for major CO₂ emitters in February 2020. A decree defines the activities or operations that emit GHGs for which an emission permit is issued (namely industrial and energy plants), the manner of conducting the auction for the allocation of emission credits, the allocation of free emission credits, the manner of recording the allocated emission credits, as well as their transfer and use. The decree determines the total amount of emission credits to be auctioned and sets a minimum price of EUR 24 per ton of CO₂. The funds raised from the scheme are transferred into an Eco Fund and used for energy efficiency measures to be implemented by the Ministry of Ecology, Spatial Planning and Urbanism.

Montenegro sent the first three draft chapters of the NECP informally to the Secretariat in May 2021. The working group continued refining the text of the document and the modelling results throughout summer 2021. The discussions have largely been linked to the decision on the future of the Pljevlja power plant. The first draft NECP has been planned to be finalized by the end of 2021. Montenegro has joined the Powering Past Coal Alliance and committed to stop using coal by 2035 at the latest.



Montenegro Infrastructure

Infrastructure Implementation

Infrastructure Indicators	Transposition Assessment	Implementation Status	Descriptions
National competent authority			The national competent authority has not been designated to date although this was announced several years ago.
Manual of procedures			There is no manual of procedures for the permitting process of the Projects of Energy Community Interest or Projects of Mutual Interest.
National regulatory authority involvement			The regulator published its methodology and criteria used to evaluate investments in electricity and gas infrastructure projects in 2017.

The adoption of the new Law on Cross-border Energy Infrastructural Projects, which aims to transpose Regulation (EU) 347/2013, originally envisaged for 2019 has now been postponed for the second year in a row until the end of 2021. The national competent authority should be designated and should publish the manual of procedures for the permit granting process applicable for Projects of Energy Community Interest and Projects of Mutual Interest as soon as possible. It should also report regularly to the Secretariat and the Electricity Group.

The transposition of the Regulation will support the realization of ongoing strategic infrastructure projects in electricity (Trans-balkan corridor), as well as planned infrastructure projects in gas (Ionian Adriatic Pipeline). Montenegro will benefit from improved security of supply and the overall operation of the country's energy system. The Law will also have a positive impact on the regional market and its coupling.





Montenegro Statistics

Statistics Implementation

Statistics Indicators	Transposition Assessment	Implementation Status	Descriptions
Annual statistics			The five annual questionnaires for 2019 were transmitted to EUROSTAT. Data on final energy consumption of households are not compiled and disseminated.
Monthly statistics			Monthly data are not transmitted to EUROSTAT from January 2020.
Price statistics			Price statistics for electricity for 2020 were compiled and transmitted in accordance with the acquis.

The level of compliance with the statistics acquis in Montenegro remains moderate without visible progress during the reporting period, in particular as regards assigning adequate human resources to the posts in charge of energy statistics.

According to the Law on Official Statistics, the Statistical Office of Montenegro (MONSTAT) is the central body responsible for the statistical system and statistical surveys.

MONSTAT collects and publishes annual energy balances. The methodology and formats are harmonized with International Energy Agency/EUROSTAT standards. Annual questionnaires are communicated to EUROSTAT timely and in compliance with the acquis. Disaggregated data on energy consumption of households for 2019 are not compiled and disseminated. Montenegro is the only Contracting Party not transmitting this questionnaire to EUROSTAT. The preliminary data for 2020 has also not been transmitted. MONSTAT established a procedure to maintain the

expected level of quality and submitted the report on the quality of transmitted data in the format defined by EUROSTAT.

A reporting system for monthly energy data was established within the Ministry of Economy. Although certain monthly data are collected, no monthly questionnaires were transmitted to EUROSTAT in 2020.

Electricity prices charged to industrial end-users and households broken down per consumption band and taxation level, as well as the breakdown of price components, are collected in line with the acquis, communicated to and subsequently published by EUROSTAT.

Montenegro fails to comply with the acquis by failing to collect disaggregated data on energy consumption in households and all monthly data. Providing sufficient resources is the core precondition for MONSTAT to fulfil this task.



Montenegro Cybersecurity

Cybersecurity Implementation

Cybersecurity indicators	Transposition Assessment	Implementation Status	Descriptions
Institutions and legislation			A cybersecurity strategy is in place but energy-specific policies are not defined. An updated strategy is in preparation. The Law on Information Security partially transposes the NIS Directive, and cybersecurity is supported by CIRT-ME. Designation of critical infrastructure in the energy sector is in place.
Requirements for operators and energy regulatory authority			Risk assessment criteria are provided in a general manner, as are the security obligations and reporting requirements of critical information infrastructure operators. Energy-specific criteria, risks and requirements should be established, along with the corresponding competences of the energy regulator.

Montenegro's main policy act in the domain of information security is the Cybersecurity Strategy 2018 - 2021, which defines objectives in the cybersecurity domain, including boosting incident response capacity, protection of critical information infrastructure and public awareness. There are no energy-specific policies in the strategy. Drafting of a follow-up Cybersecurity Strategy 2022 - 2026 is under way.

The Law on Information Security of 2010, as amended in 2021, only partially transposes Directive (EU) 2016/1148 (NIS Directive). It defines the basic rules for protection of information and the tasks, powers and operation of the national CIRT. CIRT-ME is established as a unit within the National Security Authority operating under the Ministry of Public Administration, as the main contact point for security threat analysis and incident reporting. A reference contact point for the energy sector is the Ministry of Economic Development. CIRT-ME provides cybersecurity services and coordinates assistance in case of cybersecurity incidents.

The Law on Designation and Protection of Critical Infrastructure of 2019 transposes Directive 2008/114/EC. It defines general criteria for identification and requests the specific criteria and measures for protection to be defined by the sectoral ministries. The Law imposes the development of security plans and inventory of critical assets. The Law on Information Security defines

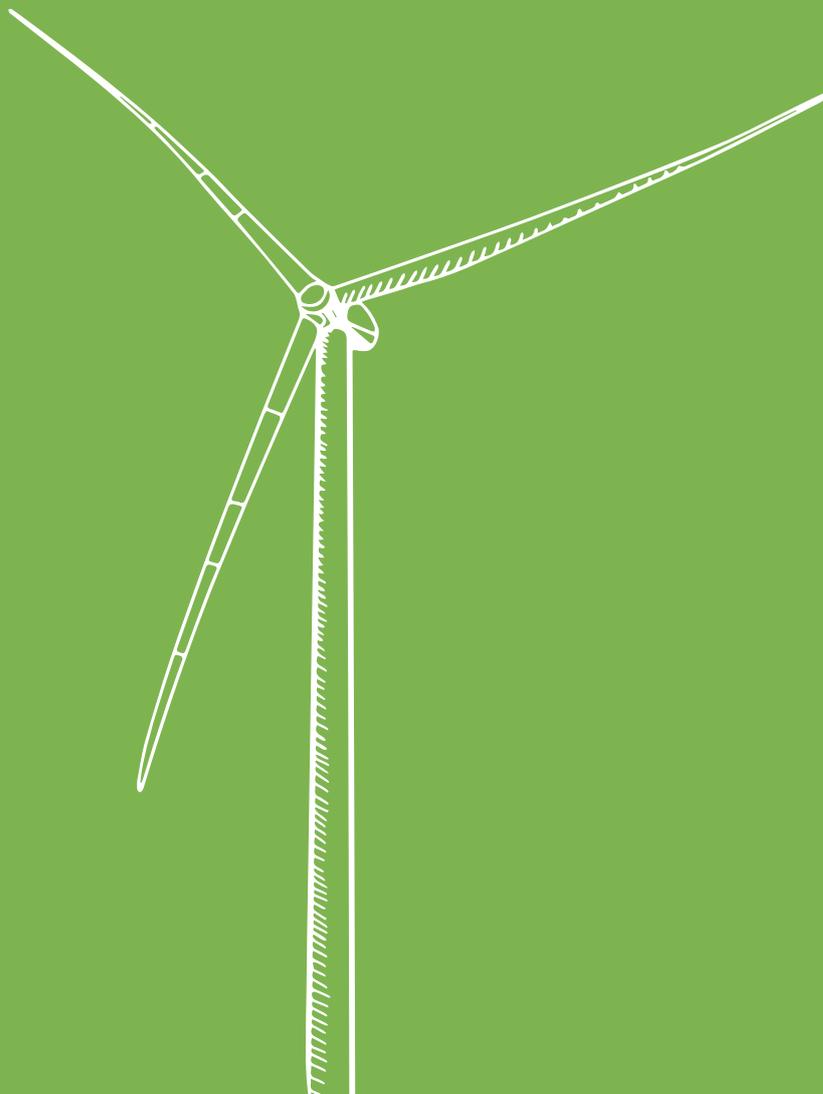
the basic criteria for critical information infrastructures and tasks the Government to specify the critical assets and the Ministry of Public Administration to implement the measures. The methodology for the selection of critical information infrastructure includes the infrastructures used in production, transmission, system operation and distribution of electricity and natural gas, storage of gas, and production, refining, storage and distribution of oil and derivatives. Supply of electricity, gas and oil are treated as essential services.

The Law on Critical Infrastructure defines a general set of criteria related to the development of security plans and appointment of security coordinators and outlines the basic obligations for the operators of critical infrastructures. Consequently, the energy operators have an obligation to report to the Ministry of Economic Development, which is responsible for the energy sector. The Law on Information Security provides a basic structure for information security risk definition and management, cybersecurity requirements and reporting obligations for the operators of critical information infrastructures, applicable to the energy sector.

The energy regulatory authority REGAGEN does not have competences on cybersecurity.

09

North Macedonia

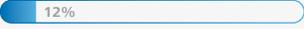
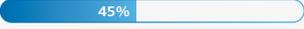






North Macedonia

Summary Implementation

Summary Indicators	Transposition Assessment	Implementation Status	Descriptions
 Electricity		 82%	Implementation in the electricity sector of North Macedonia is almost completed.
 Gas		 38%	Implementation in the gas sector of North Macedonia is still at an early stage.
 Oil		 75%	Implementation in the oil sector of North Macedonia is well advanced.
 Renewable Energy		 57%	Implementation in the renewable energy sector of North Macedonia is moderately advanced.
 Energy Efficiency		 62%	Implementation in the energy efficiency sector of North Macedonia is well advanced.
 Environment		 60%	Implementation in the environment sector of North Macedonia is moderately advanced.
 Climate		 76%	Implementation in the climate sector of North Macedonia is well advanced.
 Infrastructure		 12%	Implementation in the infrastructure sector of North Macedonia is yet to begin.
 Statistics		 83%	Implementation in the statistics sector of North Macedonia is almost completed.
 Cybersecurity		 45%	Implementation in the cybersecurity sector of North Macedonia is moderately advanced.

Overall number of cases: **2**

Procedure by Article **91**

ECS-7/21 Environment

ECS-22/21 Environment



North Macedonia

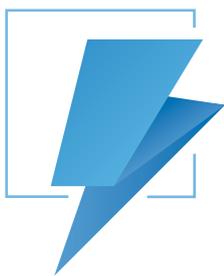
State of Energy Sector Reforms

The drive of North Macedonia in reforming its energy sectors observed in the previous reporting period has somehow slowed down. There was no tangible progress either in the unbundling of the gas transmission system operator, although a long standing dispute over its ownership was finally settled, the establishment of a day-ahead market or in the market coupling project with the Bulgarian exchange. The transposition of the

REMIT Regulation is pending due to necessary legislative changes. North Macedonia has yet to transpose the TEN-E Regulation. In terms of the environment, North Macedonia, as several other Contracting Parties, needs to update its legislation on environmental impact assessment. The National Energy and Climate Plan drafted last year, as the first in the Energy Community, and reviewed by the Secretariat is still not adopted.

North Macedonia's power generation mainly relies on lignite and hydropower and is dependent on electricity imports. The gas volumes consumed are modest and imported from Russia through an interconnector with Bulgaria. A second interconnector towards Greece is currently in an advanced stage of planning. North Macedonia was the first country in the Western Balkans to build a sizeable wind facility in 2014. However, no new wind capacities have been built since then. The country currently tenders for a new pumped storage facility at Cebren as well as additional solar PV capacities.





North Macedonia Electricity

Electricity Implementation

Electricity Indicators	Transposition Assessment	Implementation Status	Descriptions
Unbundling			Transmission and distribution network operators are unbundled in accordance with the acquis.
Access to the system			Access to the system is granted based on transparent and non-discriminatory rules and tariffs. Connection Network Codes are still not effectively implemented. The Transparency Regulation is transposed but its implementation is still to be completed.
Wholesale market			The wholesale market is open and the balancing market is operational. The establishment of the day-ahead market is delayed. REMIT has not been transposed.
Retail market			The retail market is open for competition. Small customers and households are entitled to universal service at regulated prices.
Regional integration			Interconnection capacities on the border with Greece and Kosovo* are allocated through SEE CAO, others bilaterally. The market coupling project with Bulgaria hinges on the creation of a day-ahead market in North Macedonia.

The state-owned transmission system operator MEPSO and the distribution system operator Elektro distribucija are unbundled in line with the acquis. Both transmission and distribution system operators prepare and publish a compliance programme and an annual compliance report. Pursuant to the Energy Law, Connection Network Codes should be directly applicable. However, the implementing rules of network operators have not been amended accordingly.

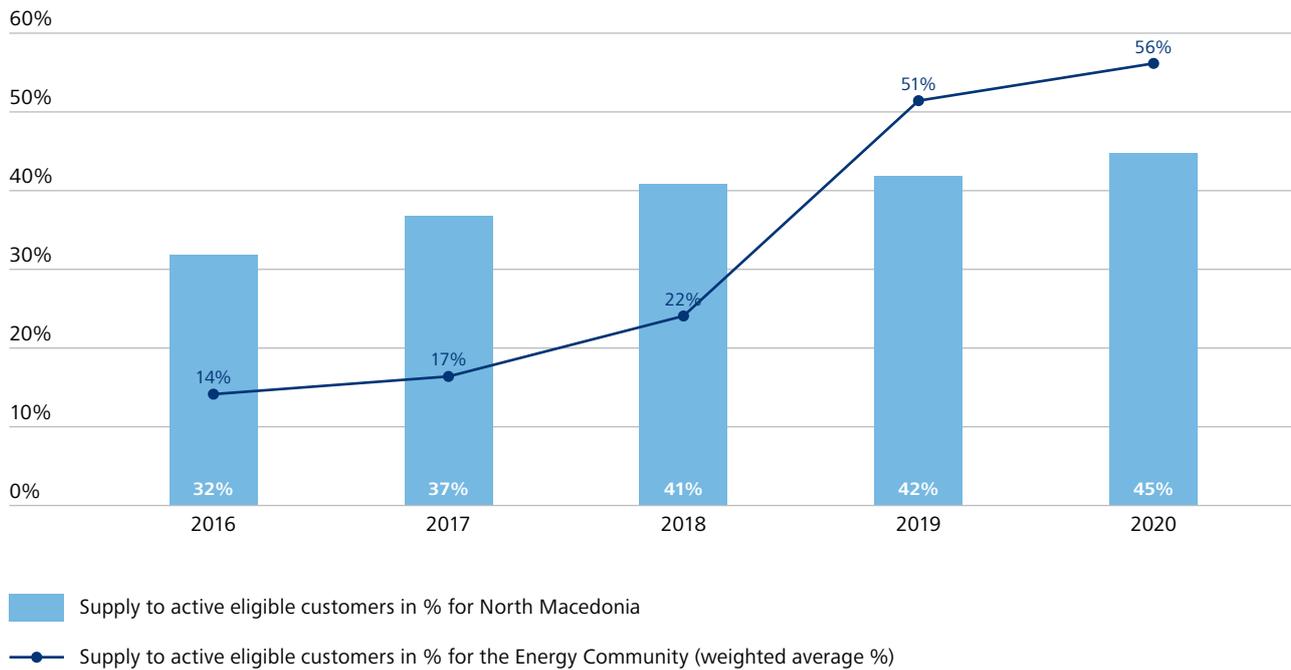
The wholesale electricity market is open. From September 2020, a subsidiary of MEPSO, the National Electricity Market Operator (MEMO), acts as the nominated operator of the organised electricity market. MEMO conducted a tender for a service provider of the trading platform for the day-ahead market and market coupling, but no contract was awarded. Additional efforts are needed to finally set up the day-ahead market and couple with Bulgaria after years of delay. Given the state of play, it is expected that the functioning of the day-ahead market and its coupling with Bulgarian IBEX will be further delayed.

MEPSO procures both the balancing reserve and balancing energy in a competitive procedure, albeit only with two registered balancing service providers.

The Transparency Regulation is partially implemented, but the publication of missing data on the ENTSO-E Transparency Platform requires a new market management system, which is currently being procured by MEPSO. An amendment to the Energy Law, required to transpose the REMIT Regulation, has not been adopted yet. ERC performs only general market monitoring functions.

Retail prices are deregulated, except for the universal service supplier, EVN Home. The latter was appointed to provide the universal service for the period of five years until 2024. The price for the supplier of last resort is based on the reference market price, currently the HUPX's day-ahead price. Despite that the Law allows for the recognition of supply licenses issued abroad on the basis of the reciprocity principle, foreign suppliers have not emerged in the market so far.

Retail Market Opening



Source: Ministry of Economy, compiled by the Energy Community Secretariat

The Energy Regulatory Commission (ERC) set up a web platform with a comparison tool to facilitate switching for households and small customers.

Protection of vulnerable customers is provided by the Government's programme for protection of vulnerable customers, adopted in January 2021. The programme defines the users, the conditions to classify categories of vulnerable customers, support measures and the funding for support measures.

MEPSO allocates interconnection capacities with Greece and Kosovo* through the SEE CAO. Interconnection capacities with Bulgaria and Serbia are allocated bilaterally. Signature of the agreement on grid control cooperation within the control block of transmission system operators of Montenegro, North Macedonia and Serbia awaits approval of MEPSO.



North Macedonia

Gas

Gas Implementation

Gas Indicators	Transposition Assessment	Implementation Status	Descriptions
Unbundling			The transmission system operator is not unbundled and certified in line with the Third Energy Package. Distribution companies have less than 100.000 customers and are thus exempt from the unbundling rules.
Access to the system			An entry/exit transmission tariff methodology and provisions on capacity allocation are in place. However, the capacity is not offered at the capacity platforms. The national grid code has not been revised to implement the Network Codes. The transmission system operator publishes only basic information, not in line with the scope required by Annex I of Regulation (EU) 715/2009.
Wholesale market			Wholesale gas prices are deregulated, but not reported as required by the REMIT Regulation. That Regulation is not transposed. The market remains illiquid, without a virtual trading point. All contracts are concluded bilaterally on a monthly and yearly basis.
Retail market			All customers are formally eligible, and end-user gas prices are deregulated. Customer protection measures are defined in line with Annex I of Directive 2009/73/EC.
Interconnectivity			Security of supply provisions are in line with Directive 2004/67/EC and partly Regulation (EU) 2017/1938. The obligation to submit the Security of Supply Statement to the Secretariat was fulfilled. The existing technical agreement for the interconnector with Bulgaria and a Memorandum of Understanding with Greece still have to be harmonised with the Network Code on Interoperability and Data Exchange.

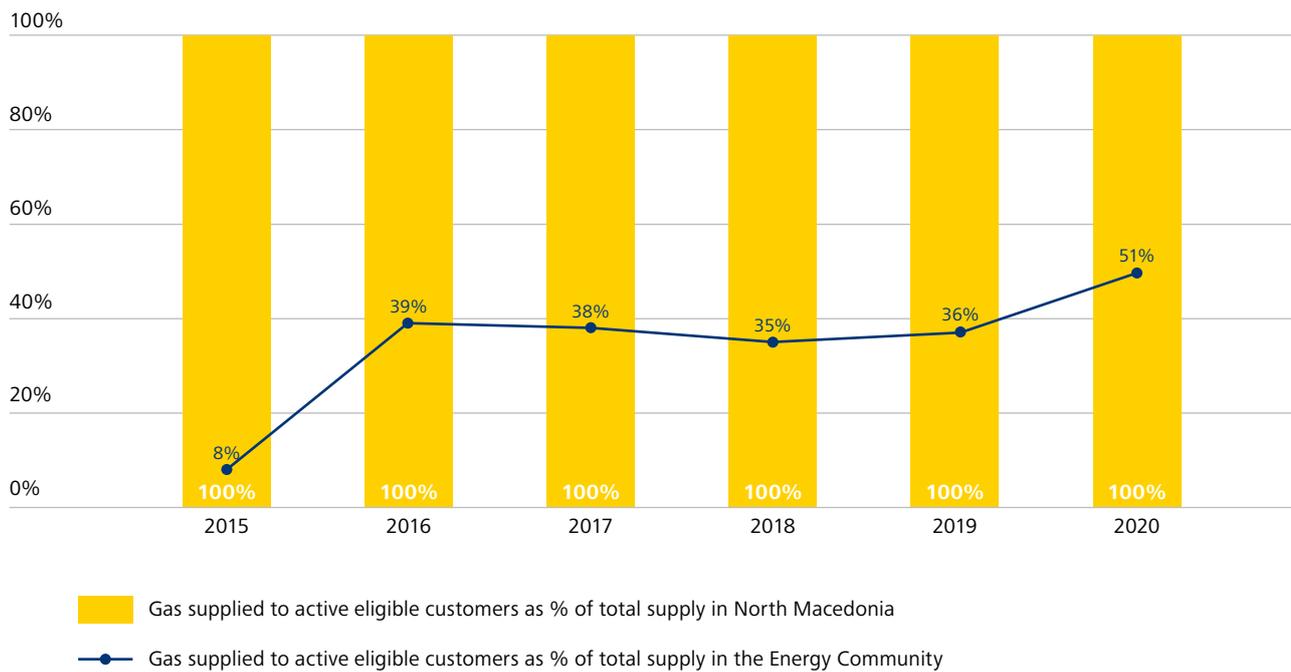
The implementation status of the gas acquis has unfortunately stagnated for the second reporting period in a row. However, the recent action by the Government to finally resolve the long-standing dispute with the private supplier Makpetrol, brokered by the Secretariat's Dispute Resolution and Negotiation Centre, will allow the establishment of an unbundled transmission system operator. The issue was finally settled by the transfer of Makpetrol's shares in GA-MA, a company operating as transmission system operator between the North Macedonian-Bulgarian border and Skopje, to the Government.

The establishment of a functional transmission system operator should ultimately unlock progress on other pending issues, such as the proper implementation of the Network Codes, re-

lated to capacity allocation, congestion management, tariffs, balancing, interoperability and cooperation with neighbouring transmission system operators. In July 2021, North Macedonia and Greece signed an agreement for the construction of a gas interconnector of 1,5 Bcm annual capacity. The final investment decision is expected to be taken by early 2022.

The company Nacionalni Energetski Resursi continues to make progress in constructing new transmission infrastructure, despite delays caused by the Covid-19 lockdown. Two sections, Klecovice - Negotino and Negotino - Bitola, are expected to be finished by the end of 2021. Once finalised, these pipelines will be integrated into the single national transmission grid.

Retail Market Opening



Source: Energy Regulatory Commission (ERC), compiled by the Energy Community Secretariat

The wholesale market is deregulated. However, the REMIT Regulation is neither transposed nor implemented. In the absence of a virtual trading point, gas trade is based solely on bilateral contracts. Supply is based on contracts with Gazprom and its affiliates. Several companies import gas to the country, via the sole interconnection point with Bulgaria. Non-applicability of EU rules from the Bulgarian side of that interconnector constitutes

an obstacle to the booking of unused cross-border capacity at the exit from the Bulgarian system.

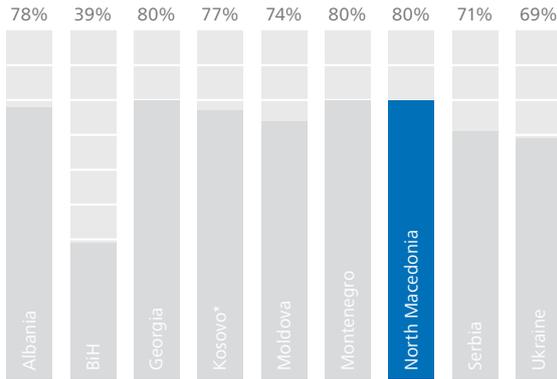
In November 2020, the Government invited bidders to the second stage of the tender for distribution network development on the national level, but the final decision has not been made yet.



North Macedonia National Authorities



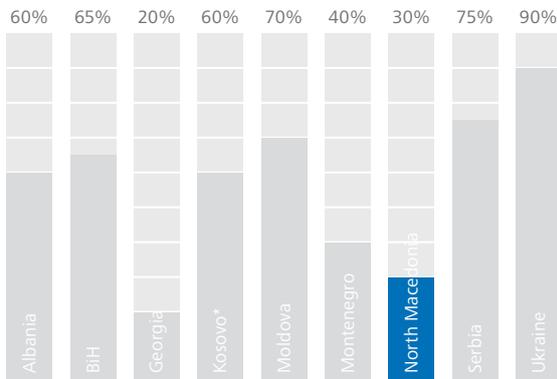
Regulatory Authority



The Energy Regulatory Commission (ERC) has a high technical profile and continued to demonstrate regulatory independence. The need for approval of ERC's annual employment plan and the requirement to follow cumbersome selection procedures remain a barrier to attracting human resources. Incorporation of the electricity and gas Network Codes into the national grid code by the system operators as well as full compliance with the Electricity Transparency Regulation should be more effectively enforced by ERC. The definition of criteria based on which derogations from the Network Code Regulations can be granted and the transposition of the REMIT Regulation are pending due to lack of competences. ERC's chairman currently assumes the position of ECRB President.



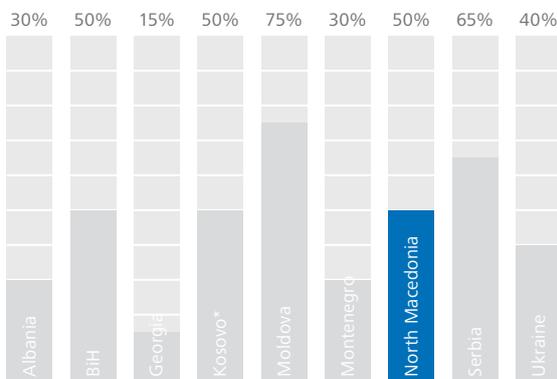
Competition Authority



The Commission for Protection of Competition (CPC) once again did not render any decision in the area of competition, nor did it carry out any investigation in the energy sector. Effective enforcement of competition law is needed in order for North Macedonia to comply with the obligations under the Energy Community Treaty.



State Aid Authority



In the reporting period, the Commission for Protection of Competition (CPC) did not render any decision nor open any investigation into State aid in the energy sector.



North Macedonia Oil

Oil Implementation

Oil Indicators	Transposition Assessment	Implementation Status	Descriptions
Stockholding obligation			The Law on Compulsory Oil Reserves, which transposes Directive 2009/119/EC, was adopted on 1 January 2021. In practice, oil stocks corresponded to 52 days of average daily consumption in September 2021, a decrease from September 2020 when stocks stood at 80 days.
Emergency procedures			The Law on Compulsory Oil Reserves foresees that the Government will adopt a decision on releasing compulsory reserves into circulation in the case of an oil supply emergency. The Intervention Plan was adopted and published by the Government in January 2021. It put in place the necessary procedures and measures in order to enable the competent authorities to release quickly, effectively and transparently emergency stocks in the event of a major supply disruption.
Fuel specifications of petrol, diesel and gas oil for non-road mobile machinery (NRMM)			North Macedonia transposed the main provisions of the Fuel Quality Directive in 2007. The environmental specifications of petrol and diesel are in conformity with European standards but not for gas oil for NRMM.
Monitoring compliance and reporting including the lay down the rules on penalties			The quality of the oil fuels placed on the market is monitored by the supplier pursuant to the annual plan for monitoring of the quality of liquid fuels, prepared and implemented by the Ministry in charge of energy. Penalty provisions for non-compliance with fuel quality standards are stipulated in the Law on Product Safety.

The Law on Compulsory Oil Reserves, adopted already in October 2014, finally came into effect on 1 January 2021. In June 2021, the Law was amended to transpose Commission Implementing Directive (EU) 2018/1581 on the Methods for Calculating Stockholding Obligations and align with the new Energy Law and the Misdemeanours Law. As of 13 July 2021, the Directorate of Compulsory Reserves of Oil and Oil Derivatives became the Compulsory Oil Reserves Agency (MACORA), as the central body responsible for the formation and maintenance of compulsory oil reserves.

As of September 2021, the average occupancy level of the compulsory oil reserves, calculated in accordance with the new methodology prescribed in Commission Implementing Directive (EU) 2018/1581, corresponded to 52 days of the average daily net imports, as daily net imports are greater than daily inland consumption. There was considerable revert in oil stockpiling during the reporting period due to the different methods for calculating the stockholding obligation in compliance with Implementing Directive (EU) 2018/1581. The oil stocks corresponding to the average daily consumption shrunk by 28 days compared to the

last reporting period. This decrease of average daily net imports may cause non-fulfilment of the final 90 days obligation by 1 January 2023.

In the reporting period, activities on the preparation of draft by-laws, including those transposing Annexes I - IV of Directive 2009/119/EC, continued. The majority of the by-laws were already adopted by the competent authorities during the first and second quarter of 2021. The Action Plan for formation of mandatory reserves was adopted in May 2021.

North Macedonia's legal framework conforms to the Fuel Quality Directive to a large extent. The most critical issue is the non-specification of the sulphur content of the gas oil used for non-road mobile machinery (NRMM).

In accordance with the current Energy Law, the Government of North Macedonia should adopt a new Rulebook on the Quality of Liquid Fuels within 18 months from the date of entry into force of the 2018 Energy Law. The act's adoption is pending.



North Macedonia Renewable Energy

Renewable Energy Implementation

Renewable Energy Indicators	Transposition Assessment	Implementation Status	Descriptions
National Renewable Energy Action Plan			In 2019, renewables accounted for 16,81% of North Macedonia's energy consumption, which is far less than the indicative target of 23%. The country has reached its sectorial target for heating and cooling, but not targets for electricity and transport.
Quality of support schemes			Administratively set feed-in tariffs (FiT) are still granted for wind projects with installed capacity up to 50 MW and hydropower plants with installed capacity up to 10 MW. The other support mechanism is a feed-in premium (FiP) granted on a competitive basis. Producers granted with FiTs are exempt from balancing responsibility whereas producers with support granted via tenders bear balance responsibility.
Grid integration			Transmission and distribution system operators are obliged to ensure priority connection to the systems and priority in the dispatching of electricity produced from renewable energy sources.
Administrative procedures and guarantees of origin			No progress has been made to simplify administrative procedures and establish a one-stop shop in the reporting period. Given the absence of such a system at national level, North Macedonia has expressed interest to join the Energy Community regional initiative to establish an electronic system for guarantees of origin.
Renewable energy in transport			The draft law on biofuels, prepared by the Ministry of Economy, is waiting for the Government's approval. The share of renewables in transport remained negligible in 2020, not reaching even 0,5%.

There were negligible improvements in the transposition and implementation of the renewable energy acquis in the reporting period. Although the country overreached its sectorial target for the share of renewable energy in heating and cooling and almost reached its electricity target, the overall target of 23% of renewable energy in gross final energy consumption by 2020 is far from being achieved because of the insignificant share of renewable energy in the transport sector.

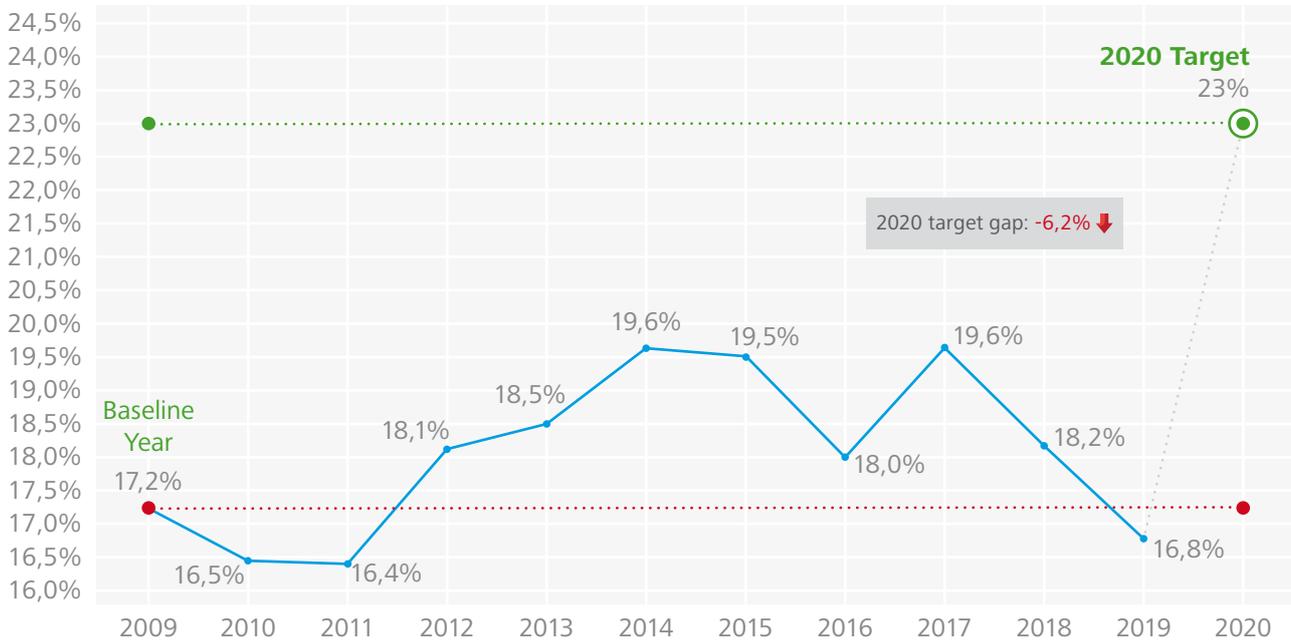
In line with the Government programme for financial support for the production of electricity from preferential producers using premiums for 2021, the maximum reference amount of the fixed premium for generation of electricity from solar PV was set at 15 EUR/MWh. The average feed in premium as a result of the last solar PV auction in 2020 was around 4 EUR/MWh

for state-owned land and around 11 EUR/MWh for private land.

According to the Rulebook on Renewable Energy, the threshold for the net billing scheme is 4 kW for households and 20 kW for small consumers. So far, 42 self-consumers are registered under the currently applicable net billing scheme.

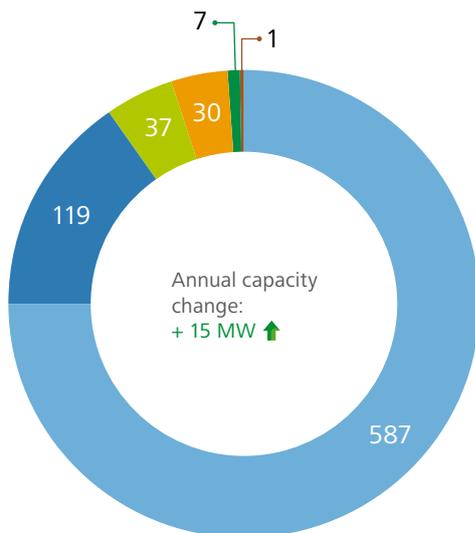
The priority for North Macedonia should be the transposition of provisions related to the sustainability of biofuels. Thresholds for administratively set feed-in tariffs (FiT) have to be aligned with the Guidelines on State Aid for Environmental Protection and Energy. The country should also implement an electronic system for guarantees of origin and continue with the further implementation of existing legislation while promoting the use of renewable energy.

Shares of Energy from Renewable Sources



Source: EUROSTAT

Total Capacities of Renewable Energy 2020 (MW)



- Large hydropower
- Small hydropower <10 MW
- Wind
- Solar
- Biogas
- Biomass

The renewable energy portfolio of North Macedonia is mainly based on hydropower. In 2020, only 6 MW of solar PV were added. The only wind farm remains Bogdanici (37 MW), which is in operation since 2014.

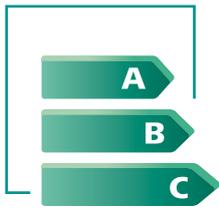
The total share of renewables decreased in 2019 compared to 2018 due to the decrease of the share of renewables in heating and cooling.

In August 2021, North Macedonia announced a public call to support individual solar PV plants with total installed capacity of 80 MW.

Total capacities of renewable energy (MW):

782

Source: Energy Regulatory Commission of the Republic of North Macedonia



North Macedonia

Energy Efficiency

Energy Efficiency Implementation

Energy Efficiency Indicators	Transposition Assessment	Implementation Status	Descriptions
Energy efficiency targets and policy measures			The 2020 Law on Energy Efficiency transposed the Energy Efficiency Directive and set the specific targets required under Articles 5 and 7. The fifth Annual Progress Report indicated increased savings in 2020 and confirmed that the country is on track to meet the 2020 target. By-laws on the obligation scheme, buildings renovation strategy and energy audits are still not adopted.
Energy efficiency in buildings			The Law on Energy Efficiency transposed the Buildings Directive. Implementation is still lagging behind as key by-laws are either missing or are not updated. North Macedonia is preparing rulebooks on energy performance of buildings, energy audit of buildings and an energy performance certificates verification system.
Energy efficiency financing			The Energy Efficiency Fund is being set up and will be funded through a EUR 24 million loan from the World Bank. The Government programme for renewables and energy efficiency for 2021 was adopted. A buildings renovation programme of approx. EUR 24,5 million is being implemented.
Energy efficient products - labelling			Rulebooks implementing EU Directive 2010/30/EU were adopted. Rulebooks implementing the new Regulation 2017/1369/EU on labelling are in the drafting process.
Efficiency in heating and cooling			In 2019, the share of district heating in total heat supply was 8% and entirely produced by gas, of which 45,5% in cogeneration units. 30,5% of heating and cooling was generated from renewables, but efficiency is low as the majority of biomass-based boilers and stoves use old technologies. The country has not yet prepared the assessment of its high-efficiency cogeneration and efficient district heating potential required by the Energy Efficiency Directive.

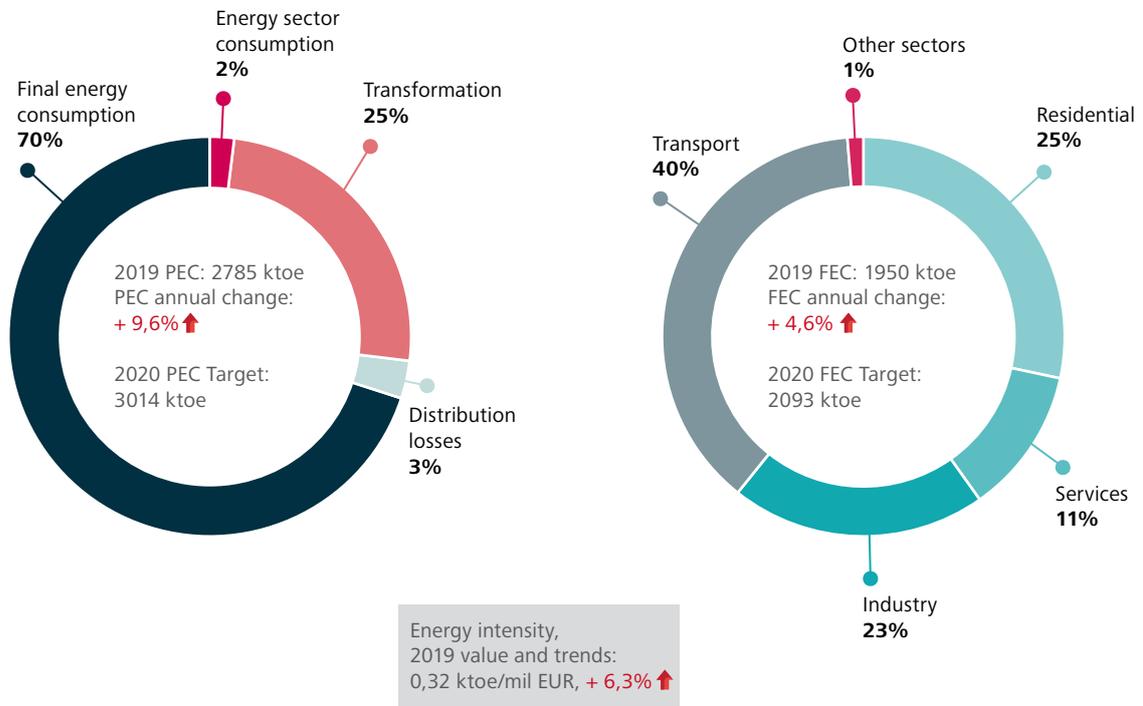
In this reporting period, North Macedonia has not made any significant progress with the adoption of the needed by-laws to implement the 2020 Law on Energy Efficiency. Nevertheless, drafts are being prepared. Some (for labelling and eco-design) are expected to be adopted before the end of 2021. Financing of energy efficiency measures, including for residential and public buildings, continues to be supported by international financial institutions and soon also by the national Energy Efficiency Fund.

The lack of institutional capacity in the Ministry of Economy remains acute (with one single energy efficiency expert in the staff), but many donors are supporting the preparation of legal and regulatory acts. The preparation as well as the subsequent implementation of secondary legislation remain a big challenge despite the technical assistance available.

2019 Energy Efficiency Indicators and Trends

Primary Energy Consumption (PEC)

Final Energy Consumption (FEC)



Source: EUROSTAT 2021 data and Contracting Party's Annual Reports under Directive 2012/27/EU

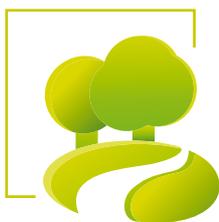
Energy Efficient Products – Overview of Implementation of Labelling Regulation

FRAMEWORK REGULATION*	Household dishwashers	Fridges and freezers*	Household washing machines	Televisions	Air conditioners and fans*	Household tumble driers	Electrical lamps and luminaires	Solid fuel boilers*	Space heaters*	Water heaters & storage tanks	Domestic ovens and range hoods
	●	●	●	●	●	●	●	●	●	●	●

● Adopted and implemented ● Compliance or implementation issues detected ● No progress with adoption/implementation

* The new labelling package adopted by the Ministerial Council in November 2018 was assessed, as the transposition deadline expired in January 2020.

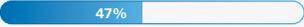
Source: multiple sources of data (EECG reports, NEEAPs etc.), compiled by the Energy Community Secretariat



North Macedonia

Environment

Environment Implementation

Environment Indicators	Transposition Assessment	Implementation Status	Descriptions
Environmental impact assessment (EIA) and strategic environmental assessment (SEA)			The Secretariat initiated a case against North Macedonia for not transposing the amendments (Directive 2014/52/EU) to the EIA Directive. The SEA Directive is transposed in the national legislation. The draft SEA report for the NECP should be improved and further aligned with SEA Directive.
Sulphur in fuels			The national legislation is in line with the provisions of the Directive. There is no domestic production, and imported fuels covered by the scope of the Directive are subject to regular sampling and analysis.
Large combustions plants and industrial emissions			The new Law on Industrial Emissions (addressing more sectors than large combustion plants) and the integrated permit of the largest combustion plant in the country (TPP Bitola) are still not adopted.
Nature protection			One protected area under national legislation, a category II national park, and one protected area under the Ramsar Convention were designated. Implementation of effective and appropriate measures to secure the protection of the protected areas under the Emerald Network is not satisfactory.
Environmental liability		n/a	North Macedonia has partially transposed the Environmental Liability Directive by the relevant provisions of the Law on Environment.

North Macedonia has not transposed the amending Directive 2014/52/EU. The screening process of projects subject to Annex II of the EIA Directive and in particular the screening of small hydropower projects remains a challenge. The potential cumulative impact is not systematically considered in the screening procedures. In the reporting period, 14 hydropower projects were subject to EIA screening and in all cases it was concluded that an EIA is not needed.

The national provisions concerning the strategic environmental assessment (SEA) are compliant with the SEA Directive. The preparation of SEAs should be synchronized with the preparation of plans or programmes in order to ensure early integration of the environmental considerations into those documents when all options are open. The SEA report for the National Energy and Climate Plan should be further improved in order to reflect the environmental impacts of the RES development projects. Particular attention should be given to cumulative impact of the hydropower development.

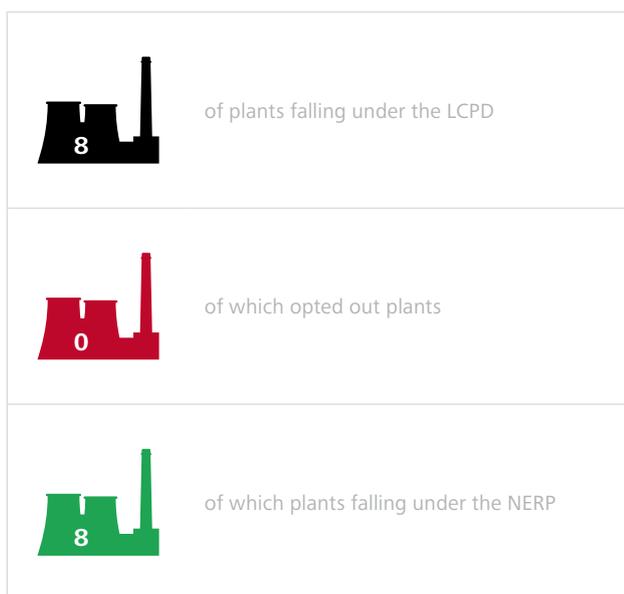
The Directive on the sulphur content of liquid fuels is transposed and properly implemented.

The overdue integrated permit for TPP Bitola, which would serve as the main implementation tool for the National Emission Reduction Plan (NERP) of the Contracting Party, is still not adopted. In July 2021, North Macedonia announced that it will close all of its coal-fired thermal power plants by the end of 2027, making it highly unlikely that investments into emissions abatement will be carried out. North Macedonia complied with its emission reporting obligations for the reporting year 2020. Emissions data still show significant non-compliance with the ceilings for sulphur dioxide and dust. The Secretariat opened dispute settlement procedures in March 2021. In terms of the absolute amount of emissions, a slight decrease was recorded compared to 2019 levels for dust, while sulphur dioxide and nitrogen oxides emissions decreased more significantly.

The country designated its fourth national park “Shar planina” as an International Union for Conservation of Nature (IUCN) category II protected area and the protected landscape “Oso-govo” as an IUCN category V protected area. Cross-border cooperation with Kosovo* concerning the Shar mountain to secure proper and effective measures in line with the Wild Birds Directive would be important. North Macedonia also designated

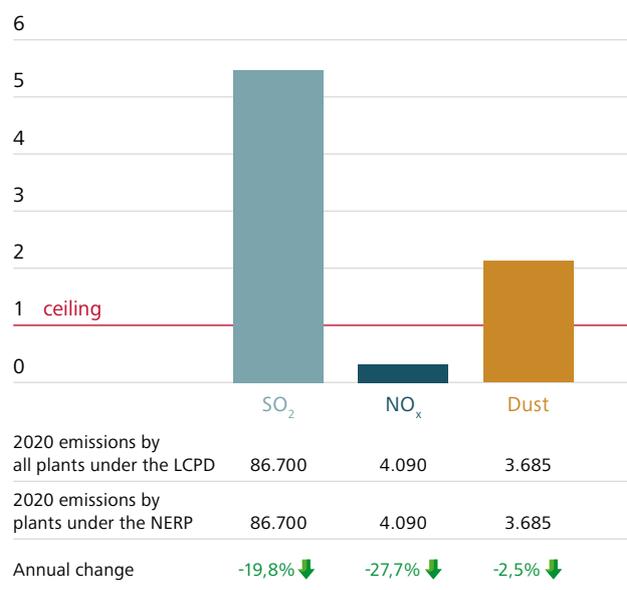
its third wetland of international importance under the Ramsar Convention (Lake Ohrid), but a proper management plan for the lake is still missing. In the reporting period, the Valley of Dlaboka River located in National Park Mavrovo was designated as a UNESCO natural heritage site. However, the protection of the rivers in the park is still not ensured given existing plans for hydropower development.

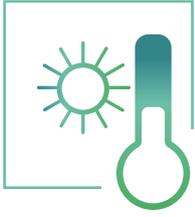
Installations under the Large Combustion Plants Directive



Source: compiled by the Energy Community Secretariat

2020 emissions versus NERP ceilings





North Macedonia

Climate

Climate Indicators	Transposition Assessment	Implementation Status	Descriptions
National greenhouse gas emissions monitoring and reporting systems		 80%	The Law on Climate Action, finalized during this reporting period, is expected to be adopted by the end of 2021. It will set the legal obligations for the institutionalization of a national GHG emissions inventory system and for policies, measures and projections. A long-term strategy on climate action has been adopted by the Government on 1 September 2021.
National Energy and Climate Plans (NECPs)		 73%	North Macedonia's NECP is still to be finalized and adopted.

North Macedonia submitted its revised National Determined Contribution (NDC2) to the UNFCCC Secretariat in April 2021. The document envisages a 51% reduction of GHG emissions by 2030 compared to 1990 levels. It is focused on mitigation and echoes the green scenario from the National Strategy for Energy Development up to 2040. Policies and measures on Agriculture, Forestry and Other Land Use (AFOLU) are also reflected. The third Biannual Update Report to the UNFCCC was submitted in June 2021. The fourth National Communication is expected to be finalized in the first half of 2022.

The long-term strategy was adopted by the Government, while the adoption of the Law on Climate Action is still pending. The preparation of the GHG inventory is still project based, a shortcoming the Law on Climate Action and related secondary legislation is expected to rectify. A rulebook for determining

the national inventory system, the system of policies, measures and projections, the manner and form of reporting information on policies and measures, determining the list of authorities, organizations and other entities that have data on activities for determining the GHG inventory as well as a list of preliminary data for activities has been drafted.

North Macedonia was the first Contracting Party to submit its draft NECP and receive the Secretariat's formal recommendations in 2020. Yet it still has not adopted the plan. The document was updated in summer 2021 taking into account impacts of the Covid-19 pandemic and put out for public consultation. North Macedonia was also the first Contracting Party to commit to a coal phase-out (by 2027) as a member of the Powering Past Coal Alliance.



North Macedonia Infrastructure

Infrastructure Implementation

Infrastructure Indicators	Transposition Assessment	Implementation Status	Descriptions
National competent authority		<div style="width: 30%;"><div style="width: 30%;"></div></div> 30%	The Law on Strategic Investments, adopted on 16 January 2020, is currently undergoing a revision to properly transpose Regulation (EU) 347/2013.
Manual of procedures		<div style="width: 0%;"><div style="width: 0%;"></div></div> 0%	The manual of procedures has not been defined yet.
National regulatory authority involvement		<div style="width: 0%;"><div style="width: 0%;"></div></div> 0%	The national regulatory authority did not publish the methodology and the relevant evaluation criteria for investments in electricity and gas infrastructure projects.

In the last reporting period, the Ministry of Economy had prepared amendments to the Law on Strategic Investments to transpose Regulation (EU) 347/2013. The Government should act as the national competent authority, supported by the special Commission for strategic investment projects.

North Macedonia must proceed with the Regulation's transpo-

sition immediately, followed by swift implementation. Transposition should facilitate the realization of PEI and PMI infrastructure projects. Beside the PEI 2018 project (line 400 kV Bitola – Elbasan), North Macedonia is developing important gas projects like interconnectors North Macedonia – Serbia, North Macedonia – Albania (PEI 2020) and North Macedonia – Greece (PMI 2020).

PEI/PMI projects (December 2020): **3**

Electricity: **0**

PEI: **0**

PEI: **2**
PMI: **1**

Gas: **3**



North Macedonia

Statistics

Statistics Implementation

Statistics Indicators	Transposition Assessment	Implementation Status	Descriptions
Annual statistics			The annual questionnaires for 2019 were transmitted to EUROSTAT but the questionnaire on final energy consumption of households is missing.
Monthly statistics			All monthly data are transmitted in accordance with the acquis; short-term monthly data are not provided on time.
Price statistics			Electricity price statistics for 2020 as well as prices of natural gas charged to households were compiled and transmitted in accordance with the acquis. The data on natural gas prices charged to industrial end-users are missing.

The high level of compliance with the acquis on statistics in North Macedonia has declined in 2021 due to the mobilisation of all human resources in preparation of the census 2021.

The production of official statistics in North Macedonia is by law entrusted to the State Statistical Office (SSO). SSO is also responsible for the coordination of all statistical activities in the country.

Annual data are compiled and disseminated including the five questionnaires for coal, oil, natural gas, electricity, heat and renewable energy for 2019. The annual questionnaires are communicated to EUROSTAT timely and in compliance with the acquis. Preliminary questionnaires for 2020 were prepared and transmitted on time. However, unlike in previous years, the disaggregated data on residential consumption of energy for 2019 have not been transmitted yet. SSO also prepares and transmits to EUROSTAT the questionnaire on renewables shares. SSO has already established a quality system for producing qual-

ity reporting as required under the Treaty and a corresponding quality report was submitted to EUROSTAT.

SSO releases monthly energy statistics on electricity, natural gas, oil and petroleum products and solid fuels, which are subsequently published by EUROSTAT, in compliance with Annex C of Regulation (EC) 1099/2008. The short-term monthly data pursuant to Annex D of Regulation (EC) 1099/2008 are still not available on time. Natural gas and monthly oil data are also reported to the JODI database.

Prices of electricity charged to industrial end-users and households are compiled and submitted to EUROSTAT, as well as the breakdown of prices per component, pursuant to the acquis. Prices of natural gas charged to households are compiled and transmitted, however, the prices of natural gas charged to industrial end-users in second semester 2020 and the breakdown of natural gas price components for 2020 have not been released yet.



North Macedonia Cybersecurity

Cybersecurity Implementation

Cybersecurity indicators	Transposition Assessment	Implementation Status	Descriptions
Institutions and legislation			A Cybersecurity Strategy is in place. The adoption of a compliant cybersecurity law is pending. Corresponding amendments to the Energy Law are in preparation. There is no criteria for identification of critical energy infrastructures. MKD-CIRT is operational and responsible for the energy sector.
Requirements for operators and energy regulatory authority			Cybersecurity risk assessment and obligations for energy operators are not directly included in the law. The Energy Regulatory Commission has taken initiative to provide acts on risk management, obligations and other cybersecurity mechanisms in the electricity domain.

The Cybersecurity Strategy 2018 - 2022 developed by the Ministry of Information Society and Administration aims to provide resilient information and communication technology (ICT) infrastructures, and boost cybersecurity capacity and culture, cyber defence, international cooperation and exchange of information. Specific targets include the transposition of Directive (EU) 2016/1148 (NIS Directive), legal enforcement for critical infrastructures in sectoral laws and establishment of a National Cybersecurity Council.

The Strategy for Information Society of 2005 and the Law on Electronic Communications, as amended in 2021, provide the basic legal framework for security management of ICT infrastructures, applicable also to energy. There is no compliant cybersecurity law in force. The draft Law on Security of Network and Information Systems that transposes the NIS Directive, developed in 2019 and updated in 2021, is not adopted.

The protection of critical infrastructure lacks clear criteria for identification and designation applicable to the energy sector. The draft Law on Security of Network and Information Systems contains provisions addressing the criteria for critical ICT infrastructures.

Based on the Law on Electronic Communications, the responsible authority is the Agency for Electronic Communications, hosting the MKD-CIRT. The CIRT acts as the point of contact for reporting and coordination in dealing with security incidents in

ICT systems, providing a coordinated response, education and risk analysis, including for the operators of critical infrastructure and large enterprises in the energy sector.

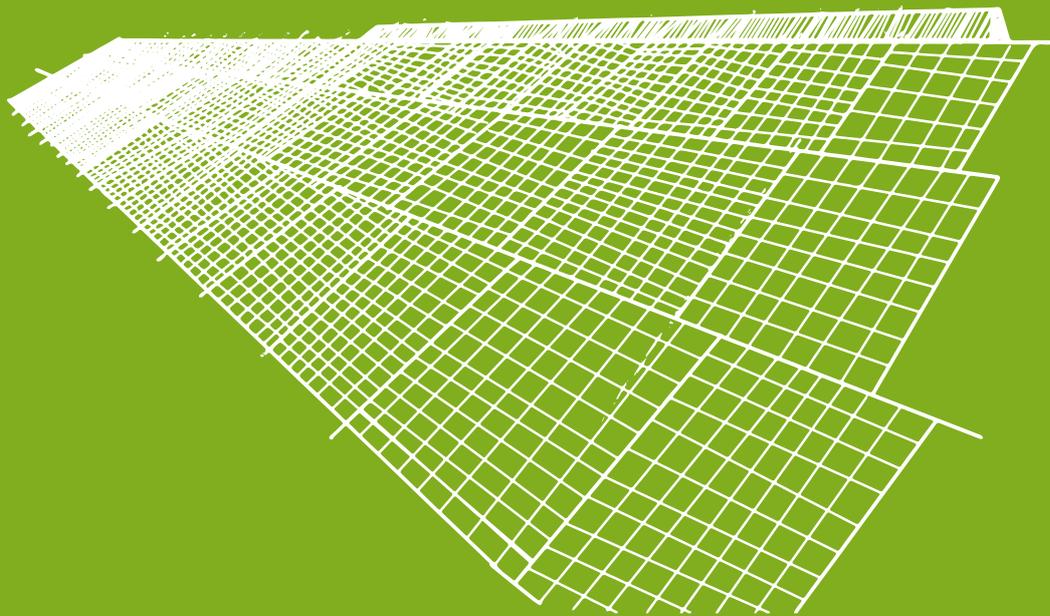
The methodology for cybersecurity risk assessment and rules on reporting obligations addressing the energy sector are not applied. MKD-CIRT performs assessments of threats in the ICT domain and communicates with stakeholders. The CIRT has established an incident reporting mechanism, which is mandatory for all public bodies and utilities. Security risk management and operators' obligations related to the supply chain for critical ICT components are enforced by the law.

Amendments to the Energy Law addressing cybersecurity mechanisms in the energy sector, enforcing identification and designation of critical energy infrastructures and providing cybersecurity competences to the energy regulatory authority, are in preparation. The establishment of a specific energy CIRT is foreseen in a draft Cybersecurity Law.

The Energy Regulatory Commission (ERC) has adopted Recommendations including criteria for identification of critical energy infrastructures in the electricity sector in cooperation with MKD-CIRT and the Ministry of Economy. ERC is drafting a cybersecurity strategy of the energy sector including requirements and obligations for public and private operators, application of ISO 27001 standards and methodologies for risk assessment and critical asset management.

10

Serbia

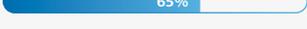






Serbia

Summary Implementation

Summary Indicators	Transposition Assessment	Implementation Status	Descriptions
 Electricity		 75%	Implementation in the electricity sector of Serbia is well advanced.
 Gas		 36%	Implementation in the gas sector of Serbia is still at an early stage.
 Oil		 75%	Implementation in the oil sector of Serbia is well advanced.
 Renewable Energy		 64%	Implementation in the renewable energy sector of Serbia is well advanced.
 Energy Efficiency		 73%	Implementation in the energy efficiency sector of Serbia is well advanced.
 Environment		 65%	Implementation in the environment sector of Serbia is well advanced.
 Climate		 66%	Implementation in the climate sector of Serbia is well advanced.
 Infrastructure		 12%	Implementation in the infrastructure sector of Serbia is yet to begin.
 Statistics		 96%	Implementation in the statistics sector of Serbia is almost completed.
 Cybersecurity		 80%	Implementation in the cybersecurity sector of Serbia is well advanced.

Overall number of cases: **5**

ECS-10/21 Environment

ECS-23/21 Environment

Procedure by Article **91**

Procedure by Article **92**

ECS-09/13S Gas

ECS-10/17S Gas

ECS-13/17 Gas



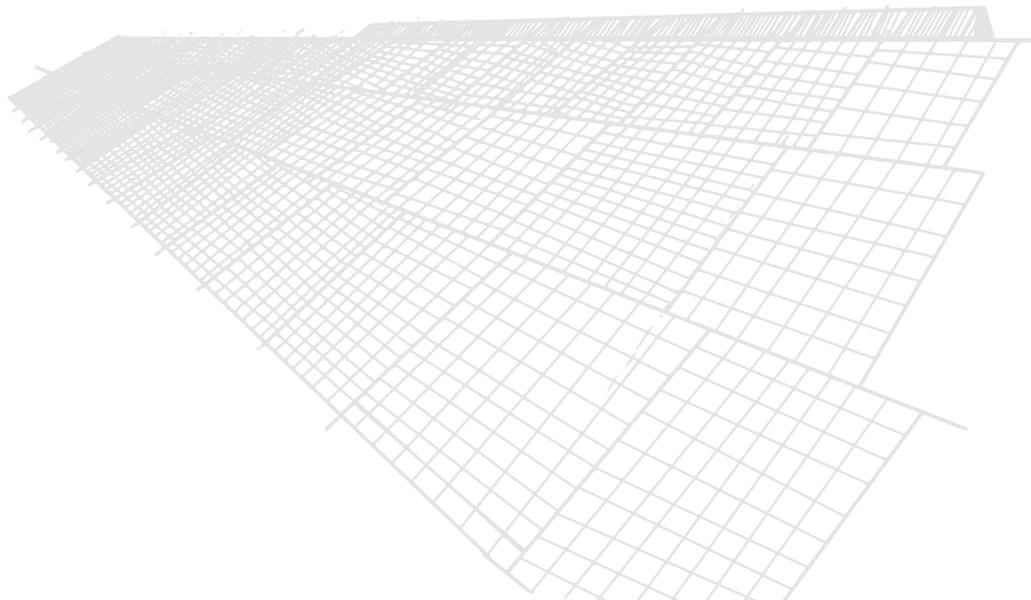
Serbia

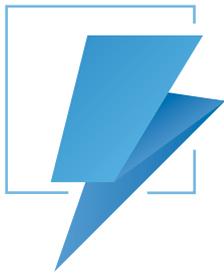
State of Energy Sector Reforms

Serbia has achieved major progress in particular in the renewable energy and the energy efficiency sectors by the adoption of new laws. The country also improved the market governance for electricity by completing the unbundling of the distribution system operator. The transposition of the REMIT Regulation is in its final stages. On the other hand, not a single transmission system operator in the country is unbundled in line with the Third Energy Package, and the refusal to grant third party ac-

cess to the Horgos gas interconnection pipeline continues to be a straight-forward breach of the Treaty. As other Contracting Parties, Serbia needs to amend its legislation on environmental impact assessment, and respect its own emissions reduction plan for large combustion plants. Despite efforts to meet its renewables targets (significant capacities in wind power generation are in place), the country will most likely not achieve the renewable energy target due to increased consumption.

Serbia's electricity production mostly relies on coal and, to a lesser extent, hydropower. The country was the first Contracting Party with an operational organized wholesale market. While Serbia produces some oil and gas, the country remains highly dependent on imports, especially of gas from Russia. The so-called TurkStream 2 project connects Serbia with Bulgaria, but breaches European rules.





Electricity Implementation

Electricity Indicators	Transposition Assessment	Implementation Status	Descriptions
Unbundling			Compliant unbundling of the transmission system operator still requires legislative changes. The distribution system operator is unbundled.
Access to the system			Third party access is ensured in a compliant manner. Methodologies for network access were amended in line with the new Energy Law. Transposition of Connection Network Codes is almost completed. The Transparency Regulation is transposed, and its implementation is almost completed.
Wholesale market			Bilateral, day-ahead and balancing markets are operating, but no intraday market. Prices of balancing reserves continue to be regulated. The REMIT Regulation is not transposed yet.
Retail market			The retail market is formally open for competition. Prices of universal supply to small customers and households continue to be regulated.
Regional integration			Interconnection capacities on the border with Bulgaria and Croatia are allocated through JAO, others bilaterally. The new Energy Law sets a legal framework for the designation of a nominated electricity market operator and market coupling as well as for participation in European balancing platforms.

Amendments to the Energy Law adopted in April 2021 continued energy market reforms in Serbia.

The unbundling of the distribution system operator from the vertically integrated company Elektroprivreda Srbije (EPS) started with the transfer of EPS' shares in the distribution company EPS Distribucija to the Republic of Serbia. In January 2021, the Government established the new distribution company Elektrodistribucija Srbije. The company was licenced by the regulator on 1 April 2021. According to the amendments to the Law, a compliance programme should have been adopted by 30 August 2021, along with the appointment of a compliance officer. This has not happened.

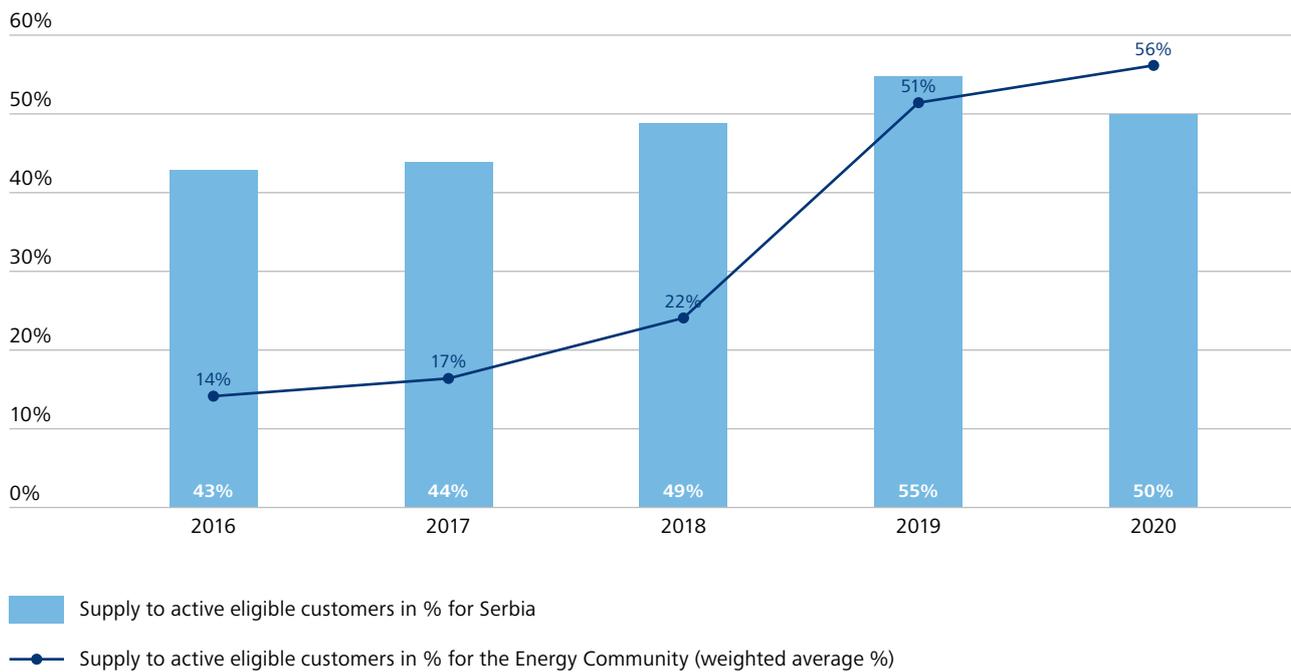
The decision-making rights for the transmission system operator Elektromreza Srbije (EMS), and for public enterprises responsible for production and supply of electricity and gas remain with the same public body, the Government. Legislative changes are necessary to achieve the ownership unbundling of EMS.

The 2021 amendments to the Energy Law require the transposition of the Connection Network Codes. Accordingly, network codes were adapted by the system operators and approved by the regulator on 26 August 2021. The approved codes should be submitted by the system operators to the Ministry, and then by the Ministry to the Government for adoption.

The transmission system operator is publishing data on the ENT-SO-E Platform in line with the Transparency Regulation, except for the generation data, whose publication was enabled by the amendments to the Energy Law and will take place following adaptations of the existing transparency rules and software. Draft rules transposing the REMIT Regulation are currently in public consultation.

The volume of electricity traded in the day-ahead market operated by the power exchange SEEPEX reached a level of 10% of total electricity supplied to final customers in 2020. The legal basis for the coupling of the day-ahead market was introduced

Retail Market Opening



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

by the 2021 amendments to the Energy Law. In particular, the Energy Law defines a procedure and requirements for the designation of the nominated electricity market operator, the responsibilities with regard to the coupling of the day-ahead and intraday markets and the principles of cost sharing. Detailed conditions, principles and responsibilities with regard to market coupling are to be further defined by a governmental act. An intraday market is not yet in place, and no deadline exists.

The dominance of the universal supplier and low, regulated prices continue to impede the development of competition in the retail market and supplier switching, with the switching rate even decreasing in 2020. The deregulation of prices for universal supply, provided by the incumbent supplier, and appointment of the universal supplier in a market-based procedure has not been achieved. As in previous years, the regulator's report for 2020 concluded that deregulation would be premature given the wide gap between the regulated universal service price and

market prices. The universal service supply price was slightly increased on 1 February 2021.

Cross-border capacity on the interconnections with Croatia and Bulgaria are allocated through the Joint Auction Office (JAO). On other interconnectors, joint auctions still apply, except with Albania where split allocations are implemented. Rules for the allocation of capacities on the interconnections with the control area of Kosovo* have not yet been published and no auctions have been organised. The Secretariat has received complaints.

The agreement on grid control cooperation in the control block of Serbia, Montenegro and North Macedonia is expected to commence with imbalance netting between Serbia and Montenegro in the first phase. The transmission system operator has joined the European platform for imbalance netting, for the time being as a non-operational member.



Serbia

Gas

Gas Implementation

Gas Indicators	Transposition Assessment	Implementation Status	Descriptions
Unbundling			The Government fails to implement the unbundling plans for Srbijagas and Yugorosgaz adopted in April 2021. Srbijagas's subsidiary, Transportgas Srbija, is not unbundled and certified in line with the Third Energy Package, nor is Yugorosgaz Transport. Gastrans, exempted and certified by the regulator in disregard of the Secretariat's Opinion, was licensed as an independent transmission operator.
Access to the system			The Energy Law amended in 2021 stipulates a lengthy procedure of transposing Energy Community gas Network Codes, which has still not been achieved. Capacity allocation at interconnection points is not performed. Transportgas Srbija hoards its capacities at the interconnection point Horgos with Hungary which is in breach of Energy Community law. An entry-exit transmission tariff methodology is in place. Gastrans was exempted from third party access contrary to the Secretariat's Opinion.
Wholesale market			Only a bilateral market exists in Serbia. Srbijagas is the dominant player and monopolises the market.
Retail market			The vast majority of market share is supplied at non-regulated prices. 90% of the retail market is held by Srbijagas. Customer protection measures are implemented.
Interconnectivity			Interconnection agreements with the adjacent transmission system operators are aligned with the Network Code on Interoperability. Security of gas supply by-laws define protected customers, supply standards and emergency measures.

In 2021, Serbia amended the Energy Law, which should enable the transposition of the Network Codes and the REMIT Regulation, and facilitate access of low carbon and biogases in the grid. Nevertheless, the implementation of the Network Codes remains at low level. Capacity allocation and congestion management procedures are not in place and the balancing rules are not aligned with the respective Network Code.

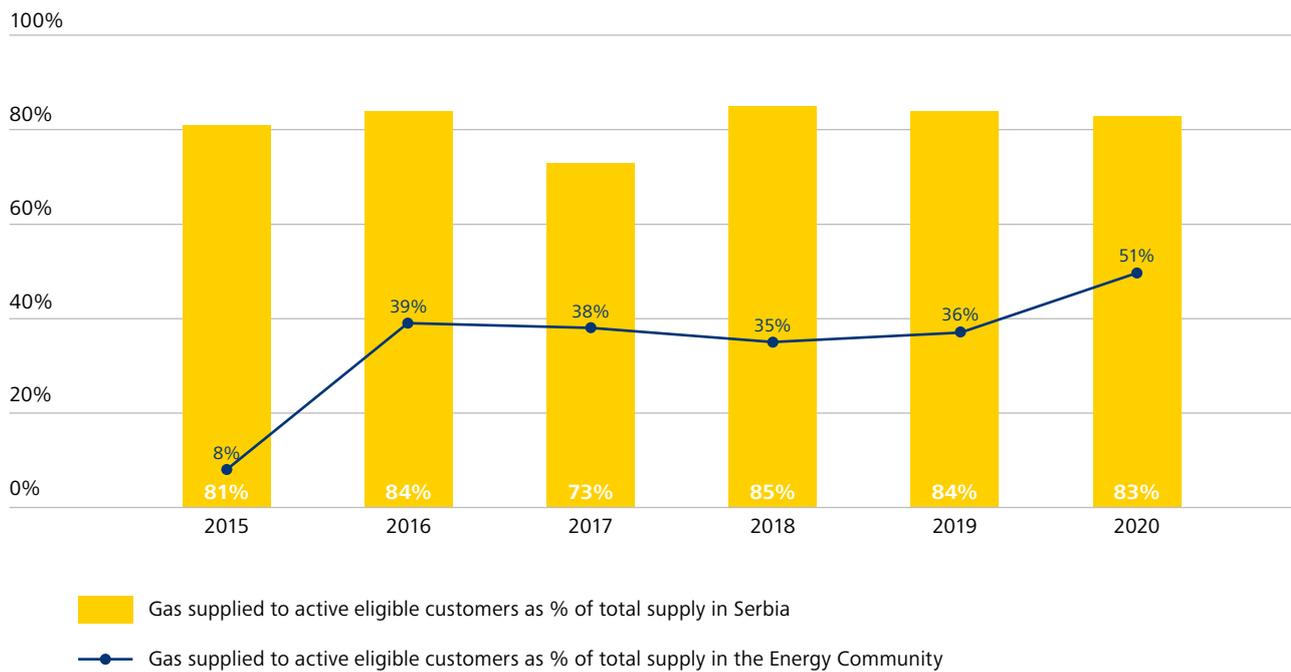
In April 2021, the Government adopted an unbundling plan for Srbijagas and Yugorosgaz, the lack of which amounts to long-standing breaches of Energy Community law. The plan is not being implemented as promised. So far, only the transfer of ownership of the company Transportgas Srbija from Srbijagas to the Republic of Serbia has taken place in June 2021. The implementation of further operational steps such as the true separation of

control within the Government, the appointment of a supervisory board and management completely independent from Srbijagas is delayed. Transportgas Srbija cannot apply for certification nor for a licence, and is still subordinated to Srbijagas in practice.

A precondition for unbundling of Yugorosgaz Transport is the ratification of the Intergovernmental Agreement between Russia and Serbia, which has not happened. Despite not unbundled, Yugorosgaz Transport still continues to operate under a license issued by AERS.

In addition to these severe breaches of the Third Energy Package, Transportgas Srbija continues to deny access at the interconnection point Horgos, booking the capacities only for Srbijagas, Gazprom Export and suppliers of Bosnia and Herzegovina. This

Retail Market Opening



Source: Energy Agency of the Republic of Serbia (AERS), compiled by the Energy Community Secretariat

practice continues despite Turk Stream and its extension pipelines bringing gas to Serbia since the beginning of 2021, and to Bosnia and Herzegovina as of April 2021. Srbijagas thus effectively prevents suppliers from more liquid central European hubs from entering the Serbian market, and the pipeline is virtually empty.

AERS approved the ten-year network development plan (TYNDP) of Transportgas Srbija in December 2020 and gave consent to draft five network codes, jointly prepared by Transportgas Srbija, YugoRosgaz Transport and Gastrans, which aim at implementing the Energy Community gas Network Codes. Their final adoption requires approval by the Government, which has not been received.

Gastrans, a project company owned jointly by Gazprom and Srbijagas, started with commercial operation at the beginning of this year. It was certified as an independent transmission operator, under an exemption decision granted by AERS which did not take into account the Secretariat's Opinion. Both the certification and the exemption decision are not compliant with the Gas Directive. They also violate the pan-European solidarity principle.

As all distribution system operators serve less than 100.000 final customers, they are exempted from the unbundling requirements by law.

Srbijagas continues to dominate the wholesale and retail markets. It acts as a supplier of all public suppliers in Serbia and as a supplier of last resort, appointed by the Government on a yearly basis. Regulated entry exit tariffs continue to apply. The wholesale market still consists of bilateral contracts between traders and suppliers. The price of gas sold to non-household customers is not regulated (83% of the market in 2020). In retail gas supply, Srbijagas is the dominant market player, accounting for some 90% of the retail market in 2020. Supply switching occurred but in a very limited manner (accounting for about 0,15% of the total sales of gas).

Transportgas Srbija as well as Gastrans have implemented the Network Code on Interoperability by signing interconnection agreements with adjacent transmission system operators.

National security of supply rules are in place.

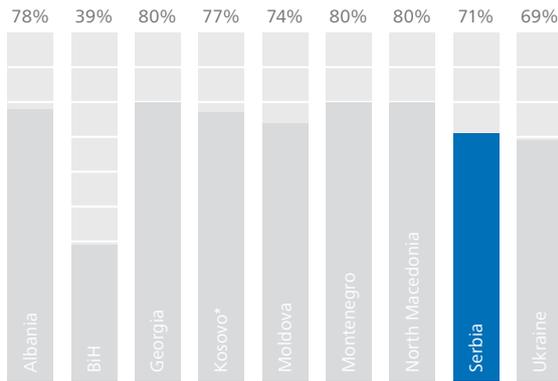


Serbia

National Authorities



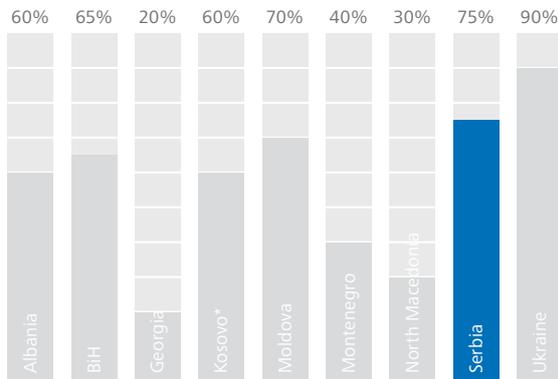
Regulatory Authority



Amendments to the Energy Law gave new powers to the Energy Agency of the Republic of Serbia (AERS). The regulator made use of its newly gained responsibilities by issuing guidelines to national transmission operators for introducing gas and electricity Network Codes into the national grid codes. Their adoption by the Government of Serbia, upon proposal of the Ministry, as a formal step to transpose the gas and electricity Network Codes is still pending. The adoption of methodologies on prosumers and storage, issuance of new licenses and launch of public consultations on feed-in tariffs and co-generation testify to the regulator's technical ability to deliver within short deadlines. In addition, the transposition of REMIT has been launched. At the same time, no progress has been made as regards enforcement of unbundling and certification of network operators or third party gas access. AERS also upholds regulated prices for households below market prices. This inertia and disregard of key requirements of the Third Energy Package is of constant concern, and contrasts with the high level of expert knowledge present in AERS.



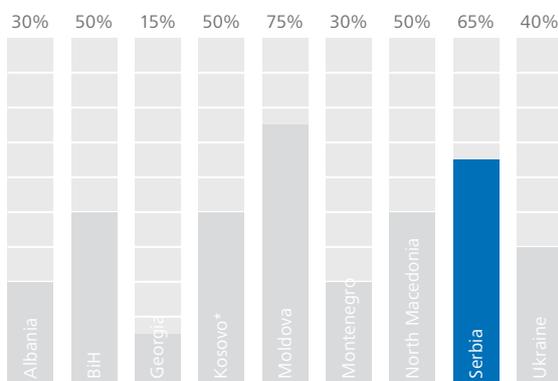
Competition Authority



In the reporting period, the Commission for Protection of Competition (CPC) mainly focused on the review of mergers. It closed an investigation initiated in 2016 against Elektrodistribucija Srbije d.o.o. Beograd, in which the CPC had examined whether an obligation imposed by the said company on all users of the distribution system, except the public enterprise Elektroprivreda Srbije JP Beograd - Ogranak EPS Snabdevanje, to deposit funds as a guarantee for payment of receipts for the service of accessing the system constituted an infringement of competition law. Elektrodistribucija Srbije d.o.o. Beograd proposed voluntary commitments to eliminate the CPC's concerns and implemented them within the deadline imposed.



State Aid Authority



The new Law on State Aid Control provides for a new structure of the authority, comprising the Commission for State Aid Control and the Secretariat as a supporting body, replacing the previous Department for State Aid Control within the Ministry of Finance and thereby ensuring independence. The Commission for State Aid Control has not rendered any decision in the energy sector in the reporting period.



Serbia Oil

Oil Implementation

Oil Indicators	Transposition Assessment	Implementation Status	Descriptions
Stockholding obligation			The emergency oil stocks obligation, calculated based on inland consumption, covers an estimated number of 21 days, which is expected to rise to 25 by the end of 2021 as a result of public procurements for the purchase of diesel, fuel oil and crude oil. An action plan for the establishment and maintenance of emergency stocks of crude oil and oil products was adopted by the Government in May 2021. The Rulebook on Defining the Yearly Programme of Emergency Oil Stocks for 2021 was adopted in June 2021.
Emergency procedures			The 2019 Emergency Response Plan outlines procedures and criteria for the identification of a supply disruption and procedures for the normalization of supply to the Serbian market. It also appoints the authority and assigns the responsibility for eliminating supply disruptions. The plan includes actions to make emergency stocks available to the market in case of international decisions.
Fuel specifications of petrol, diesel and gas oil for non-road mobile machinery (NRMM)			The Rulebook on the Technical and Other Requirements for Liquid Fuels of Petroleum Origin, adopted in December 2020, applies as of 1 January 2021. Environmental specifications for petrol and diesel are in conformity with European requirements. Gas oil used for NRMM is also compliant with the Fuel Quality Directive.
Monitoring compliance and reporting including the lay down the rules on penalties			As required by the Energy Law, a quality monitoring programme for petroleum products is in place. Monitoring of the quality of gasoline and diesel and gas oil for NRMM is carried out in accordance with the SRPS EN 14274 standard. All penalty provisions are specified in the Law on Technical Requirements for Products and Conformity Assessments.

A long-term plan for the establishment and maintenance of emergency stocks of crude oil and oil products was adopted by the Government in May 2021. As per the action plan, preparation of public private partnership arrangements has begun and market research on exploring the oil companies' interest in such partnerships was conducted. Activities on the formation of emergency oil stock reserves continued during this reporting period, including public procurement for the purchase of Euro Diesel in an amount of 15 kt, while public procurement for 12 kt fuel oil and 26 kt crude oil is ongoing (expected to be finalized in the fourth quarter of 2021). The current estimated number of days of emergency

reserves is 21, calculated based on inland consumption, and expected to rise to 25 by the end of 2021.

During the latest reporting period, activities on fuel quality continued. The Rulebook on the Content and Manner of Implementation of the Annual Programme for Monitoring the Quality of Petroleum Products and Biofuels for 2021 was adopted in April 2021. Trade of leaded petrol on the market is forbidden and diesel quality is very good. Gas oil used for non-road mobile machinery (NRMM) is also compliant with the environmental specifications of the Fuel Quality Directive.



Serbia Renewable Energy

Renewable Energy Implementation

Renewable Energy Indicators	Transposition Assessment	Implementation Status	Descriptions
National Renewable Energy Action Plan			With 21,44% of renewable energy sources, Serbia was still far from its overall indicative trajectory of 25,6% in 2019. None of the indicative sectorial targets have been reached in 2019.
Quality of support schemes			Serbia enabled a market-based support scheme by the newly adopted Law on the Use of Renewable Energy Sources. Renewable energy projects with capacity of less than 500 kW and 3 MW for wind are entitled to feed-in tariffs (FiT), while auctions based on a feed-in premium (FiP) will be held for other projects based on quotas, which are yet to be defined. Details of the scheme are expected to be provided in secondary legislation. Currently, renewable energy producers are not responsible for imbalances. However, the Law anticipates the conversion to full balancing responsibility once the intraday market is liquid.
Grid integration			Guaranteed and priority access to the network for electricity produced from renewable energy sources is provided. Based on the methodology adopted by the regulator, system operators adopt acts on the amount of connection costs for all producers including renewable.
Administrative procedures and guarantees of origin			No progress has been made to simplify administrative procedures and establish a one-stop shop in the reporting period. An electronic system for issuing, transfer and cancellation of guarantees of origin is functional.
Renewable energy in transport			The relevant provisions of Directive 2009/28/EC, including sustainability criteria, have been transposed by primary and secondary legislation. The share of renewable energy sources in transport remained low (barely above 1%, while the target for 2020 is 10%).

On 22 April 2021, Serbia adopted its first renewable energy law. This was a significant advancement in the transposition of the renewables acquis and should contribute to scaling up capacities from renewable energy sources.

The Law on the Use of Renewable Energy Sources enables a market-based support scheme envisaging feed-in premiums (FiP) obtained on auctions for projects above 500 kW and 3 MW for wind. Feed-in tariffs will remain for small projects, however, their amount will be determined at auctions. The details of how the scheme is to be implemented are expected to be elaborated in secondary legislation, which should be adopted

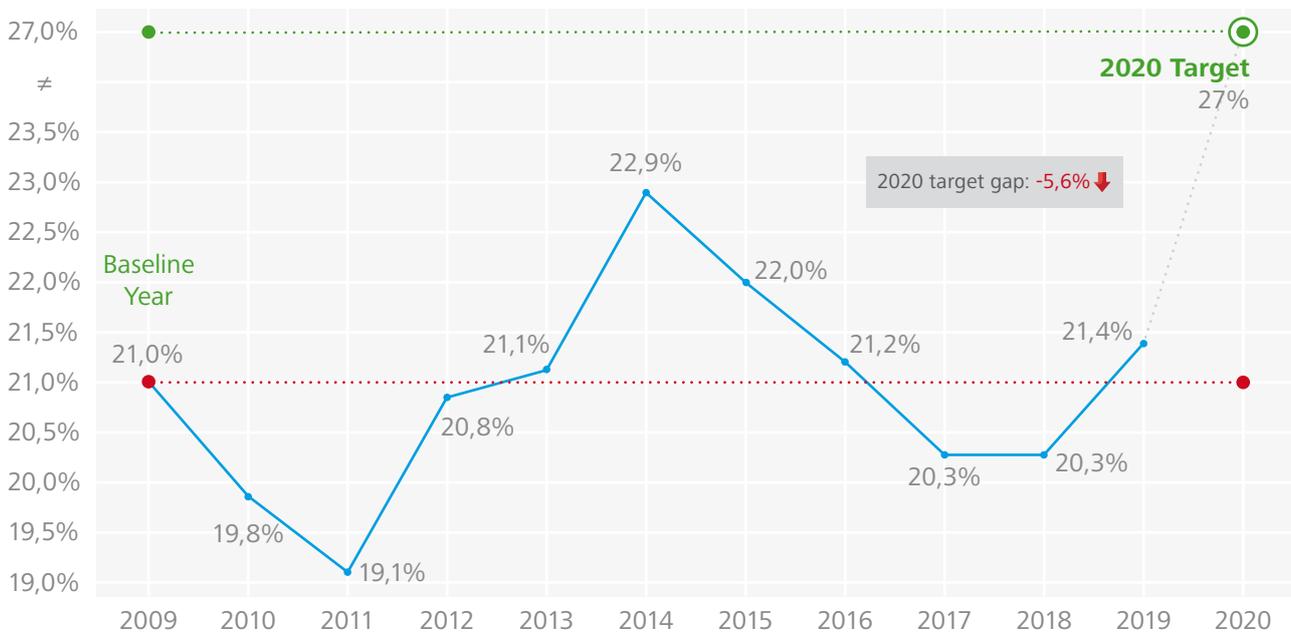
by the end of October 2021. The guaranteed supplier is the balance responsible party for all renewable energy producers, until a liquid intraday market is established. Once the regulator announces that the intraday market is liquid, large (above 500 kW and 3 MW for wind) renewable energy producers will have to arrange their balance responsibility in accordance with the relevant legislation (Energy Law and Market Rules). This is in line with the Guidelines on State Aid for Environmental Protection and Energy.

The Law enabled self-consumption, including jointly-acting self-consumption, as well as energy communities. On 31 August

2021, Serbia adopted a decree on self-consumption, enabling a net-metering scheme for households or housing communities and a net billing scheme for all other self-consumers. Already in September, the Ministry of Mining and Energy published a call for the programme to subsidize households to install solar panels and become self-consumers.

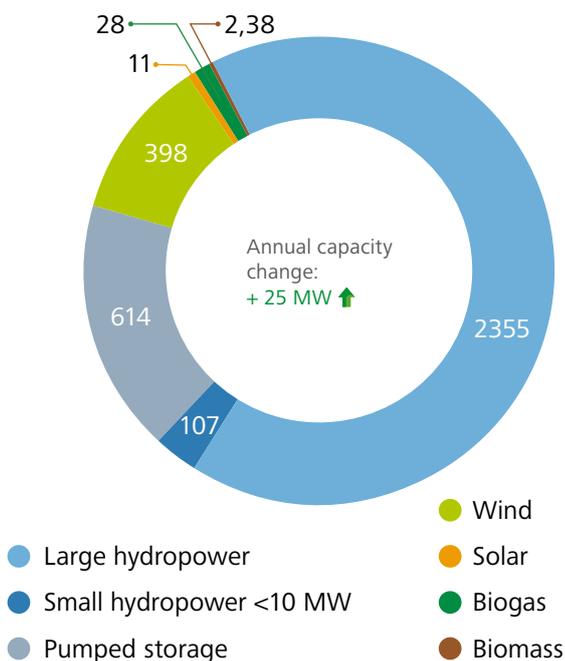
The priority for Serbia is the adoption of the necessary secondary legislation to enable implementation of the Law on the Use of Renewable Energy Sources.

Shares of Energy from Renewable Sources



Source: EUROSTAT

Total Capacities of Renewable Energy 2020 (MW)



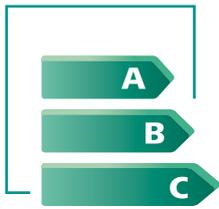
Source: Ministry of Mining and Energy

After a significant increase in wind capacity in previous years, only 25 MW of renewable (hydro) capacities were added in 2020. This stagnation might be attributed to the Covid-19 crisis, which slowed down licensing, contracting, procurement as well as construction and installation activities in all Contracting Parties including Serbia.

Serbia remained far from reaching its target of 27% of renewable energy in gross final energy consumption in 2019. Not only is the share of renewables well below the 2020 renewables target, it is also lower than the renewables share set in the baseline year 2009 due to growing energy consumption. Serbia is lagging behind in all three sectors: electricity, heating and cooling and transport.

Total capacities of renewable energy (MW):

3515



Serbia

Energy Efficiency

Energy Efficiency Implementation

Energy Efficiency Indicators	Transposition Assessment	Implementation Status	Descriptions
Energy efficiency targets and policy measures			The revised Law on Energy Efficiency and Rational Use of Energy was adopted in April 2021, improving compliance with the Energy Efficiency Directive. The Secretariat was notified of the implementation of the Article 7 target for obligation schemes in January 2020. The Article 5 renovation target was adopted in August 2018. The final fourth NEEAP was adopted in August 2021.
Energy efficiency in buildings			The preparation of the long-term building renovation strategy is in its final stages. It is planned to be adopted by the end of 2021. Little progress has been achieved regarding the update of the regulation implementing Directive 2010/31/EU.
Energy efficiency financing			The institutional framework was strengthened with the establishment of the Directorate for Financing and Promotion of Energy Efficiency within the Ministry of Mining and Energy. In April and September 2021, two public calls were launched to support the renovation of residential buildings and installation of PV systems in the residential sector. An enabling legal framework for energy performance contracting is in place and ESCO projects in buildings, public lighting and district heating are being implemented.
Energy efficient products - labelling			The revised Law on Energy Efficiency and Rational Use of Energy transposed the Framework Labelling Regulation (EU) 2017/1369. During 2021, the Ministry updated existing rulebooks to introduce rescaled labels for fridges and freezers, washing machines and dishwashers, and electronic displays. The adoption of the remaining four delegated regulations is pending.
Efficiency in heating and cooling			With 58 operational systems, Serbia has the largest district heating system in the Western Balkans, but renewables make up less than 1% of the input fuel. Projects to increase the use of renewables are being implemented. Fifteen district heating companies introduced consumption-based billing of individual units. Serbia has not yet assessed its potential for high-efficiency cogeneration and efficient district heating and cooling as required by the Energy Efficiency Directive.

Serbia has achieved progress by adopting the new Law on Energy Efficiency and Rational Use of Energy to transpose the Energy Efficiency Directive, improving the energy efficiency financing framework, adopting the fourth NEEAP and new labelling regulations. The fifth Annual Progress Report required by the Directive was submitted in July 2021.

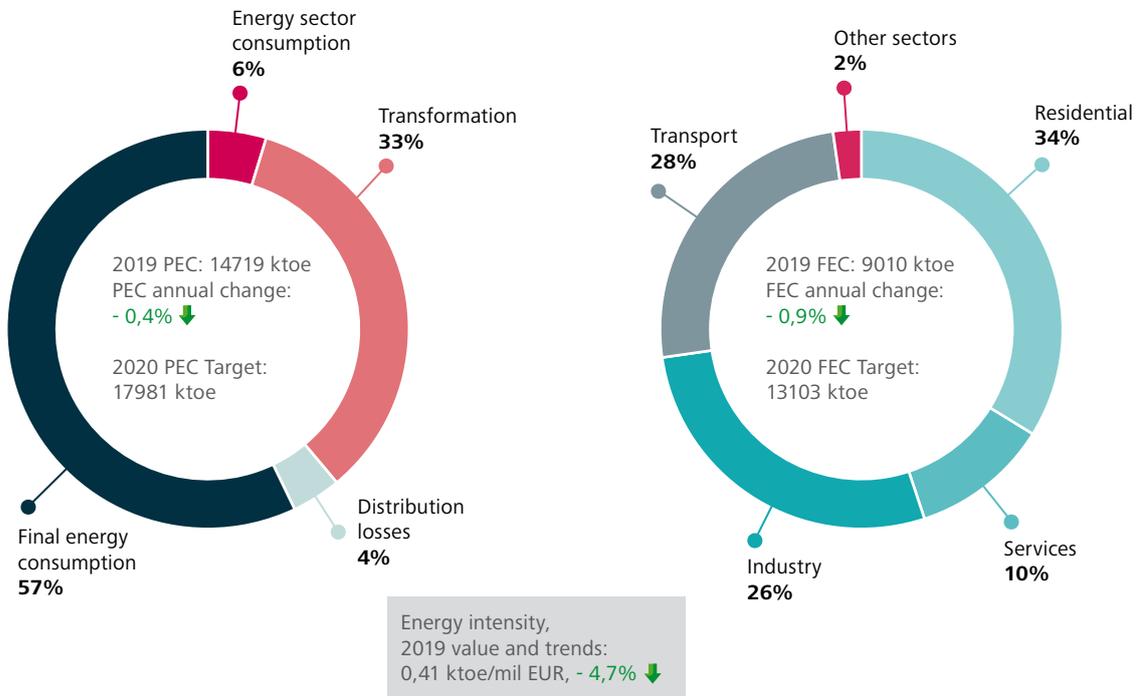
In the forthcoming period, Serbia should shift its focus to the adoption of by-laws based on the Law on Energy Efficiency and Rational Use of Energy.

The second priority remains the adoption of the updated regulation for implementation of the Energy Performance of Buildings Directive and the remaining delegated regulations for energy labelling of energy-related products.

2019 Energy Efficiency Indicators and Trends

Primary Energy Consumption (PEC)

Final Energy Consumption (FEC)



Source: EUROSTAT 2021 data and Contracting Party's Annual Reports under Directive 2012/27/EU

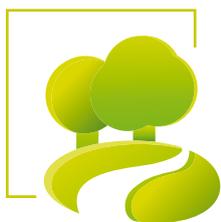
Energy Efficient Products – Overview of Implementation of Labelling Regulation

FRAMEWORK REGULATION*	Household dishwashers	Fridges and freezers*	Household washing machines	Televisions	Air conditioners and fans*	Household tumble driers	Electrical lamps and luminaires	Solid fuel boilers*	Space heaters*	Water heaters & storage tanks	Domestic ovens and range hoods
	●	●	●	●	●	●	●	●	●	●	●

● Adopted and implemented ● Compliance or implementation issues detected ● No progress with adoption/implementation

* The new labelling package adopted by the Ministerial Council in November 2018 was assessed, as the transposition deadline expired in January 2020.

Source: multiple sources of data (EECG reports, NEEAPs etc.), compiled by the Energy Community Secretariat



Serbia Environment

Environment Implementation

Environment Indicators	Transposition Assessment	Implementation Status	Descriptions
Environmental impact assessment (EIA) and strategic environmental assessment (SEA)			The Secretariat initiated a case against Serbia for not transposing Directive 2014/52/EU. The shortcomings of the existing EIA legislation concerning the issuing of development consent and the screening process should be addressed. Legislation must be strengthened to ensure that SEAs are carried out in parallel with the drafting of the plans or programmes.
Sulphur in fuels			With the adoption of a new rulebook in December 2020, the 1,00% requirement for heavy fuel oil entered into force on 1 January 2021. The serious and persistent breach established by Ministerial Council Decision 2018/14/MC-EnC was thus rectified.
Large combustions plants and industrial emissions			The NERP is in force, however, it is not complied with as for sulphur dioxide and dust emissions. The Secretariat launched infringement procedures to address this breach.
Nature protection			Hydropower development in protected areas has been prohibited. Any exemptions must be interpreted in a restrictive manner. Potential energy projects, including national strategic projects, must be assessed against the protection goals of the recently designated Wetland of International Importance, the Ramsar site Djerdap. Further efforts are needed for the proper protection of birds and their habitats.
Environmental liability		n/a	The draft Law on Environmental Liability was prepared. It is expected to be adopted by the end of 2021.

Serbia failed to transpose Directive 2014/52/EU. Future amendments should also address the failure to issue construction permits (development consent) only after EIA consent (or an EIA decision) is granted, as well as the lack of EIA screening of HPP projects with less than 2 MW of installed capacity located outside protected areas. For proper implementation and enforcement, legislative amendments should be supplemented with capacity building.

Strategic environmental assessments must be carried out during the preparation of the plans and programmes in order to adequately integrate environmental considerations. The SEA procedure for the NECP should be initiated as early as possible. Identifying the relevant authorities and public concerns including those of relevant non-governmental organisations, as stipulated in the SEA Directive, is a precondition for successful and effective consultations.

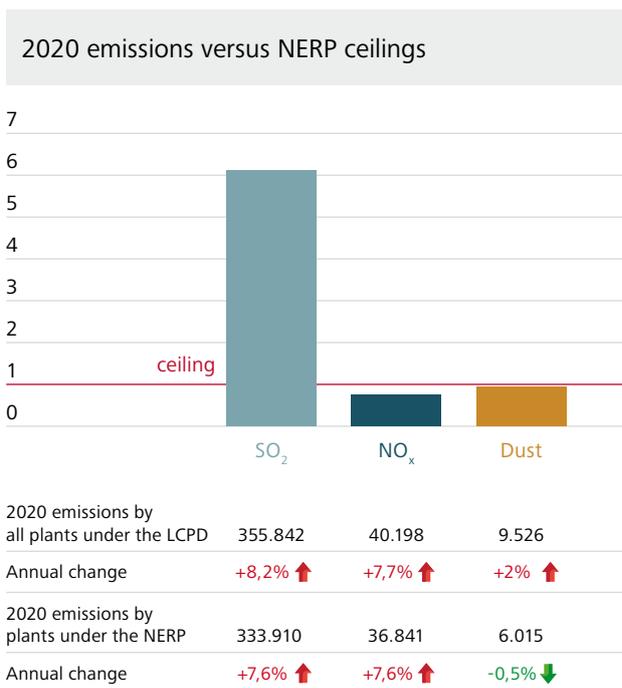
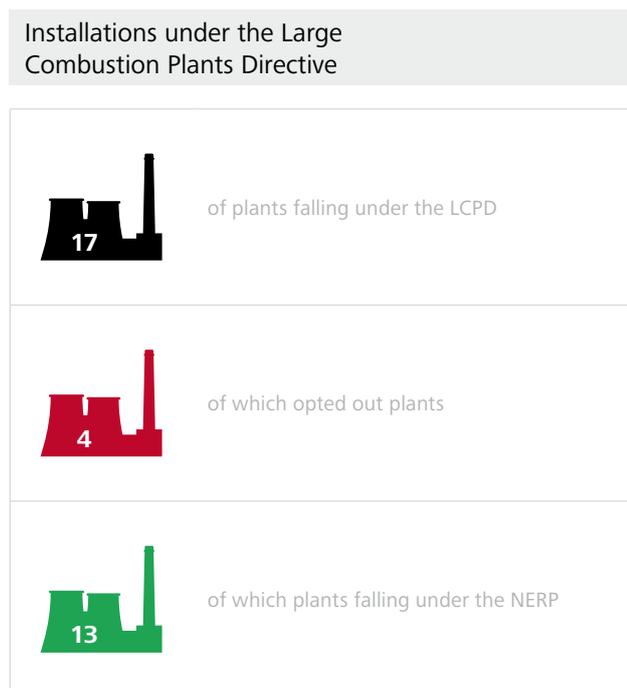
In relation to the overdue obligation of 1,00% sulphur content of heavy fuel oil, the new Rulebook on technical and other requirements for liquid fuels adopted in December 2020 finally removed the exemption for the sulphur content of heavy fuel oil. Thereby, the serious and persistent breach established by Ministerial Council Decision 2018/14/MC-EnC was addressed, and the current legislation is in compliance with the Directive. Serbia has to ensure that quality control of the fuels falling under the scope of the Rulebook is carried out according to the standards listed therein.

Serbia complied with its reporting obligations under the Large Combustion Plants Directive for 2020 and provided emission scenarios taking into account ongoing investments. In 2020, the emission of all three pollutants slightly increased, while a slight decrease in dust emissions was recorded for plants under the NERP. Since the non-compliance with the NERP ceilings for

sulphur dioxide reappeared and the projections do not show a clear trend towards compliance in the coming years, the Secretariat launched infringement procedures in March 2021. Four large combustion plants are operating under the opt-out regime in Serbia. Based on their current load factor, two out of those are expected to reach the limit in the course of 2022, while the other two are likely to have sufficient operating hours until the end of 2023, the final date of operation for opted-out plants.

The Government adopted the Programme for Nature Protection of Serbia with an action plan for 2021 - 2023 as well conclu-

sions on measures and activities to prevent the illegal killing, capture and trafficking of wild bird species. In this reporting period, Serbia designated its eleventh and largest Wetland of International Importance, the Ramsar site Djerdap, known for its importance for migrating and wintering birds. Proper protection and management of the nature park Stara Planina remains a challenge. Adequate administrative capacities and financial support must be created (on national and local level) to properly assess the impact of planned HPP projects early in the decision-making process.



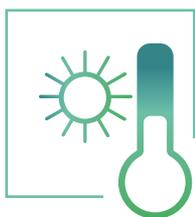
Source: compiled by the Energy Community Secretariat

Amount of operational hours used from opt-out period

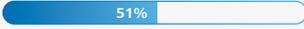
Termoelektrana Kolubara A3 (boilers 3, 4, 5)	Expected expiry of opt-out period	March 2022
	Remaining hours	5.765
	Operating hours consumed in 2018 - 2020	14.235
Termoelektrana Morava	Expected expiry of opt-out period:*	May 2022
	Remaining hours	6.253
	Operating hours consumed in 2018 - 2020	13.747
Termoelektrana Kolubara A3 (boiler 1)	Expected expiry of opt-out period	September 2023
	Remaining hours	9.515
	Operating hours consumed in 2018 - 2020	10.485
Termoelektrana Kolubara A5	Expected expiry of opt-out period	December 2023
	Remaining hours	11.059
	Operating hours consumed in 2018 - 2020	8.941

*Calculations for the expected expiry of the opt-out period are based on 2018 - 2020 average load factor.

Source: compiled by the Energy Community Secretariat



Serbia Climate

Climate Indicators	Transposition Assessment	Implementation Status	Descriptions
National greenhouse gas emissions monitoring and reporting systems		 82%	The Law on Climate Change was adopted in March 2021. It is in line with the Monitoring Mechanism Regulation. It contains specific provisions on setting up a greenhouse gas (GHG) emissions inventory, low carbon development strategies as well as policies, measures and GHG projections. A set of by-laws is currently being drafted.
National Energy and Climate Plans (NECPs)		 51%	Serbia set up a national working group to prepare the NECP. Drafting and analytical work on the NECPs are ongoing. Finalization of the draft is planned for the end of 2021.

Serbia plans to submit its NDC2 under the Paris Agreement prior to COP26, along with the second Biennial Update Report. Work on the third National Communication, to be submitted by the end of 2021, is almost finished.

The Law on Climate Change was adopted in March 2021. It prescribes the adoption of the Low Carbon Development Strategy with an Action Plan within two years from the adoption of the Law. Also, it sets the basis for the establishment of a national system for policies, measures and projections, which will be operational upon adoption of the relevant by-laws (planned for March 2022). The Law on Climate Change stipulates that the Serbian Environmental Protection Agency establishes and maintains the GHG inventory and prepares the inventory report. A set of by-laws, currently being drafted, list the types of data and the bodies and competent authorities requested to submit

data on GHG emissions to the Agency, which will ensure data quality control.

The work on the NECP took off in an intensive manner in February 2021 by identifying key scenario parameters and assumptions, and by calibrating existing models. The relevant technical working groups were established and started operation in May 2021, which was followed by the development of the basic concept for the NECP, preparations for the strategic environmental assessment, and the development of the draft trajectories and the draft chapters. Formal consultations with the public and with the Secretariat on the first draft of the NECP are foreseen for autumn 2021. The finalization of the draft NECP is planned by the end of 2021, followed by adoption by the Government in early 2022.



Serbia Infrastructure

Infrastructure Implementation

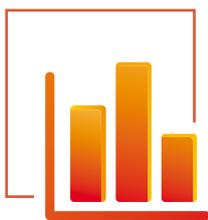
Infrastructure Indicators	Transposition Assessment	Implementation Status	Descriptions
National competent authority		<div style="width: 30%;"><div style="width: 30%;"></div></div> 30%	The national competent authority was previously defined as an inter-ministerial working group on strategic energy projects but did not report any progress on Projects of Energy Community Interest or Projects of Mutual Interest to the Secretariat to date.
Manual of procedures		<div style="width: 0%;"><div style="width: 0%;"></div></div> 0%	There is no manual of procedures published by the national competent authority for the permitting process of PECE/PMI projects.
National regulatory authority involvement		<div style="width: 0%;"><div style="width: 0%;"></div></div> 0%	The methodology and criteria to be used to evaluate investment in electricity and gas projects and the higher risks incurred by them has not been published to date.

Amendments to the Energy Law, adopted in April 2021, created the preconditions for transposition of Regulation (EU) 347/2013. They stipulate that the Government prescribes in more detail the conditions and manner of promoting strategic energy projects. Obligations of competent institutions in terms of monitoring the implementation of strategic energy projects are also defined, as well as the procedure for preparation and implementation of strategic investment projects in the field of energy identified as PECE and PMI projects. The amended Law also stipulates that the manual of procedures will be passed within six months from entry into force. The amended Law creates the legal basis for the development of the methodology for investment and

risk assessment for strategic infrastructure projects in areas of electricity, natural gas and oil. The regulatory agency shall adopt the methodology and criteria to evaluate investments within six months from entry into force. Further progress in adopting Regulation (EU) 347/2013 is expected as soon as possible.

The full transposition of the Regulation would facilitate faster realisation of the electricity and gas infrastructure projects in Serbia like the Transbalkan corridor (PECE 2016, 2018, 2020) and the gas interconnectors Serbia - Bulgaria, Serbia – North Macedonia and Serbia – Croatia; Phase I.





Serbia Statistics

Statistics Implementation

Statistics Indicators	Transposition Assessment	Implementation Status	Descriptions
Annual statistics			The five annual questionnaires and the questionnaire on final energy consumption of households for 2019 were transmitted to EUROSTAT.
Monthly statistics			Monthly statistics, except short-term monthly oil and natural gas, are transmitted to EUROSTAT.
Price statistics			Price statistics for electricity and natural gas for 2020 were compiled and transmitted in accordance with the acquis.

Serbia is improving the timeliness and completeness of its energy statistics. In 2021, Serbia started reporting on monthly oil statistics as defined in Annex C of Regulation (EC) 1099/2008 on energy statistics. With the support of the Secretariat, Serbia is conducting a survey of energy consumption in households, with a focus on the use of renewables, in order to further improve data quality.

According to the Law on Official Statistics, the central body responsible for energy statistics is the Statistical Office of the Republic of Serbia (SORS). A memorandum on cooperation was signed with the Ministry of Mining and Energy to efficiently use human and technical resources.

Annual energy statistics for 2019 were compiled in the five questionnaires, transmitted on time and published by EUROSTAT. Disaggregated data on energy consumption of households were compiled and transmitted to EUROSTAT in due time. Preliminary data for 2020 were also compiled and transmitted to EUROSTAT. The questionnaire on the renewables share for 2019 were transmitted to and published by EUROSTAT. SORS has established a

quality management system based on written procedures and policies. The quality reports for statistical surveys are submitted to EUROSTAT.

SORS is responsible for disseminating monthly data. In cooperation with the Ministry of Mining and Energy, monthly electricity, coal and natural gas data are collected and transmitted to EUROSTAT. In accordance with the agreement between the Serbian institutions, EUROSTAT and the Secretariat, SORS started to transmit the required monthly oil statistics, including data for 2020 and lapsed period of 2021 from September 2021. Short-term monthly collections on oil and natural gas are still missing.

Half annual prices of electricity and gas for industry and households per consumption band, as well as the price breakdown per component, are submitted to EUROSTAT in accordance with Regulation (EU) 2016/1952.

To fully comply with the statistics acquis, Serbia must implement the remaining reporting requirements related to monthly oil statistics and short-term monthly oil and gas.



Serbia Cybersecurity

Cybersecurity Implementation

Cybersecurity indicators	Transposition Assessment	Implementation Status	Descriptions
Institutions and legislation		 85%	A cybersecurity strategy for 2021 - 2026 is adopted. The cybersecurity acquis is transposed in national law. The energy sector critical information infrastructure is defined and designated at national level. Energy-specific cybersecurity criteria could be further developed. SRB-CERT covers the energy sector.
Requirements for operators and energy regulatory authority		 75%	The risk assessment, security requirements and reporting obligations of energy operators are well established. Energy-specific rules and mechanisms should be considered for increased efficiency. The energy regulator does not have powers in cybersecurity.

The Strategy on the Development of Information Society and Information Security 2021 - 2026 sets targets in the application of security measures with respect to critical information and communication infrastructures, establishment and operation of CERTs and information security audits, handling of threats, and international cooperation. Proposed measures include capacity building, application of new technologies, further digitalization of services and enhanced information security in the public and private domain.

The Law on Information Security, last amended in 2019, transposes the NIS Directive. It promotes risk management, comprehensive protection on all levels and time horizons, application of good practices and development of permanent awareness and competence. It also governs the establishment of a security audit and promotes cooperation between the public and private sector, academic community and civil society through a coordination body. The Ministry of Trade, Tourism and Telecommunications is responsible for its implementation.

The Law identifies the information and communication technology (ICT) systems used in electricity production, transmission and distribution, coal production and processing, oil and derivatives production, processing, transport, distribution and trade, and natural or liquid gas production, processing, transport and distribution, as ICT of Special Significance. The Ministry keeps a registry of specific operators. A Government regulation of 2019

sets a list of activities carried out through ICT systems of special significance including energy activities.

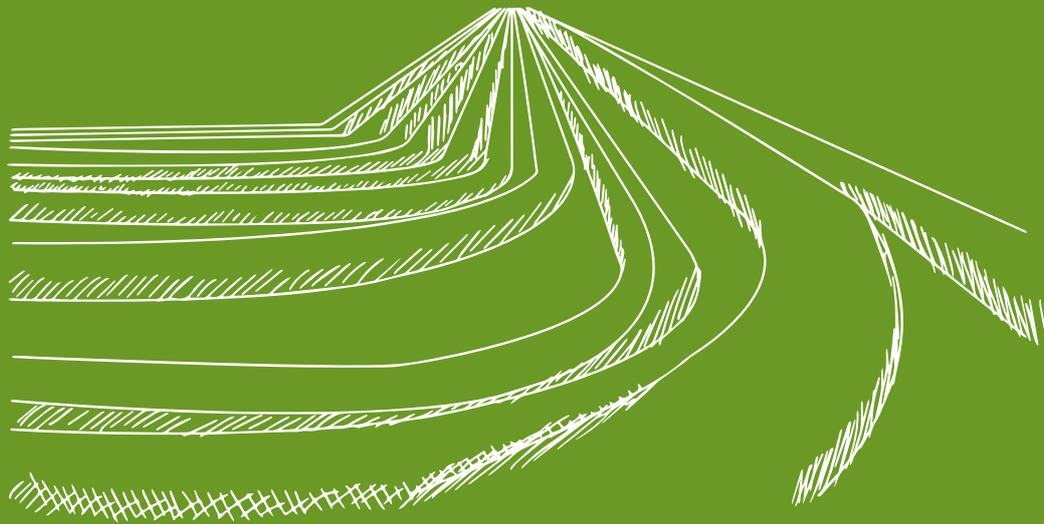
The competent authority is the Regulatory Agency for Electronic Communications and Postal Services (RATEL). It hosts the national computer emergency response team SRB-CERT that covers the ICT security of the energy sector. The CERT acts as a focal point and performs risk assessment, shares risk and incident related information and coordinates prevention and protection activities.

The Law obligates the operators to adopt rules on ICT system security and to set up liaison officers. Risk assessment, testing and reporting is further implemented by the Government Decree on More Detailed Contents of Enhancement on Security of ICT of Special Significance. Security requirements are enhanced by the Decree on Closer Regulation of Protection Measures for ICT of Special Significance, referring to organizational structure, safety in remote operation, identification of assets, classification of data and protection levels, and qualification and responsibility of the personnel. Reporting obligations are detailed in the Decree on Incident Notification Procedure for the ICT of Special Significance, which defines the reporting criteria, content and details for different types of incidents.

The energy regulatory authority AERS does not have any powers or obligations in the domain of cybersecurity.

11

Ukraine

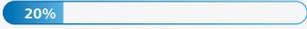
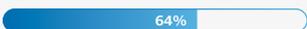






Ukraine

Summary Implementation

Summary Indicators	Transposition Assessment	Implementation Status	Descriptions
 Electricity		 51%	Implementation in the electricity sector of Ukraine is moderately advanced.
 Gas		 83%	Implementation in the gas sector of Ukraine is almost completed.
 Oil		 20%	Implementation in the oil sector of Ukraine is yet to begin.
 Renewable Energy		 56%	Implementation in the renewable energy sector of Ukraine is moderately advanced.
 Energy Efficiency		 75%	Implementation in the energy efficiency sector of Ukraine is well advanced.
 Environment		 64%	Implementation in the environment sector of Ukraine is well advanced.
 Climate		 66%	Implementation in the climate sector of Ukraine is well advanced.
 Infrastructure		 12%	Implementation in the infrastructure sector of Ukraine is yet to begin.
 Statistics		 91%	Implementation in the statistics sector of Ukraine is almost completed.
 Cybersecurity		 60%	Implementation in the cybersecurity sector of Ukraine is moderately advanced.

Overall number of cases: **4**

ECS-8/14 State aid

ECS-4/18 Infrastructure

ECS-4/21 Electricity

Procedure by Article **91**

Procedure by Article **92**

ECS-1/185 Energy efficiency



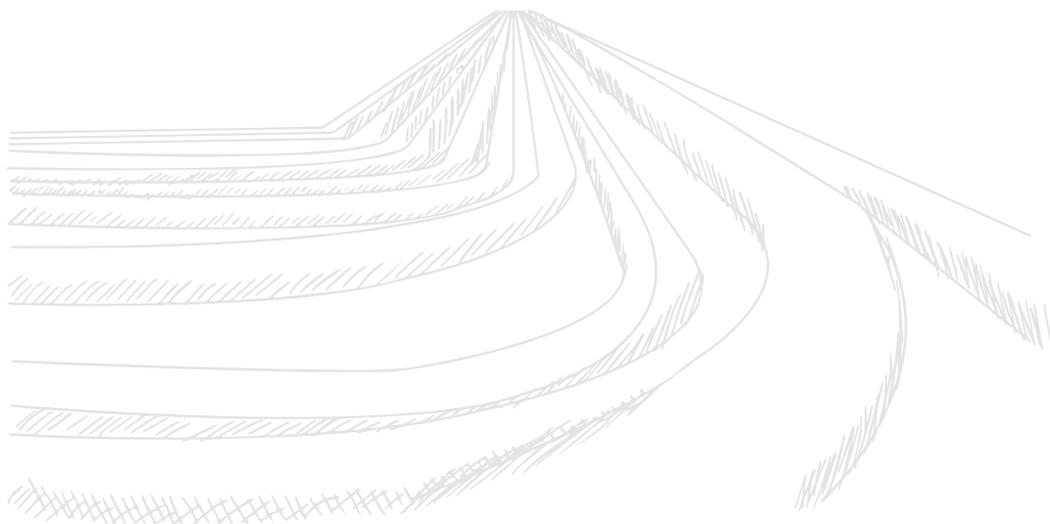
Ukraine

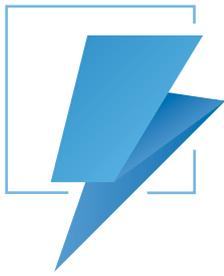
State of Energy Sector Reforms

The authorities of Ukraine continue to intervene frequently in the regulatory framework for the electricity and gas sector. Despite setbacks, overall the governance for both sectors is improving. This is evidenced by improvements to the public service obligations in electricity, and their abolition in gas. A gas exchange is functional. The independence and viability of

transmissions system operators deserves attention, including during the ongoing certification procedure for Ukrenergo. The renewable energy sector still suffers from instability and certain design flaws. Ukraine has also made progress in the adoption of the energy efficiency law, which will unleash the country's great savings potential.

Ukraine is the Contracting Party of the Energy Community with the largest energy market. Despite producing significant volumes of natural gas, the country is still dependent on gas (and oil) imports and is a major transit route for Russian gas exports towards Europe. The electricity mix comprises coal, natural gas, nuclear, large hydropower, wind and solar. The so-called Burshtyn island, a zone not connected to the main part of the Ukrainian electricity network, but to the ENTSO-E system exchanges electricity with its Western neighbours. The country's transmission system operator is engaged with ENTSO-E for the synchronization of the main grid with the one of continental Europe, which is planned for 2023. The organised day-ahead and intraday electricity market is operational. The gas market is becoming more liquid. The renewable energy sector has been rising fast in the last years due to increasing investment.





Ukraine Electricity

Electricity Implementation

Electricity Indicators	Transposition Assessment	Implementation Status	Descriptions
Unbundling			The transmission system operator is not certified yet. Distribution system operators are legally and functionally unbundled in compliance with the acquis.
Access to the system			Network tariffs are public and applied also to generators. Implementation of the Transparency Regulation has started. The Connection Network Codes are not yet transposed by a formal government or regulatory act, but the necessary requirements are implemented through grid codes.
Wholesale market			Bilateral, day-ahead, intraday, balancing and ancillary services markets are operational, but subject to many regulatory interventions. Non-compliant public service obligations and regulated prices of state-owned generation companies are impeding competition. Losses are procured by the transmission system operator on the market, but distribution system operators are obliged to buy a significant amount of their losses from state-owned Energoatom in contravention of the acquis. REMIT has not been transposed.
Retail market			All customers in the retail market are free to choose their supplier. Universal service suppliers are obliged to supply electricity to households under regulated tariffs, which are not cost-reflective. The scope of customers entitled to universal service at tariffs applied to households was extended by amendments to primary legislation.
Regional integration			Cross-border capacity is allocated via unilateral auctions, i.e. not coordinated with neighbouring transmission system operators. Arrangements for the settlement of unintended deviations were agreed between the transmission system operators of Ukraine and Moldova, but their implementation is delayed. The Electricity Market Law was amended to allow for joint auctions, which are currently being prepared on Burstyn Island and with Moldova.

Despite the many changes in the electricity sector, there were no overall improvements during the reporting period. The electricity market remains subject to frequent interventions which undermine market developments. These include restrictive price caps, which are subject to regular reviews by NEURC, often through amendments to the Covid-19 Regulation without public consultation, restrictions on certain market players for trading on the day-ahead market, special bilateral auctions for individual consumers, slow progress in phasing out excessive public service obligations and regulated prices for households which are kept

significantly below cost. Accumulated debts on the balancing market remain high.

On 1 October 2021, the national regulatory authority NEURC issued a preliminary decision on the certification of UkrenergO under the independent system operator model. The compliance programme of the owner, which is the Ministry of Energy, was approved on 17 September 2021. The compliance programme of the transmission system operator was approved on 6 August 2021.

Retail Market Opening



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

Distribution system operators are unbundled from supply activities in a compliant manner. Compliance programmes and compliance officers are in place and regular reporting is ensured. Consequently, the Secretariat closed the related infringement case.

Since 1 January 2021, a new approach for setting tariffs is applied (under the so-called RAB regulation) for the majority of distribution system operators. The applied tariff methodology is not compliant due to lack of the transparency and cost reflectivity.

The requirements of the Connection Network Codes are implemented through the transmission grid code.

Amendments to primary legislation required for the transposition of REMIT are still pending. The Secretariat opened a case against Ukraine for the non-transposition of the REMIT Regulation.

Consumers are free to choose their suppliers, but households (and some other categories of customers) lack incentives to switch their supplier, being supplied at low prices under the public service obligation scheme. During the reporting period, prices for households were increased. However, with the latest amendments to the public service obligation act, prices were decreased again for households, and a block tariff, i.e. a different price for consumption up to 250 kWh per month, was (re-) introduced. A Government act defining vulnerability criteria is still missing.

Coordinated auctions for cross-border capacity allocation do not exist and the rules for cross-border capacity allocation are not compliant. In April 2021, the Electricity Market Law was amended to eliminate legal uncertainties preventing joint auctions with neighbouring transmission system operators and allowing access to cross-border capacity to non-resident companies.



Ukraine

Gas

Gas Implementation

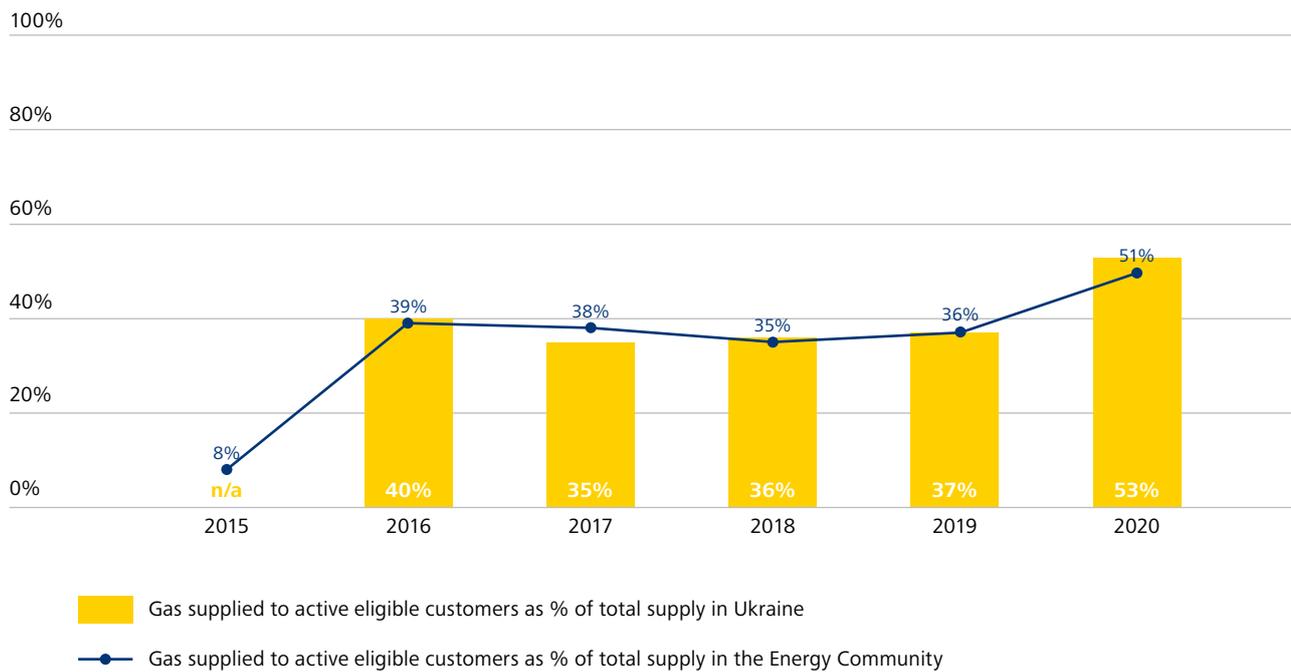
Gas Indicators	Transposition Assessment	Implementation Status	Descriptions
Unbundling			The transmission system operator is unbundled under the ISO model. The Government recently transferred control of the transmission system operator and asset ownership to the Ministry of Energy. The transmission system operator was tasked to make good for a liquidity shortage of the national gas incumbent, Naftogaz. The storage system operator and the distribution system operators are unbundled in legal, information and accounting terms.
Access to the system			Third party access to transmission, storage and distribution systems exist. Tariff cost reflectivity should be improved. The gas Network Codes have been implemented in relation to capacity allocation and interoperability. Congestion management and transparency, as required by Regulation (EC) 715/2009, are still not fully implemented.
Wholesale market			By release of households and district heating companies from the public service in 2020 and 2021, all gas quantities consumed in Ukraine are freely available on the market at deregulated prices and trading procedures. A virtual trading point is in operation, and trade takes place on the existing exchange, albeit with limited functionalities. The non-implementation of the REMIT Regulation affects the overall implementation status.
Retail market			The public service obligation has been cancelled completely, i.e. prices for all final customers have been deregulated. All customers are formally eligible. Secondary acts, aimed to enable supplier switching and customer protection, have been continuously upgraded.
Interconnectivity			The transmission system is well interconnected on all neighbouring countries' borders. The majority of interconnection points are covered by interconnection agreements aligned with the Network Code on Interoperability and Data Exchange. Security of supply preparedness is improving continuously, following Regulation (EU) 2017/1938.

During the reporting period, Ukraine made a big step forward by deregulating prices, increasing customer protection and implementing the gas Network Codes. However, accumulated debts for imbalances and the task to finance Naftogaz' liquidity gaps threaten the financial stability of the transmission system operator.

The transmission system operator has signed interconnection

agreements with all neighbouring EU transmission system operators and Moldova. The existing agreement with Transgaz does not cover all interconnection points at the Romanian – Ukrainian border and negotiations continued over the entire reporting period. The transmission system operator progressed well in the implementation of the Capacity Allocation Mechanism Network Code, offering capacity at two regional capacity platforms, Regional Booking Platform and Great Solution for Auctioning,

Retail Market Opening



Source: National Electricity Regulatory Commission (NEURC), compiled by the Energy Community Secretariat

utilising the virtual interconnection points at the borders with Hungary and Poland.

Gas consumption in 2020 amounted to 30,9 Bcm, while the import flow to Ukraine was 15,8 Bcm in 2020. The import comes solely through its western borders, 65% of it from interconnection points with Slovakia. Domestic production is at the level of 20,2 Bcm, whereas Naftogaz has a share of 76% and the rest is produced by independent companies. The short haul service, under a favourable tax regime and storage tariffs, has proven to be a winning combination for the utilisation of Ukraine's vast underground storage capacities by European traders.

Ukraine has continued to work towards a fully functional daily balancing system and gas exchange. The law enabling the transmission system operator to purchase gas for balancing purposes at the gas exchange was adopted. Interim measures, as permitted by the Balancing Network Code, are still in place; i.e. application of neutrality charges has been postponed for one

more year. The main obstacles to defining the charges remained the same: accumulated debts for imbalances and the lack of proper reference prices. Payment discipline for imbalances, together with a solution for accumulated debts, is still missing.

After lifting the regulated prices under the public service obligation for households in summer 2020, supply prices for district heating companies were deregulated as well as of June 2021. By consequence, all gas consumed in Ukraine is deregulated. Comprehensive reform of the district heating sector remains a challenge for the upcoming period.

The regulator continued to amend secondary legislation aimed at strengthening consumer protection – including amendments to provisions on the supplier of last resort, mandatory annual supply contracts at fixed prices for households and simplification of the switching procedure. All those regulatory and market tools have proven their value and efficiency when the gas prices became fully deregulated and PSO regime was abandoned.

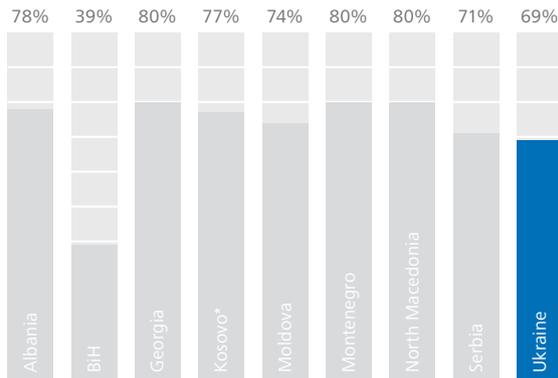


Ukraine

National Authorities



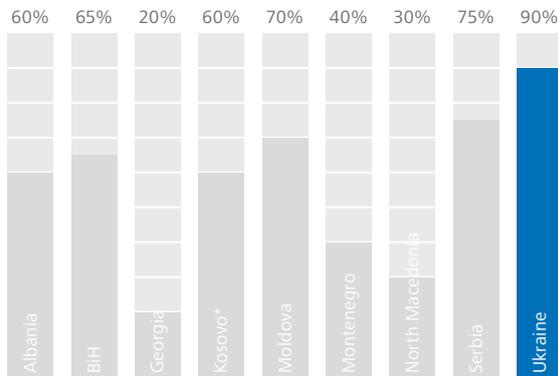
Regulatory Authority



The National Energy and Utilities Regulatory Commission of Ukraine (NEURC) is set up as a 'central executive body' established by the Cabinet of Ministers. This is a breach of the requirement of the acquis for independent operation of the regulator from other public bodies. This model was introduced as a temporary solution after the constitutional court's ruling that the regulator's independent status is unconstitutional but has developed into a permanent state of play that can only be restored by amending the constitution. The early adoption of the Network Codes is proof of NEURC's commitment to align the regulatory framework with the acquis. The transposition of REMIT still requires legislative changes. The recent practice of NEURC to publish documents scheduled for decision ahead of a Board meeting with delay or publish them incomplete raises concerns about transparency and violates the Law on NEURC. Latest decisions should be published in a consolidated version more continuously.



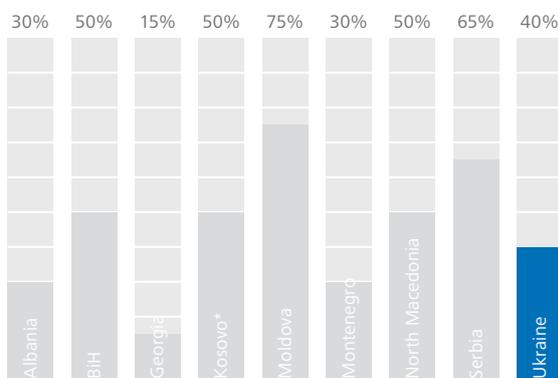
Competition Authority



The Antimonopoly Committee of Ukraine (AMCU) is one of the most active and rigorous enforcers of competition law in the Energy Community. In the reporting period, it rendered a decision regarding the abuse of dominance by DTEK on Burshtyn island in the form of capacity hoarding and pricing abuse and imposed a fine on three undertakings. AMCU actively cooperated with the Secretariat regarding the assessment of this case.



State Aid Authority



The Antimonopoly Committee of Ukraine has started to review and monitor potential State aid measures, in particular in the coal and electricity sectors. Yet again, no decision has been taken in the energy sectors since the entry into force of the Law on State Aid for Business Entities. The lack of an active enforcement system of the State aid acquis is the subject of a pending case.



Ukraine Oil

Oil Implementation

Oil Indicators	Transposition Assessment	Implementation Status	Descriptions
Stockholding obligation		<div style="border: 1px solid blue; border-radius: 10px; width: 100%; height: 15px; margin-bottom: 2px;"></div> <div style="border: 1px solid blue; border-radius: 10px; width: 0%; height: 15px; margin-bottom: 2px;"></div> <div style="border: 1px solid blue; border-radius: 10px; width: 0%; height: 15px;"></div> 0%	Ukraine has no legal framework in place for the establishment of emergency oil stocks under the Directive. A draft law on minimum stocks of crude oil and petroleum products exists. A final decision on a specific model for emergency oil stockholding is yet to be made.
Emergency procedures		<div style="border: 1px solid blue; border-radius: 10px; width: 100%; height: 15px; margin-bottom: 2px;"></div> <div style="border: 1px solid blue; border-radius: 10px; width: 0%; height: 15px; margin-bottom: 2px;"></div> <div style="border: 1px solid blue; border-radius: 10px; width: 0%; height: 15px;"></div> 0%	A draft legal act on an Oil and Petroleum Products Market Crisis Plan is prepared but not adopted. There are no emergency procedures in place in compliance with Directive 2009/119/EC.
Fuel specifications of petrol, diesel and gas oil for non-road mobile machinery (NRMM)		<div style="border: 1px solid blue; border-radius: 10px; width: 100%; height: 15px; margin-bottom: 2px;"></div> <div style="border: 1px solid blue; border-radius: 10px; width: 80%; height: 15px; margin-bottom: 2px;"></div> <div style="border: 1px solid blue; border-radius: 10px; width: 0%; height: 15px;"></div> 80%	According to the 2013 Technical Regulation on requirements for motor petrol and diesel, the Euro 5 standard (10 ppm sulphur in petrol and diesel) is obligatory for fuels marketed in Ukraine since the beginning of 2018. The environmental specifications of petrol and diesel are in conformity with European standards. Gas oil used in non-road mobile machinery is not specified in the Regulation.
Monitoring compliance and reporting including the lay down the rules on penalties		<div style="border: 1px solid blue; border-radius: 10px; width: 100%; height: 15px; margin-bottom: 2px;"></div> <div style="border: 1px solid blue; border-radius: 10px; width: 60%; height: 15px; margin-bottom: 2px;"></div> <div style="border: 1px solid blue; border-radius: 10px; width: 0%; height: 15px;"></div> 60%	A draft programme on annual monitoring for petroleum products is prepared as foreseen by the 2013 Regulation. It is expected to be adopted by the end of 2021. The level of penalties for non-compliance with fuel quality standards is regulated by the Law on the State Market Supervision and Control of Non-food Products.

Ukraine has currently no legal framework on emergency oil stocks and there was no progress in the reporting period. The Ministry of Energy's experts are reviewing a draft law on minimum stocks of crude oil and petroleum products. Its speedy adoption would be a very significant step forward, making it possible for Ukraine to substantially progress towards the transposition of secondary legislation (including the Action Plan) and start the implementation of the Oil Stocks Directive. Ukraine is behind in this regard and it will be very difficult to fulfill the oil

stocks implementation deadline by 1 January 2023.

There was no progress in the reporting period. The 2013 Technical Regulation, which establishes requirements for fuels sold on the territory of Ukraine, should be amended in order to stipulate the environmental specifications of the gas oil used in non-road mobile machinery (NRMM). Sulphur content of gas oil used in NRMM should be up to 10 mg/kg.



Ukraine

Renewable Energy

Renewable Energy Implementation

Renewable Energy Indicators	Transposition Assessment	Implementation Status	Descriptions
National Renewable Energy Action Plan			In 2019, Ukraine's share of energy from renewable sources reached only 8,1%, well below the indicative trajectory of 10,1%. The indicative trajectory for the electricity sector was almost reached, while contributions of renewable energy in heating and cooling and transport remain lower than planned.
Quality of support schemes			From 2020, only wind projects with installed capacity up to 5 MW and other technologies up to 1 MW are granted administratively set feed-in tariffs (FiTs). Auctions envisaged by legislative amendments adopted in December 2019 are yet to be implemented. A new draft law introducing a contract for difference mechanism was published for public consultation in August 2021.
Grid integration			Guaranteed access to the transmission and distribution network for electricity produced from renewable energy sources is provided.
Administrative procedures and guarantees of origin			Administrative procedure guidelines as well as a portal that provides online administrative services exist; nevertheless, the entire procedure remains lengthy. There is no single administrative body. An electronic system for issuing, transfer and cancellation of guarantees of origin is not in place.
Renewable energy in transport			The draft Law on Amendments to the Law on the Mandatory Use of Liquid Biofuels (Biocomponents) in Transport passed first reading in the Parliament in September 2021, and the Law on Alternative Fuels was amended in October 2021, introducing the framework to foster biomethane production. The share of renewables in the transport sector was at the level of 3,1%.

During the reporting period, there was only little progress in the implementation of the renewables acquis.

In August 2021, the Ministry of Energy and Coal Industry published the draft Law on Amendments to Certain Laws of Ukraine on Stimulating the Production of Electricity from Alternative Energy Sources on a Market Basis for public consultation. The draft Law introduces a contract for difference mechanism for auctions and provides producers under the current FiT regime the possibility to voluntarily leave the balancing group of the Guaranteed Buyer and receive FiT compensation under the contract for difference mechanism.

Ukraine's renewable energy sector remains troubled by the continuing lack of liquidity of the Guaranteed Buyer to settle existing

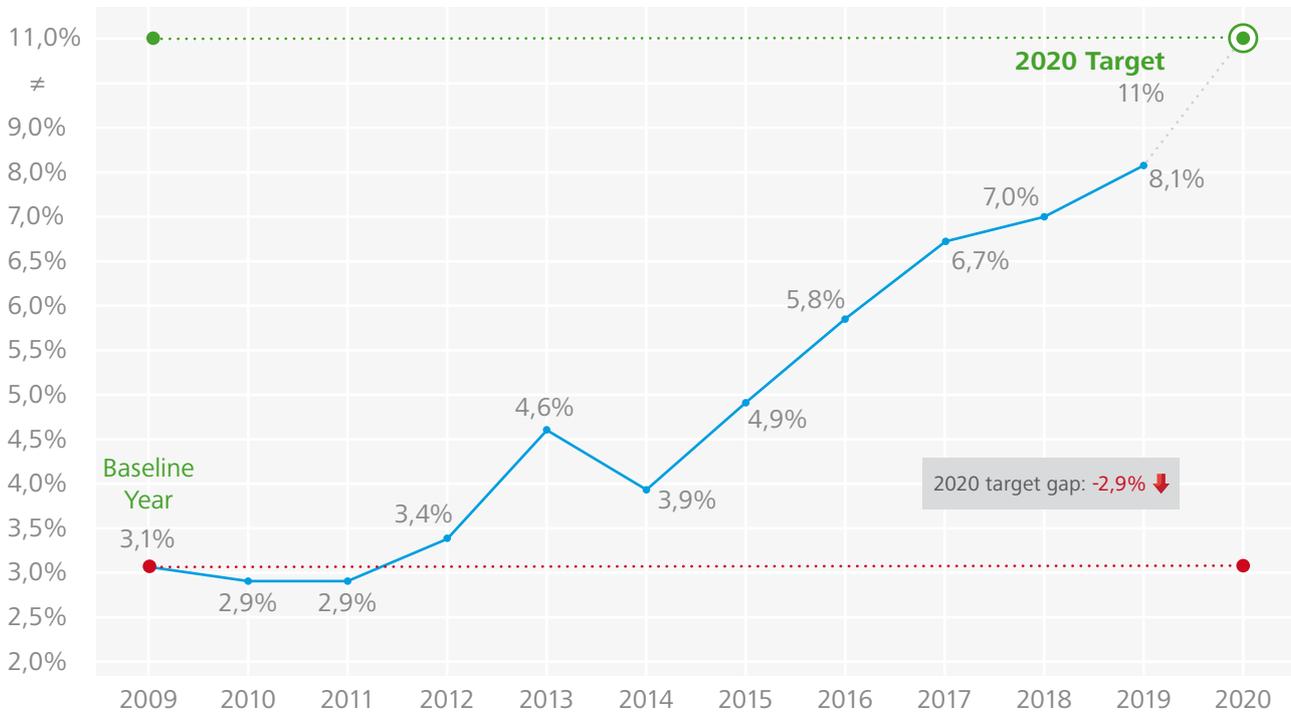
arrears and ongoing payment obligations to renewable investors under the existing FiT scheme. The memorandum signed between the Government and renewables investors in June 2020, negotiated under the auspices of the Secretariat's Dispute Resolution and Negotiation Center, foresees reform of the FiT regime including debt payment. Although the Verkhovna Rada adopted a corresponding law on the restructuring of FiTs in July 2020, debt to producers under the FiT scheme has been paid only partially.

In order to promote self-consumption of electricity from renewable sources, the Law on the Promotion of the Use of Energy from Renewable Sources enabled households to install up to 30 kW of wind and solar capacities for own consumption. The surplus of energy not consumed can be in-fed into the distribution grid and purchased by the universal service providers at the green

tariff. By mid of 2021, more than 32.000 (835 MW) households applied this mechanism.

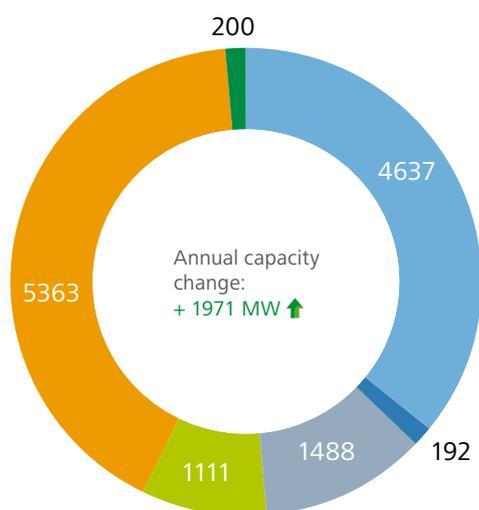
The utmost priority for Ukraine remains the implementation of a functional market-based support scheme. Moreover, an electronic system for guarantees of origin should be established without further delay.

Shares of Energy from Renewable Sources



Source: Progress Reports on promotion and use of energy from renewable energy sources, State Agency on Energy Efficiency and Energy Saving of Ukraine according to the Energy Balance 2018

Total Capacities of Renewable Energy 2020 (MW)



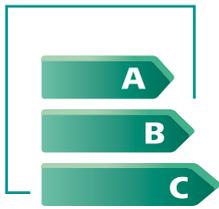
In spite of all shortcomings in the support scheme mechanism, the country increased significantly its renewable energy capacities. In 2020, almost 2 GW of renewables were added. The most significant growth was in solar PV capacities, which reached 5.363 MW, followed by wind (1.111 MW) and small hydro (192 MW).

Total capacities (MW):

12990

- Large hydropower
- Small hydropower <10 MW
- Pumped storage
- Wind
- Solar
- Biogas

Source: State Agency on Energy Efficiency and Energy Saving of Ukraine (SAEE)



Ukraine

Energy Efficiency

Energy Efficiency Implementation

Energy Efficiency Indicators	Transposition Assessment	Implementation Status	Descriptions
Energy efficiency targets and policy measures			The NEEAP until 2030 is still pending adoption by the Government. The Energy Efficiency Law, which is to include the specific targets, has not been adopted. The fifth Annual Progress Report was submitted to the Secretariat in August 2021.
Energy efficiency in buildings			Ukraine has updated five by-laws to implement the Energy Performance of Buildings Directive and align them with the Energy Efficiency Directive. At the end of 2020, the Ministry for Communities and Territories Development approved two by-laws establishing minimal requirements for energy efficiency of buildings. With these, the full package of by-laws is adopted.
Energy efficiency financing			The Energy Efficiency Fund has a budget of UAH 2,7 billion and EUR 100 million from international donors. To date, it has received 692 applications for grants for apartment building renovations. Energy service company projects for building renovations are progressing well.
Energy efficient products - labelling			All energy labelling regulations related to the Labelling Directive were adopted, including the one on space heaters adopted in 2020. Five new regulations completing the implementation of Regulation (EU) 2017/1369 on labelling were also adopted. The country has transposed Directive (EU) 2009/125/EC on eco-design and 23 product regulations on a voluntary basis.
Efficiency in heating and cooling			Ukraine has a relatively developed district heating infrastructure, with over 1.600 district heating companies supplying centralized heat and hot water. 60% is generated in heat-only boilers and 40% in CHP plants. Gas and coal account for around 90% of the total energy mix in this sector. The new Law on cogeneration, including obligations regarding efficiency in heating, is in the second reading in Parliament. Ukraine has not yet prepared the assessment of its high-efficiency cogeneration and efficient district heating potential required by the Energy Efficiency Directive.

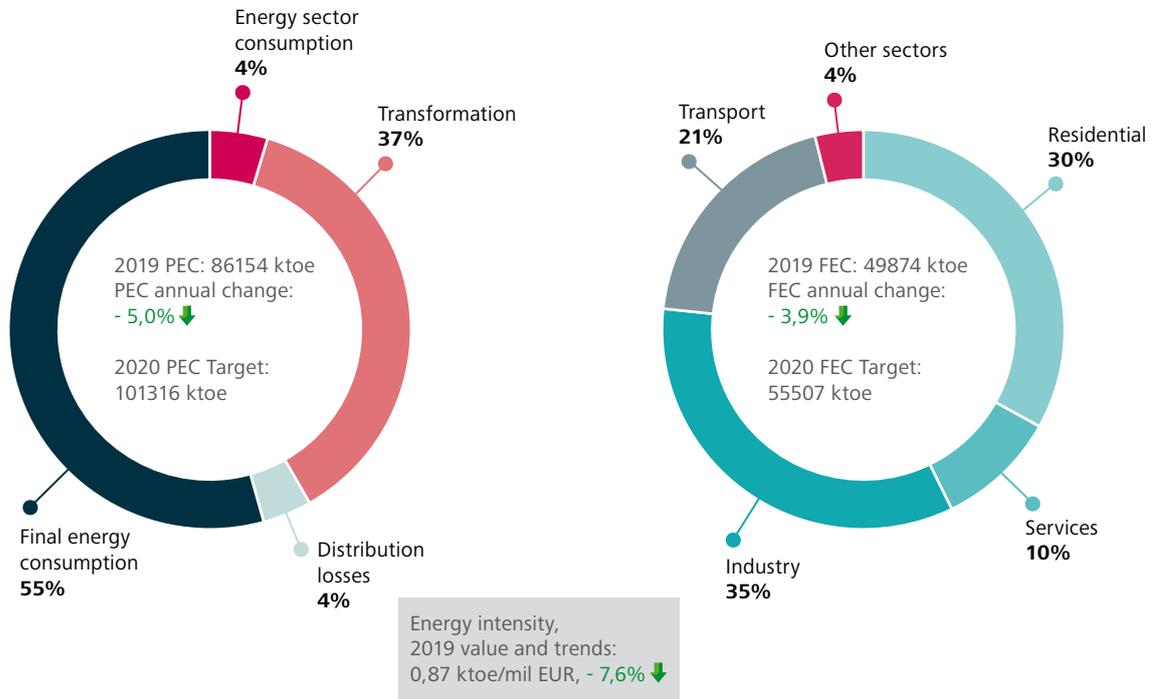
In 2020, the Ministerial Council established an infringement by Ukraine for lack of transposition of the Energy Efficiency Directive. The breach has not been rectified yet. The Energy

Efficiency Law is in the final adoption stage in the Parliament. The adoption of a law compliant with Directive 2012/27/EU remains the utmost priority for Ukraine.

2019 Energy Efficiency Indicators and Trends

Primary Energy Consumption (PEC)

Final Energy Consumption (FEC)



Source: EUROSTAT 2021 data and Contracting Party's Reports

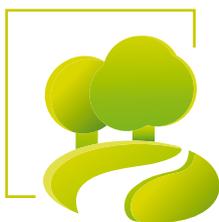
Energy Efficient Products – Overview of Implementation of Labelling Regulation

FRAMEWORK REGULATION*	Household dishwashers	Fridges and freezers*	Household washing machines	Televisions	Air conditioners and fans*	Household tumble driers	Electrical lamps and luminaires	Solid fuel boilers*	Space heaters*	Water heaters & storage tanks	Domestic ovens and range hoods
	●	●	●	●	●	●	●	●	●	●	●

● Adopted and implemented ● Compliance or implementation issues detected ● No progress with adoption/implementation

* The new labelling package adopted by the Ministerial Council in November 2018 was assessed, as the transposition deadline expired in January 2020.

Source: multiple sources of data (EECG reports, NEEAPs etc.), compiled by the Energy Community Secretariat



Ukraine Environment

Environment Implementation

Environment Indicators	Transposition Assessment	Implementation Status	Descriptions
Environmental impact assessment (EIA) and strategic environmental assessment (SEA)			The Environmental Impact Assessment Law must be improved to fully comply with the Directive. Further efforts are needed to secure early and effective opportunities for the public and for the relevant authorities to participate in EIAs and SEAs. The draft NECP should be made subject to SEA with public and expert consultations.
Sulphur in fuels			Ukraine has transposed the provisions of the Directive into national law, including the provisions on marine fuels.
Large combustions plants and industrial emissions			Ukraine revised its NERP and plant inventory in 2019, and drafted amendments to the measures envisaged by the plan in 2021. The NERP ceilings were not changed. While compliance with the 2020 NERP ceilings was achieved, further efforts are necessary to ensure compliance with the decreasing ceilings.
Nature protection			The draft Law on Territories of the Emerald Network should be revised to integrate comments by the Committee on Anti-Corruption Policy. Conflicts between nature protection goals and energy development projects should be assessed in light of international nature protection obligations of Ukraine.
Environmental liability		n/a	Ukraine transposed the core elements of the Directive. The concept of imminent threat and preventive measures, as well as details on compensation measures, are still missing.

Draft amendments to the Law on Environmental Impact Assessment (EIA) are currently being prepared. Further improvements of provisions related to the national EIA expert commission and its role should be made to fully transpose Article 5(3) of Directive 2014/52/EU. The composition of the EIA commission should include experts from various fields and in particular a biodiversity expert. Ukraine should also reconsider the option to establish a system for licencing/certification of EIA experts. Consultation with relevant authorities concerning the EIA reports should be improved as well as efforts to engage the public in early and effective consultations.

Strategic environmental assessments (SEAs) must be carried out during the preparation of the plans and programmes to integrate environmental considerations therein. The SEA process for the NECP should be initiated. Identifying the relevant authorities and the public concerned, as stipulated in Article 6 of the SEA Directive, including relevant non-governmental organisations, is a precondition for successful and effective consultations.

As regards legislation on the sulphur content of liquid fuels, Ukraine completed the transposition of the 1,00% sulphur threshold for heavy fuel oil and the 0,10% threshold for gas oil. The Directive's provisions on marine fuels are also transposed. Efforts should be focused on implementation, especially systematic compliance monitoring of the products concerned.

With regard to large combustion plants, the key priority for Ukraine remains the implementation of the National Emission Reduction Plan (NERP). Amendments to the NERP were prepared, without a change to the annual emission ceilings stipulated therein. Ukraine complied with its reporting obligations in March 2021 by submitting its emissions data to the European Environment Agency for the reporting year 2020. The emission ceilings for all three pollutants were met and a significant decrease in all three pollutants was recorded. The main reason for this is the low amount of operating hours of the plant fleet due to Covid-19.

Nineteen large combustion plants are operating under the opt-out regime since 1 January 2018, meaning that they can use a

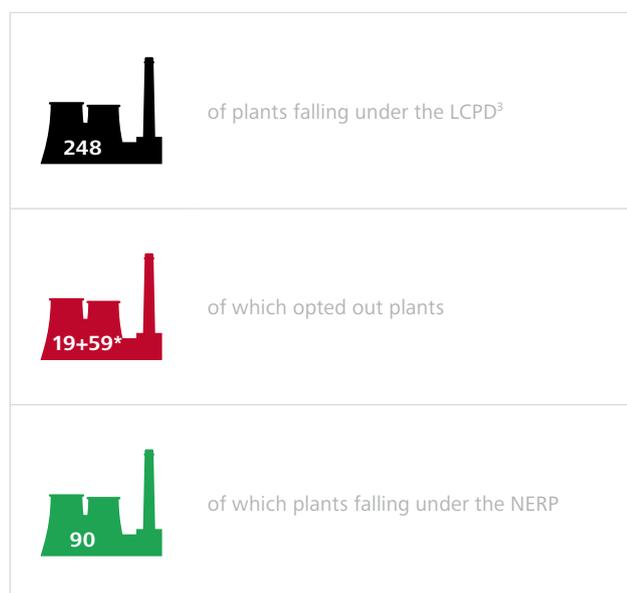
maximum of 20.000 operational hours until 31 December 2023. According to the Secretariat's estimates, several units of the Burshtynska plant are likely to reach the limit earlier than expected if the operational hours are not reduced significantly. In case this happens, the Secretariat will take enforcement action. Furthermore, 59 plants fall under the scope of Decision 2015/07/MC-EnC of the Ministerial Council, meaning that those plants may remain in operation for a maximum of 40.000 hours until 31 December 2023 at the latest. The operating hours of the plants concerned are reported together with emissions data.

The draft Law on the Territories of the Emerald Network was put on hold by the Committee on Anti-Corruption Policy for failing

to meet the requirements of anti-corruption legislation. The provisional ban on activities in the absence of reasonable grounds for determining their negative impact on the territory of the Emerald Network in the draft Law is to be welcomed. Dialogue with local communities and civil society has to be ensured when conflicts between planned energy projects and nature protection goals emerge in particular for wind projects and hydrocarbons extraction.

The Environmental Liability Directive is partially transposed by the Law on Environment (civil liability), the Code of Ukraine on Administrative Offenses (administrative liability) and the Criminal Code of Ukraine (criminal liability).

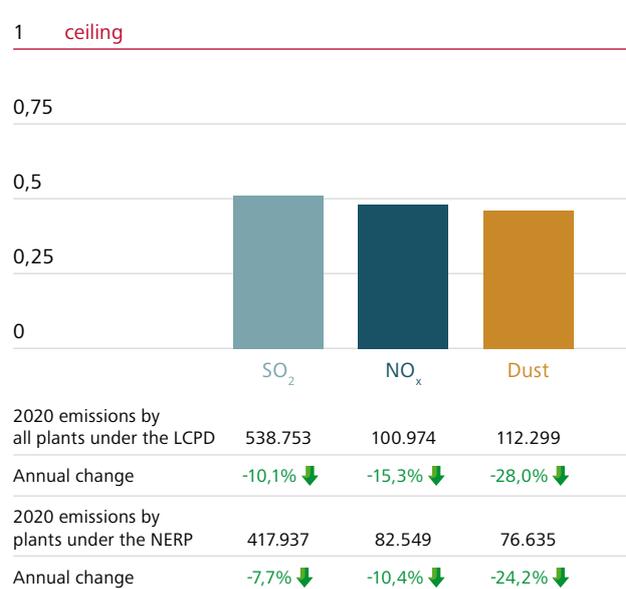
Installations under the Large Combustion Plants Directive



*Under Decision 2015/07/MC-EnC, certain plants in Ukraine are entitled to use 40.000 hours for opted out plants. 59 plants fall into that category.

Source: compiled by the Energy Community Secretariat

2020 emissions versus NERP ceilings



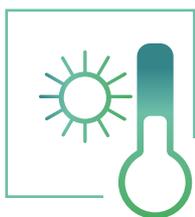
Amount of operational hours used from opt-out period⁴

Average of plants under Decision 2013/05/MC-EnC ⁵	Expected expiry of opt-out period:*	December 2023
	Remaining hours	13.466
	Operating hours consumed in 2018 - 2020	6.534
Average of plants under Decision 2015/07/MC-EnC ⁶	Expected expiry of opt-out period	December 2023
	Remaining hours	33.079
	Operating hours consumed in 2018 - 2020	6.921

*Calculations for the expected expiry of the opt-out period are based on 2018 - 2020 average load factor.

Source: compiled by the Energy Community Secretariat

- Ukraine revised its NERP and plant inventory in 2019, updated the number of plants based on the common stack approach and included all district heating installations, which modified the total number of plants. The NERP ceilings were not changed. For 80 plants, no derogations apply.
- Due to the large number of plants under the opt-out regime in Ukraine, an average for both opt-out regimes is being provided. The expected expiry of the opt-out is also provided based on this average. It varies on a plant-by-plant basis.
- Under the regime of Decision 2013/05/MC-EnC, opted-out plants can remain in operation for a total of 20.000 operational hours until 31 December 2023.
- Under the regime of Decision 2015/07/MC-EnC, which amended Decision 2013/05/MC-EnC to reflect the special situation of Ukraine, certain opted-out plants can remain in operation for a total of 40.000 operational hours until 31 December 2023. The list of plants was adopted by Decision 2016/19/MC-EnC.



Ukraine Climate

Climate Indicators	Transposition Assessment	Implementation Status	Descriptions
National greenhouse gas emissions monitoring and reporting systems		 86%	The Law on the Principles of Monitoring, Reporting and Verification (MRV) of GHG emissions, together with secondary legislation have been adopted. However, the system is still not fully operational as the launch of the MRV electronic registry (data management system) is missing.
National Energy and Climate Plans (NECPs)		 46%	Ukraine's draft NECP is still being discussed internally. It is planned to be revised after the NDC2 adoption. There are no details on the timeline for the finalization of the draft NECP.

Ukraine's revised NDC2 under the Paris Agreement was submitted to the UNFCCC Secretariat in July 2021. It includes an economy-wide net domestic reduction of 65% in GHG emissions by 2030 compared to 1990. Due already on 1 January 2018, the country's seventh National Communication and the joint second and third Biennial Report have still not been submitted. Ukraine's plans to submit, jointly, the seventh and eighth National Communication as well as the second, third and fourth Biennial Report by the end of 2022.

The Monitoring, Reporting and Verification of GHG Emissions Law, which transposes provisions of Directive 2003/87/EC related to the creation of a monitoring, reporting and verification (MRV) system, took effect in January 2021. Secondary legislation on the list of activities subject to MRV of GHG emissions, adopted in September 2020, correspond to the relevant provisions of Directive 2003/87/EC. Thus, the basic rules for the functioning of a registry system for GHGs and installations are in place. Nonetheless, the system is not fully operational as the relevant software is being developed with donors' support. The launch

of the MRV electronic registry (data management system) is pending. While establishing an MRV is a first step towards a future ETS, Ukraine has also a carbon tax in place, although with a very low rate (ca EUR 0,33 /tCO₂) which covers a range of stationary sources of emissions, including industry and the power sector.

By a decree of 23 March 2021, the Ministry of Environmental Protection and Natural Resources was tasked to update its Low Carbon Development Strategy until 2050 and turn it into a framework law on the principles of low emission development until 2050.

The draft NECP is currently being discussed within the Ministry of Energy. Related modelling work will be revised after the adoption of Ukraine's updated NDC. Preparatory work for conducting a strategic environmental assessment of the NECP is currently undertaken. The planned date for NECP finalization and adoption is unknown.



Ukraine Infrastructure

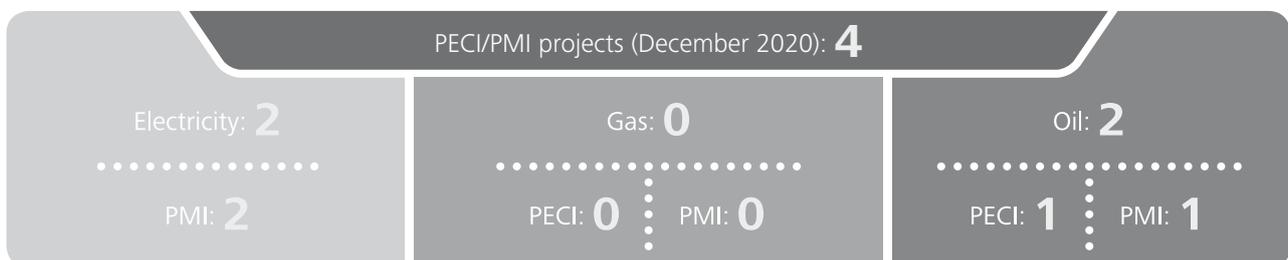
Infrastructure Implementation

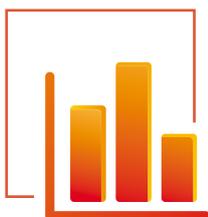
Infrastructure Indicators	Transposition Assessment	Implementation Status	Descriptions
National competent authority		<div style="width: 30%;"><div style="background-color: #007bff; height: 10px;"></div></div> 30%	Ukraine's transposition of Regulation (EU) 347/2013 and designation of the national competent authority is still pending. The draft Law on Projects of National Interest in the Energy Sector is expected to be submitted to the Parliament still in 2021.
Manual of procedures		<div style="width: 0%;"><div style="background-color: #007bff; height: 10px;"></div></div> 0%	The manual of procedures, as defined by Regulation (EU) 347/2013, is yet to be drafted.
National regulatory authority involvement		<div style="width: 0%;"><div style="background-color: #007bff; height: 10px;"></div></div> 0%	The Secretariat supported the regulatory authority in drafting the methodology and criteria to evaluate investments in electricity and gas infrastructure projects and the higher risks incurred by them. Yet, the Ukrainian national regulatory agency has not published the methodology and criteria as required by the Regulation.

The Ministry of Energy of Ukraine has been preparing the draft Law on Projects of National Interest in the Energy Sector, which aims to transpose Regulation (EU) 347/2013. The Law is expected to be submitted for adoption by the Government and subsequently by the Parliament in autumn 2021. According to the draft Law, the Ministry of Energy of Ukraine will act as the national competent authority. The Interdepartmental Commission will be obliged to consider and approve plans for project realization in close cooperation with the national competent authority. All supporting acts like the manual of procedures and methodology and criteria to evaluate investments should be developed within six months of the Law's entry into force.

Until the new Law is adopted, the country remains in breach of the Ministerial Council's Decision of 29 November 2018 on Ukraine's failure to transpose Regulation (EU) 347/2013.

Ukraine, as a Contracting Party with a relatively high number of Energy Community infrastructure projects, stands to benefit at large from the implementation of the Regulation. This is especially relevant regarding the strategic infrastructure projects related to the synchronization of Ukraine with the Continental European power system. Other projects such as the rehabilitation of the overhead power lines 400 kV to Slovakia and Romania (PMI 2020), as well as oil pipeline projects (Brody – Adamowo and Southern Druzhba pipelines, PECEI and PMI 2020) might be positively influenced by the adoption of the Law.





Ukraine Statistics

Statistics Implementation

Statistics Indicators	Transposition Assessment	Implementation Status	Descriptions
Annual statistics		 100%	The five annual questionnaires for 2019 and the questionnaire on final energy consumption of households were submitted.
Monthly statistics		 72%	Monthly coal, electricity and natural gas data are compiled and transmitted to EUROSTAT. Monthly oil data and short term natural gas data are not transmitted.
Price statistics		 92%	Price statistics for electricity and natural gas are transmitted, except for disaggregated data on electricity prices charged to households.

Implementation of the acquis on price statistics has improved with reporting on the disaggregated price of electricity charged to industrial end-users, but Ukraine is yet to fully implement all obligations pursuant to the statistics acquis.

The State Statistical Service of Ukraine (SSSU) is the central statistical institution responsible for production of energy statistics.

Annual questionnaires for 2019 were transmitted timely to EUROSTAT and published in the respective databases. Preliminary annual data for 2020 were also transmitted timely and published. The breakdown of energy consumption of households per final use is compiled and transmitted to EUROSTAT as required by the acquis. The quality report on annual statistics is transmitted to EUROSTAT in accordance with Regulation (EC) 1099/2008.

SSSU compiles monthly energy statistics and ensures their timely dissemination. Monthly coal, natural gas and electricity data are transmitted to EUROSTAT. Monthly oil statistics pursuant to Annex D (JODI data) are also compiled and transmitted. SSSU

collects information on oil stocks, but it is not publicly available. Monthly oil data compliant with Annex C of Regulation (EC) 1099/2008 are still not transmitted to EUROSTAT due to concerns over the confidentiality of oil stocks data.

Average gas and electricity prices charged to industrial customers and households, disaggregated per taxation level, are compiled and transmitted to EUROSTAT. Disaggregated prices of natural gas per price component are also compiled and published. As regards disaggregated electricity prices, price components of electricity charged to industrial end-users in 2020 are compiled and transmitted to EUROSTAT, whereas price components of electricity prices charged to households are not reported yet.

Recalling that most monthly data are already published on the SSSU website, it is expected that all remaining monthly questionnaires will be transmitted to EUROSTAT, including oil stocks pursuant to the obligations from the acquis on oil. The breakdown of electricity prices charged for households into price components and their annual reporting also have to be implemented without delay.



Ukraine Cybersecurity

Cybersecurity Implementation

Cybersecurity indicators	Transposition Assessment	Implementation Status	Descriptions
Institutions and legislation			The cybersecurity framework is fragmented and the cybersecurity acquis is transposed mostly through governmental acts. A cybersecurity strategy for 2021 - 2025 is in place and a draft cybersecurity law is pending adoption. Criteria for treatment of critical infrastructure are in place and include the energy sector. CERT-UA is established and competent for energy.
Requirements for operators and energy regulatory authority			Detailed methodologies for identification of critical infrastructure based on risk assessment are adopted by the Government but energy-specific criteria are not defined. Operators' obligations for cybersecurity, resilience, response to threats and reporting of incidents are applicable through governmental acts. The energy regulator NEURC is not empowered for cybersecurity.

The Cybersecurity Strategy of Ukraine 2021 - 2025 aims at increasing resilience, higher professional capacity, secure digital services and improving models of cooperation. The Ministry of Energy is working on the development of a cybersecurity strategy for the energy sector.

The Law on the Basic Principles of Cybersecurity partially transposes Directive 2016/1148 (NIS Directive), and sets the concept of critical infrastructures (CI) and the principles for imposing obligations on operators, public private partnership and international cooperation. Directive 2008/114/EC is transposed through governmental acts – the General Requirements for Cybersecurity of CI and the Regulation on CI, providing designation procedures and an identification methodology. The energy CI list includes infrastructures for all fundamental activities in electricity, gas, oil and nuclear technology. A draft Law on Critical Infrastructure is pending adoption. It defines conditions for CI protection, mandatory insurance, public private partnership and establishment of a National Commission for Critical Infrastructures.

The State Service for Special Communications and Information Protection (SSSCIP) is the responsible authority for technical information security of information and communication infrastructures, including the energy sector. The Government Regulation on Critical Information Infrastructure (CII) defines a designation structure managed by SSSCIP where CII is designated for each CI object. The CII must be verified as critical for the

sustainable operation of CI and sensitive to information security incidents, in the absence of an alternative facility. The lists of specific CI objects and CII facilities are not disclosed.

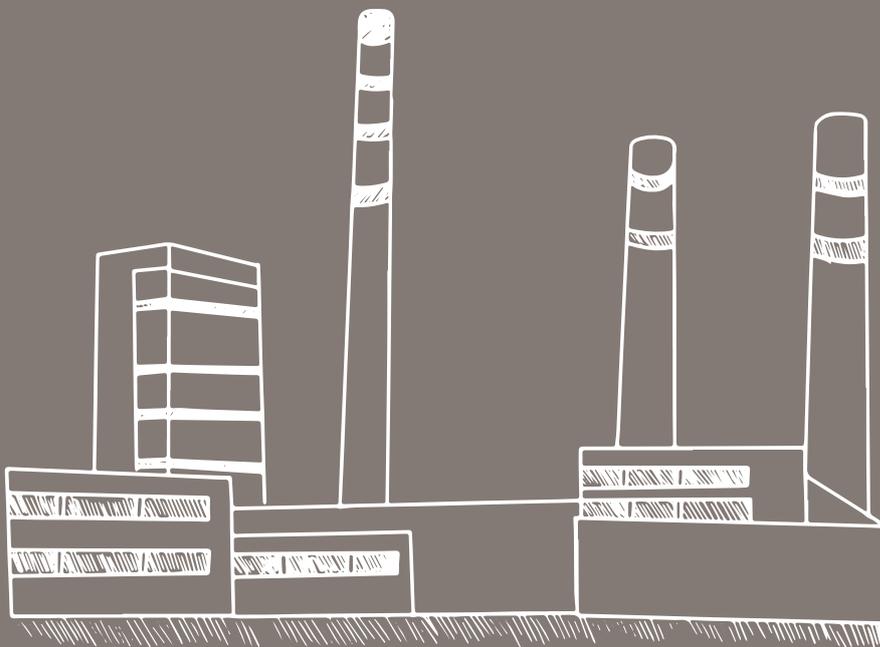
SSSCIP hosts the national CERT (CERT-UA). The CERT operates as the main contact point for cyberattacks, maintains a register of incidents, shares information with other agencies in Ukraine and abroad, provides direct assistance to stakeholders, publishes recommendations, organizes training sessions and participates in joint cyber defence events. Its competences and responsibility extend over the energy sector.

A government regulation obliges the operators of critical infrastructure to define their information security risk management policy, designate information security officers and develop security plans. The Government has also adopted a Resolution on the establishment of a system for identifying vulnerabilities and reacting to cyber incidents and cyberattacks on the state-owned CI objects, with a possibility for private companies operating CI objects to apply it voluntarily. The system engages CERT-UA for centralised collection of information and development of systems identifying and reacting to cyberattacks at the level of CI operators.

The energy regulatory authority NEURC does not have any competences, powers or obligations in the domain of cybersecurity.

12-15

Annexes







12 Annual Report

Annual Report on the Activities of the Energy Community 2020-2021

The Annual Report on the Activities of the Energy Community outlines key actions and achievements in the period from 1 November 2020 to 15 October 2021 following the requirements of Article 52 of the Energy Community Treaty.

Preparing for the energy transition

This reporting period brought to the fore the necessity to advance the energy transition in the Contracting Parties of the Energy Community and contribute to the achievement of the goals of the European Green Deal. Despite the challenging conditions posed by the Covid-19 pandemic, all institutions worked intensively on preparing legislative acts under the Clean Energy for all Europeans Package, aimed at setting a new energy and climate framework and boosting regional market integration, for adoption by the November 2021 Ministerial Council.

Besides focusing on setting 2030 targets for energy efficiency, renewable energy sources and greenhouse gas emission reduction and the development of National Energy and Climate Plans, the Energy Community worked to put in place an enabling framework for renewables to play an active role in the transition to a smart and integrated energy system and a decarbonised economy. Activities focused on the introduction of market-based support schemes, citizen's participation in the development of renewable energy projects and implementation of a system for guarantees of origin.

Through its new online Heating and Cooling Network, the Energy Community facilitated the exchange of good practice in modern technologies, policies and programmes among technical experts and policymakers and informed the public about the benefits of using renewables and waste heat in district heating networks.

Following the publication of a flagship study which recommended for the Contracting Parties to gradually introduce carbon pricing, the Secretariat invited all electricity generators in the Energy Community Contracting Parties to design and implement internal carbon pricing on a voluntary basis. The electricity producer Elektrani na Severna Makedonija (ESM) of North Macedonia and the power utility Elektroprivreda BiH (EPBIH) of Federation of Bosnia and Herzegovina have already joined the initiative.

In the area of energy efficiency, the key focus of the Energy Community in this reporting period was harvesting the energy efficiency potential of the buildings sector. The Secretariat provided assistance to the Contracting Parties to improve their

legal framework and remove regulatory barriers in the buildings sector and worked to match the needs of the Contracting Parties with donor funding.

As integrated energy markets are crucial for decarbonisation and security of energy supply, the Energy Community put in the spotlight the tools necessary to drive the transition towards a decarbonized and decentralized electricity sector, including the new electricity market design, electrification of the economy and investments in clean energy.

Recognizing that new financing opportunities are needed to secure investments to make the energy transition a reality, the Secretariat launched a new initiative to increase the understanding of EU green finance trends in the Contracting Parties and enable stakeholders to actively engage in the ongoing financial revolution.

Designing the right legal and regulatory framework

This reporting period continued to be marked by the ongoing Covid-19 pandemic. In spite of these challenging times, the Secretariat ensured that the Energy Community institutions and working groups continued to meet virtually on a regular basis and delivered technical assistance as needed. The Secretariat drafted numerous primary and secondary laws to assist the Contracting Parties in the transposition and implementation of the acquis.

Secretariat's reviews of national legal acts for 2021 (until 31 August 2021)

Contracting Party	Number of reviews
Albania	15
Bosnia and Herzegovina	10
Georgia	12
Kosovo*	3
Moldova	6
Montenegro	9
North Macedonia	4
Serbia	14
Ukraine	35

The Secretariat was deeply engaged in several transmission system operator certification processes. Taking into account the Opinion of the Secretariat, the Regulatory Commission for Energy of Republika Srpska, an entity of Bosnia and Herzegovina, certified Gaspromet Pale as a gas transmission system operator.

Work on certification of the transmission system operators in Georgia, Moldova, Serbia and Ukraine is ongoing.

The Energy Community Regulatory Board continued to address regulatory challenges and ensure that energy reforms benefit consumers. It focussed its activities on providing support to national regulatory authorities in implementing new Energy Community acquis communautaire. This included the REMIT Regulation for increased integrity and transparency of wholesale energy markets and gas and electricity Network Code and Guideline Regulations, the transposition of which is now advanced in many Contracting Parties.

Regional market integration received a major boost with the entry into force of the Connection Agreement between KOSTT of Kosovo* and transmission system operators from Continental Europe on 14 December 2020. The first-ever yearly auctions for electricity transmission capacity on Kosovo*'s borders with Albania, Montenegro and North Macedonia by the Coordinated Auction Office in South East Europe (SEE CAO) took place. In

addition, cross-border market integration gained ground with the new 400kV line between Kosovo* and Albania being put in operation.

Trans-regional cooperation on development of integrated SEEGAS market moves ahead

In summer 2021, a Memorandum of Understanding to support trans-regional cooperation on the development of an integrated South-Eastern and Eastern European gas (SEEGAS) market was signed by the Energy Community Secretariat, energy exchanges and trading service providers BRM, UEEX, TGE, CEEGEX, ECG, BHG and Henex and transmission system operators Moldova-transgaz, GTSOU, FGSZ, GAZ-SYSTEM, Transgaz and Desfa. The signatories aim to cooperate on the development of cross-border natural gas trading, e.g. on exchange platforms, and introduce transparent and competitive interregional market-based pricing mechanisms and efficient cross-border gas transmission and interoperability.

SEEGAS Memorandum of Understanding signatories



The Memorandum aims to create prerequisites for the functioning of a competitive liquid SEEGAS market and to ensure unhindered access to the respective natural gas markets for all market participants and service providers on a non-discriminatory basis and equal terms in accordance with the acquis. It also aims to facilitate cooperation on the implementation of an effective commodity clearing system for natural gas transactions that is in line with best European practices.

With the support of the Secretariat, the Ukrainian Energy Exchange became the first licensed commodity exchange in Ukraine. Georgia established the Georgian Gas Exchange.

Energy Community Just Transition Initiative

The Secretariat launched the Energy Community Just Transition Initiative to ensure that the move away from fossil fuels in the Contracting Parties is socially just, in the interest of women, workers and entire communities. The Secretariat manages four interlinked projects, which together represent the key dimensions of the Just Transition Initiative.

The first dimension of the initiative, the Coal Regions in Transition Project for Western Balkans and Ukraine is a joint effort of the European Commission, the Energy Community, World Bank, EBRD, College of Europe and the Government of Poland. The initiative aims to facilitate the development of transition strategies and projects to kick start the transition process in coal-dependent regions in the Western Balkans and Ukraine.

The second dimension focusses on gender equality and aims to ensure that a move away from fossil fuels, instead of replicating existing inequalities, will give women a place at the table where energy transitions are discussed and shaped. To lead by example, the Director of the Energy Community Secretariat, Mr Janez Kopač, became an “International Gender Champion” by joining a leadership network that aims to break down gender barriers and make gender equality a reality.

Under the Clean Air Regions dimension, nine Western Balkan municipalities (Banovići, Bitola, Kakanj, Lukavac, Maglaj, Novi Sad, Niš, Pljevlja and Tuzla) joined the Clean Air Regions Initiative (CARI). Mayors of the nine participating municipalities committed to undertake voluntary measures aimed to reduce air pollution in their municipalities, focusing on the most critical sources of pollution such as domestic heating, industry and traffic. With the knowledge gathered during the first workshop on 8 - 9 September 2021 in Hungary, participating municipalities

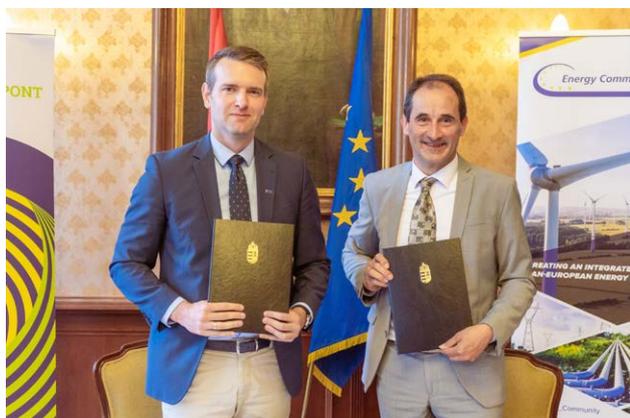
are ready to start developing their own Local Air Quality Action Plans supported by the Secretariat and the Hungarian Western Balkans Green Center.

The last dimension of the Just Transition Initiative is addressing energy poverty in the Energy Community Contracting Parties. The Secretariat launched a study to identify and assess the number of households in energy poverty in the Contracting Parties and propose policies and measures to eradicate energy poverty.

The first Energy Community Just Transition Forum took place virtually on 30 June 2021 in cooperation with the Balkan Green Foundation. The Forum was also the occasion to gather for the first time the key members of the Just Transition Advisory Board composed of representatives from academia, trade unions, governments and civil society.

Energy Community teamed up with Hungary to support green transition in Western Balkans

On 14 June 2021, the Ministry for Innovation and Technology of Hungary through its development agency of the Western Balkans Green Center (WBGC) and the Energy Community Secretariat joined efforts to help the Western Balkans fight climate change and foster the region’s green transition. Cooperation will focus on knowledge sharing and exchange programmes.



Signing ceremony of the Memorandum of Understanding between the Ministry for Innovation and Technology of Hungary and Energy Community Secretariat, 14 June 2021, Budapest, Hungary



EU4Energy Governance (Phase II) “Promoting the clean energy transition”



Co-funded by the European Union

The Energy Community Secretariat is implementing the EU4Energy Governance (Phase II) “Promoting the clean energy transition” technical assistance project, co-funded by the EU4Energy Programme of the European Union. The EU4Energy Phase II - Component 1 project will contribute to the development of sound legislative and regulatory frameworks for energy in order to support the region’s transition to clean energy and the liberalisation of the energy market.

Throughout the action (between 2020 and 2024), the Secretariat will work with stakeholders in Georgia, Moldova and Ukraine in order to assist them with the drafting, transposition and implementation of energy reforms, including the Clean Energy for all Europeans Package. The targeted sectors are electricity, gas (including hydrogen), energy efficiency and renewable energy. The Project will also facilitate knowledge transfer to the relevant public authorities via various capacity building activities.

The EU4Energy has identified the specific activities that will be implemented until the end of 2022 in Georgia, Moldova and Ukraine.

Secretariat joins EMAS to protect the environment and reduce its environmental footprint

Having set up an internal environmental management system (EMS), the Secretariat is working to continuously enhance its environmental performance. On 7 September 2021, the Secretariat was accepted to the Austrian registry of organisations implementing an Environmental Management and Audit Scheme (EMAS).



Successfully completed actions include a transition to 100% renewable energy, efficient LED lighting and a smart heating system. Water conservation and waste separation measures were put in place. In line with its green procurement principles, the Secretariat tendered new, EMS certified service suppliers in printing, cleaning, office supplies and catering. The Secretariat's emissions impact has also significantly decreased, due to the combined effect of Covid-19 restrictions and the newly introduced travel rules.

Communications and outreach

Due to the ongoing restrictions caused by the Covid-19 pandemic, the Energy Community institutions continued to meet via digital platforms. In March 2021, the Secretariat, in cooperation with GIE, MARCOGAZ, Methane Guiding Principles (MGP) and other leading industry experts, launched a new webinar series "Methane Mondays" in order to improve gas stakeholders' knowledge about the importance of tackling methane leakage and best practices in their measurement and reporting. Another successful webinar series, co-organized with the Agency for the Cooperation of Energy Regulators, explored the role of hydrogen in the transition towards a low-carbon economy.

As the first physical event following the Covid-19 lockdown, the fifth edition of the Energy Community Summer School empowered the new generation of energy and climate professionals to engage in the energy sectors in transition. The event was organized by the Energy Community Secretariat in cooperation with the Visegrad Fund and the Friedrich-Ebert-Stiftung, Dialogue Southeast Europe (FES-SOE). Polis University, Tirana; Comenius University Bratislava; Jagiellonian University, Krakow; Masaryk University, Brno; and REKK, Budapest act as project partners since 2016.



Fifth Energy Community Summer School, 21-28 August 2021, Vienna, Austria



During this reporting period, the Secretariat issued numerous publications and studies on issues of great importance to the Contracting Parties, including on boosting the use of renewables in transport, introducing carbon pricing, methane emissions in the gas sector and exploring the potential of hydrogen technologies. The Secretariat continued to publish the WB6 Energy Transition Tracker, which takes stock of the progress on reducing emission footprints, improving functioning of the energy markets, scaling up renewables, improving energy efficiency and planning for the decarbonised energy future, together with tailor-made visibility materials to emphasize the report's key messages. As in previous years, the Secretariat's Annual Imple-

mentation Report was the most downloaded document from the Energy Community website.

The Energy Community public website, as the main stakeholder communication tool, underwent development to better accommodate virtual and hybrid events. The Secretariat increased the Energy Community's presence on social media, gaining over 1.100 new followers on LinkedIn during the reporting period. Moreover, the Secretariat continued to serve as the focal point for journalists seeking pertinent information on energy and climate sector developments in the Contracting Parties.

Communications and outreach in numbers

86.097 Unique website visitors	39.340 Website downloads	362.119 Page views
12 Publications	7 Studies	142 News items
4.998 LinkedIn followers	3.256 Twitter followers	3.287 Facebook followers

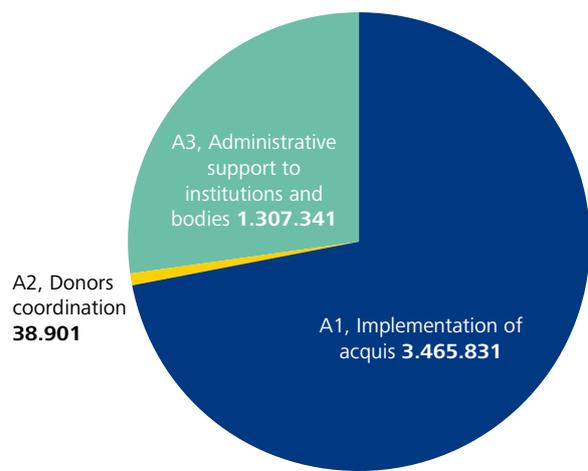
Staff

During the reporting period, the Secretariat engaged 34 permanently employed professionals, covering diverse expertise from all areas covered by the Energy Community. Apart from its permanent staff members, 20 temporary staff members, including interns, research fellows and locally recruited staff, made valuable contributions to the Secretariat's work.

Budget 2020

The Energy Community is funded by contributions from the Parties to the Energy Community Treaty. The total budget for 2020 amounted to EUR 4.812.073 and remained the same as in the previous year. This figure excludes EU4Energy Governance and donations.

2020 indicative spending per activity





13 Report of the Energy Community Secretariat on Enforcement and Dispute Resolution Activities

OCTOBER 2020 – OCTOBER 2021

Based on Article 67(b) of the Treaty establishing the Energy Community, the Secretariat shall review the proper implementation by the Parties of their obligations under the Treaty and initiate dispute settlement procedures when needed (Article 90 of the Treaty). The Secretariat reports annually on implementation, and, in accordance with Article 2(5) of the Energy Community Dispute Settlement Rules as amended in 2015 (the “DSR”), submits to the Ministerial Council an annual report on the application and interpretation of Energy Community law by national authorities of the Contracting Parties within the framework of cooperation between the Secretariat and the national authorities of the Contracting Parties. Finally, the Secretariat’s Procedural Act on the Establishment of a Dispute Resolution and Negotiation Centre (the “Centre”), together with Article 19(2) of the Dispute Settlement Rules require the Centre to draft a report on the results of the negotiations and the closure of the cases for submission to the Ministerial Council.

The present report covers these three sets of dispute resolution activities with the involvement of the Secretariat and is divided in three parts: activities related to the dispute settlement cases (Part I), activities based on Article 2 of the Dispute Settlement Rules related to cooperation with national authorities (Part II) and activities of the Dispute Resolution and Negotiation Centre (Part III).

Part I: Dispute settlement cases

By the time of drafting the present report, twenty-two (22) cases are open in preliminary procedure under Article 91 of the Treaty, of which eight (8) have been referred to the Ministerial Council by way of Reasoned Requests under Article 91 of the Treaty. Three (3) cases have been referred to the Ministerial Council under Article 92 of the Treaty.¹

Reasoned Requests submitted to the Ministerial Council for a Decision under Article 91 of the Treaty

On 27 May 2021, the Secretariat submitted a Reasoned Request to the Ministerial Council under Article 91 of the Treaty in Case **ECS-5/17** against **Bosnia and Herzegovina** concerning the lack of unbundling of distribution system operators. The Secretariat also initiated five cases based on Article 11(3) of the Dispute Settlement Rules for non-transposition of acquis communautaire. Two of those cases address the lack of trans-

position of Regulation (EU) 1227/2011 (REMIT Regulation), one against **Montenegro** (Case **ECS-3/21**) and another one against **Ukraine** (Case **ECS-4/21**). The other three cases concern the non-transposition of Directive 2014/52/EU amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment (Case **ECS-22/21** against **North Macedonia**, Case **ECS-23/21** against **Serbia** and Case **ECS-24/21** against **Moldova**). The Ministerial Council has been requested already in 2020 to decide on Case **ECS-10/18** against **Bosnia and Herzegovina** concerning a guarantee granted by Federation of Bosnia and Herzegovina for a loan to finance the Tuzla 7 coal-fired power plant project, and in Case **ECS-7/18** against **Moldova** for non-transposition of Directive 2001/80/EC on the limitation of emissions of certain pollutants into the air from large combustion plants and Chapter III and Annex V of Directive 2010/75/EU on industrial emissions.²

Requests submitted to the Ministerial Council for a Decision under Article 92 of the Treaty

On 24 September 2021, the Secretariat submitted two Requests inviting the Ministerial Council to establish serious and persistent breaches by individual Parties to the Treaty. Both of them cover breaches by **Serbia**, namely cases **ECS-10/17 S** for lack of unbundling of the gas transmission system operator Yugorosgaz-Transport, and **ECS-13/17 S** related to the failure to ensure third party access to the Horgoš interconnection point between Serbia and Hungary.

Cases where breaches have been established by the Ministerial Council Decision (Article 91 of the Treaty) which have been rectified by the Party in question

Four cases in which the Ministerial Council adopted a decision establishing breach under Article 91 of the Treaty have been complied with by the Contracting Parties concerned. Case **ECS-10/13** against **Albania** concerning the transposition of Directive 2012/27/EU has been complied with by adoption of amendments to the Energy Efficiency Law and their entry into force in April 2021. Case **ECS-6/18** against **Kosovo*** has been closed in July 2021 after adoption of an administrative instruction ensured compliance with the provisions of Directives 2001/80/EC and 2010/75/EU. Finally, Case **ECS-4/13 S** against **Serbia** has been terminated following the adoption of a new rulebook on technical and other requirements for liquid fuels adopted in December 2020, which removed the previous exemption for the sulphur content of heavy fuel oil. Finally, with the adoption

¹ In some of those cases, the Ministerial Council has already adopted one or several decisions under Article 92, but the breaches have not been rectified.

² Chapter III and Annex V of Directive 2010/75/EU were introduced in the Energy Community legal framework by Decision 2013/06/MC-EnC of the Ministerial Council.

of the Law on Energy Efficiency in Ukraine in October 2021, this Contracting Party complied with the Ministerial Council decision establishing a breach in Case **ECS-1/18** by transposing Directive 2012/27/EU.

Cases where breaches have been established by the Ministerial Council Decision (Article 91 of the Treaty) which have not been rectified by the Party in question

The failure by **Serbia** to comply with Ministerial Council Decisions establishing breaches in Cases **ECS-10/17** and **ECS-13/17** are subject to Requests to the Ministerial Council under Article 92 of the Treaty (see above). **Serbia** has also not yet rectified the breaches established by the Ministerial Council in Cases **ECS-9/13** and **ECS-9/13 S** related to the unbundling of natural gas transmission systems operators. **Bosnia and Herzegovina** has not complied with a number of Ministerial Council Decisions adopted already in the past, namely; in Cases **ECS-8/11** and **ECS-8/11 S** related to the lack of implementing the Second Energy Package in gas, in Cases **ECS-6/16** and **ECS-6/16 S** related to the lack of transposition of the Third Energy Package, in Cases **ECS-2/13** and **ECS-2/13 S** concerning the lack of implementation of Directive 1999/32/EC on Sulphur in Fuels, as well as in Case **ECS-1/14** concerning lack of transposition and implementation of Directive 2006/32/EC on energy end-use efficiency and energy services. Cases **ECS-3/18** against **Bosnia and Herzegovina** and **ECS-4/18** against **Ukraine** concerning the non-transposition of Regulation (EU) 347/2013 on guidelines for trans-European energy infrastructure have also not been rectified yet.

Open preliminary procedures in 2019

In the majority of cases currently registered at the Secretariat, formal dispute settlement procedures have not, or not yet been opened. Of the 22 cases currently subject to a formal preliminary procedure and not yet submitted to the Ministerial Council by way of Reasoned Request under Article 90 of the Treaty, six (6) were opened after last year's Implementation Report. The present Report covers only these new cases. The majority of new cases concern non-compliance with the environmental acquis. **ECS-7/21** against **North Macedonia**, **ECS-8/21** against **Kosovo***, **ECS-9/21** against **Bosnia and Herzegovina** and **ECS-10/21** against **Serbia** concern the failure to meet the National Emission Reduction Plans' ceilings for the reporting years 2018 and 2019. Case **ECS-15/21** against **Montenegro** concerns the continued operation of the country's thermal power plant Pljevlja, despite the expiry of the limited lifetime derogation period. Another case concerns lack of unbundling and certification of the electricity transmission system operator in **Moldova** (Case **ECS-18/21**).

Part II: Report on cooperation with national authorities under Article 2 DSR

Article 2 DSR provides for a cooperation mechanism between national authorities and the Secretariat by which national authorities can ask the Secretariat for assistance regarding questions of interpretation or application of Energy Community law. In the past reporting period, this mechanism has been used six times.

In **Albania**, the Secretariat was consulted by the State aid authority regarding a supplement to the concession agreement for a hydropower project containing a VAT reverse charge mechanism. The State aid authority also consulted the Secretariat regarding a state guarantee for the development of a floating solar PV plant on the surface of a hydropower reservoir. In **Bosnia and Herzegovina**, the State aid authority consulted the Secretariat regarding its draft decision on subsidies for gas prices in Sarajevo. In **Kosovo***, the Secretariat was consulted by the State aid authority with regard to the feed-in tariff granted to producers of energy from solar. Subsequently, the State aid authority rendered a decision finding the scheme to contain incompatible State aid. Furthermore, the State aid authority asked the Secretariat about specific aspects of support to the coal sector. In **Ukraine**, the Secretariat was consulted by the Antimonopoly Committee of Ukraine (AMCU) regarding non-utilization of cross-border transmission capacities to Bursh-tyn island. AMCU subsequently rendered a decision establishing the abuse of dominance in the form of capacity hoarding and pricing abuse, and imposed a fine on three undertakings.

Part III: Activities of the Energy Community Secretariat's Dispute Resolution and Negotiation Centre

The Energy Community Secretariat's Dispute Resolution and Negotiation Centre has continued to be involved in the settlement of disputes in the Contracting Parties, thus increasing regulatory stability for the benefit of consumers, governments and investors alike.

The dispute between the **Government of North Macedonia** and **Makpetrol** concerning their capital shares in GA-MA, a gas transmission system operator was closed, after the settlement agreement concluded in mediation was implemented in August 2021.

Discussions facilitated by the Centre between **Premier Energy Moldova**, a private investor in electricity supply and distribution, and the Moldovan regulator **ANRE** concerning the recognition of the costs for financing working capital in the network tariffs were ended in September 2021. The parties agreed to end the dispute and focus on the new supply methodology to be adopted by the regulator in line with best European practices.

A dispute related to balancing issues between **KESH** (the largest electricity producer in Albania) and **HPP Energji Ashta** was resolved, with the facilitation by the Centre's representatives, when balancing market rules entered into force on 1 April 2021.

In the gas sector, the Secretariat, together with ACER, has conducted a public consultation regarding the implementation of optimal capacity use at the interconnection points between the Energy Community Contracting Parties and EU Member States. The consultation was prompted by the fact that last summer Ukraine's gas grid operator GTSOU stated it would carry out maintenance at the Budince interconnection point on the border with Slovakia, leading to physical flows coming to a total halt. The consultation enlarged its scope to all interconnection points between Contracting Parties, and between

Contracting Parties and Member States. It thus aimed at gaining firmer understanding of stakeholders' views on best practices in enhancing connectivity, optimal use of existing capacity, market integration and competition. Fifteen respondents participated in this exercise, listing potential solutions in technical, commercial and market areas. ACER and the Secretariat will follow up on its results.

The dispute between several **associations of investors in renewable energy in Ukraine** and the **Government** mediated by the Centre was formally closed after the signature of a Memorandum of Understanding in 2020, and the adoption of Law 810-IX. Under the Memorandum, the Centre is still involved in its implementation.

In May 2021, the Centre was requested to mediate a dispute between several **civil society groups** and the **Government of Georgia** related to the Namakhvani hydropower project on the Rioni river. Between June and October 2021, the mediation reached agreements on three main topics: a de-escalation of the situation in the Rioni river valley, terms of reference and a selection procedure for an independent review of the environmental and contractual concerns raised by civil society, as well as an inclusion of civil society groups in drafting Georgia's National Energy and Climate Plan. In September 2021, the investor, which did not participate in the mediation process, terminated the agreement concluded for the Namakhvani project.



14 Infrastructure Report

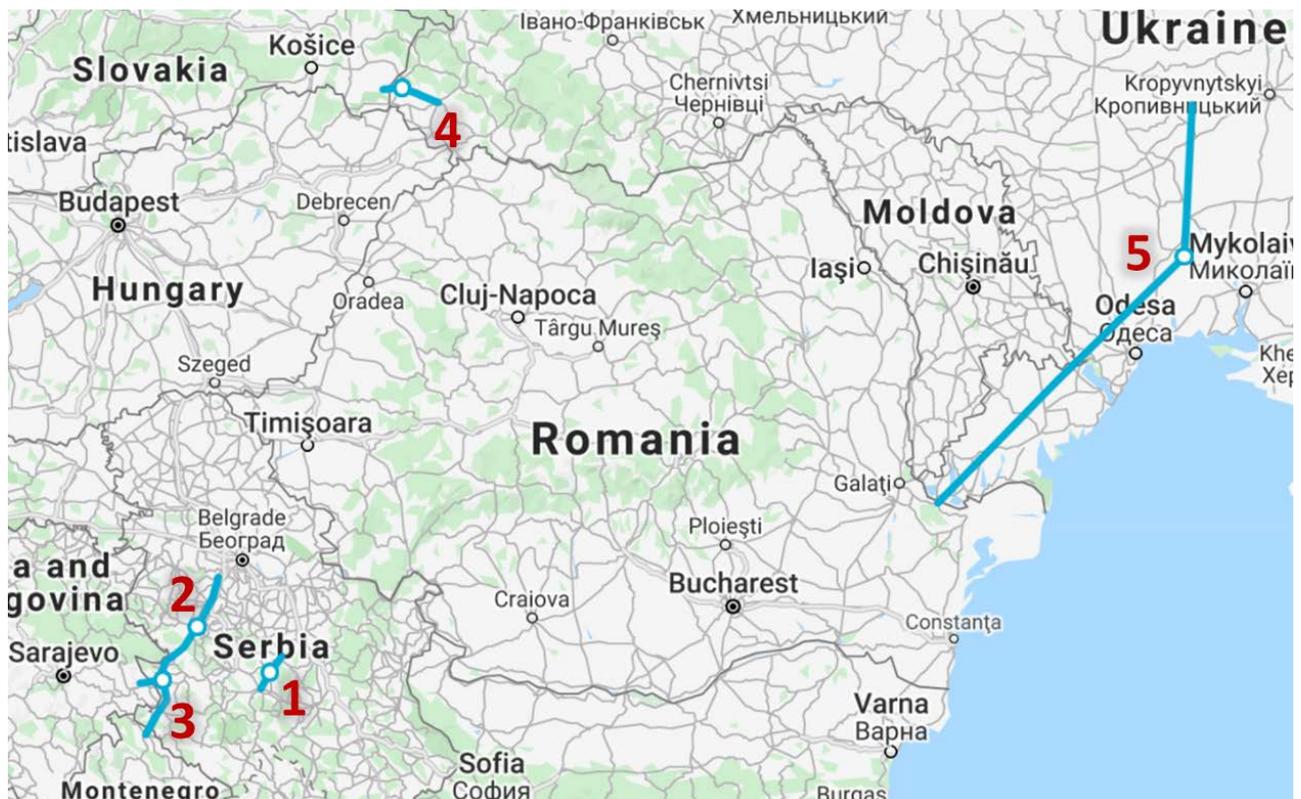
In order to boost sustainable large infrastructure development, the Energy Community in close coordination with the European Commission conducted the third selection process of Projects of Energy Community Interest (PECI) and Projects of Mutual Interest (PMI), in line with Regulation (EU) 347/2013 (TEN-E Regulation) during the course of 2020. The PEGI or PMI label should facilitate the implementation of infrastructure projects, through faster and more streamlined permitting procedures, improved regulatory treatment and financial support from EU and international financing institutions.

The Regulation defines the general eligibility criteria for the PEGI and PMI labels, namely that the project shall have cross-border impact and its potential benefits shall outweigh its costs. In order to select the most economically beneficial projects from the candidate list, electricity and gas market models were used for the assessment, underpinned by a methodology that in-

cludes a cost-benefit analysis and a multi-criteria assessment. The Regulation defines the specific criteria according to which the benefits shall outweigh the costs (market integration, sustainability and security of supply for electricity and gas projects and competition improvement for gas projects). Hence, the monetized socio-economic benefits representing the welfare impact of each project were calculated in the market models. This also included the carbon emissions impact and the potential emissions savings of the project, particularly for gas projects. In 2020, a green future scenario in line with the scenarios available in the European Union (ENTSOs) was incorporated as well as a more sophisticated treatment of project maturity.

The Ministerial Council adopted the PEGI and PMI lists in December 2020 (see pages 204 - 208).

PECI AND PMI PROJECTS IN THE ELECTRICITY SECTOR (December 2020)





PECI

Project Code	Map Index	Project Name	est. CAPEX [MEUR]	Status	Commissioning year
EL_01		Transbalkan Corridor	149,8		
a	1	New 400 kV OHL SS Kragujevac 2 (RS) – SS Kraljevo 3 (RS), with voltage level upgrade in SS Kraljevo 3 (RS) to 400 kV voltage level	29,6		2022
b	2	New double circuit 400 kV OHL SS Obrenovac (RS) – SS Bajina Basta (RS) with upgrade of SS Bajina Basta (RS) to 400 kV	59		2024
c	3	New 400 kV interconnection between SS Bajina Basta (RS) - Visegrad (BA) - Pljevlja (ME)	61,2		2026



PMI

Project Code	Map Index	Project Name	est. CAPEX [MEUR]	Status	Commissioning year
EL_07	4	400 kV Mukacheve (Ukraine) – V.Kapusany (Slovakia) OHL rehabilitation	20		2030
EL_09	5	750 kV Pivdennoukrainska (Ukraine) – Isaccea (Romania) OHL rehabilitation and modernization	388		no data provided



Investment on time

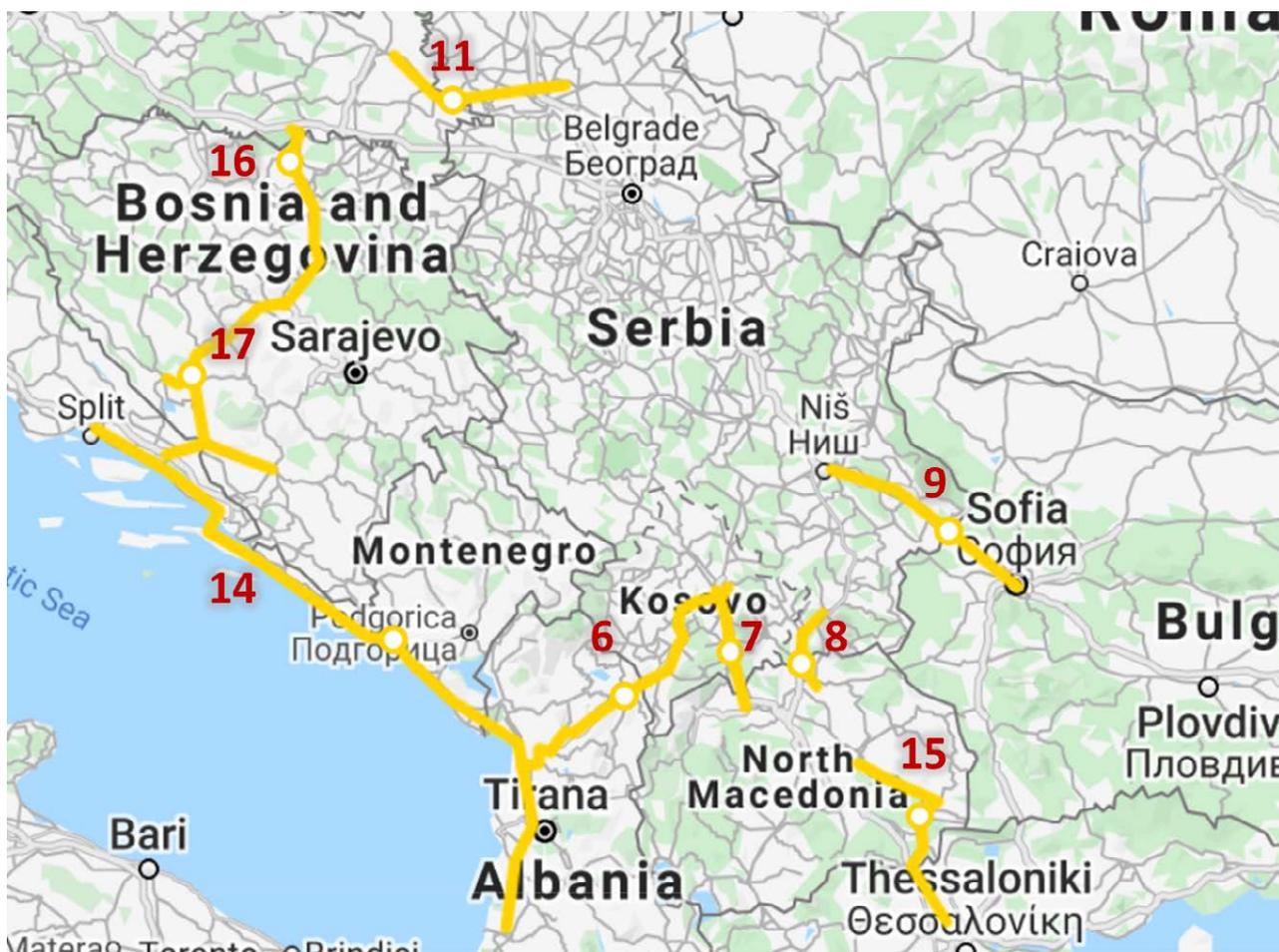


Rescheduled



Delayed

PECI AND PMI PROJECTS IN THE GAS SECTOR - WB6 COUNTRIES (December 2020)



 Peci						
Project Code	Map Index	Project Name	Cluster Name	est. CAPEX [MEUR]	Status	Commissioning year
Gas_13	6	Albania-Kosovo* Gas Pipeline-ALKOGAP	Supplying Kosovo* competing projects' cluster	214		No Date Provided
Gas_26	7	North Macedonia-Kosovo* Interconnector	Supplying Kosovo* competing projects' cluster	72		2024
Gas_11	8	Interconnector Serbia-North Macedonia	Supplying North Macedonia competing projects' cluster	23		2025
Gas_09	9	Interconnector Bulgaria-Serbia (PCI) as a competing project with TurkStream expansion in Serbia (Gastrans project)	N/A	164		2023

 Investment on time
  Rescheduled
  Delayed

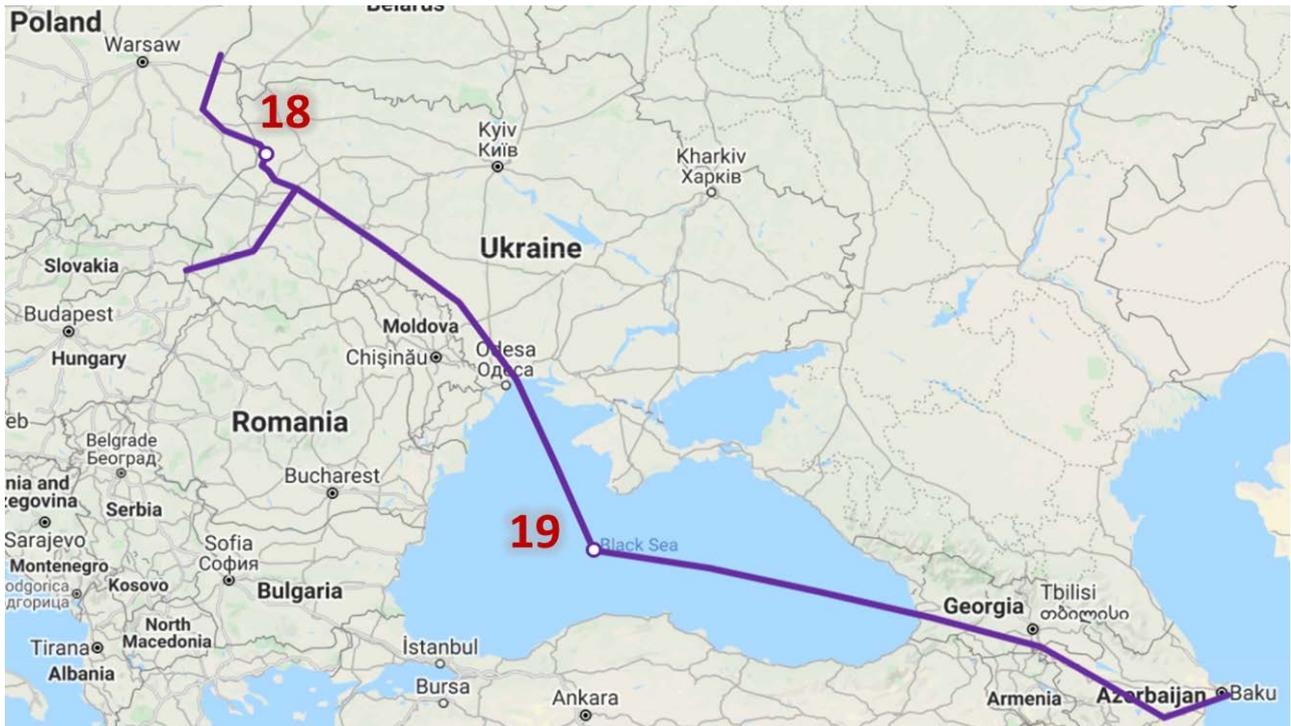
PECI AND PMI PROJECTS IN THE GAS SECTOR - EASTERN PARTNERSHIP COUNTRIES (December 2020)



 PMI						
Project Code	Map Index	Project Name	Cluster Name	est. CAPEX [MEUR]	Status	Commissioning year
Gas_29	10	SCP Georgian Offtake Expansion for EU LNG Swap	N/A	8		phase 1: 2023; phase 2: 2024
Gas_10	11	Gas Interconnector Serbia-Croatia (Phase I)	N/A	156		2028
Gas_28	12	Trans-Anatolian Pipeline Expansion - TANAPX	Southern Gas Corridor Expansion-TANAPX-SCPFIX-IAP	750		2026
Gas_22	13	South Caucasus Pipeline Further Expansion - SCPFIX	Southern Gas Corridor Expansion-TANAPX-SCPFIX-IAP	1047,5	Unknown	No Date Provided
Gas_16	14	Ionian Adriatic Pipeline - IAP	Southern Gas Corridor Expansion-TANAPX-SCPFIX-IAP	586		2025
Gas_4b	15	Interconnector Greece-North Macedonia	Supplying North Macedonia competing projects' cluster	111		2024
Gas_01	16	Interconnector Bosnia and Herzegovina-Croatia North	Supplying Bosnia and Herzegovina competing projects' cluster	94		2026
Gas_03	17	Interconnector Bosnia and Herzegovina-Croatia South	Supplying Bosnia and Herzegovina competing projects' cluster	252		2024

 Investment on time
  Rescheduled
  Delayed

PECI AND PMI PROJECTS IN THE OIL SECTOR (December 2020)



 PECI					
Project Code	Map Index	Project Name	est. CAPEX [MEUR]	Status	Commissioning year
Oil_1	18	Ukraine - Poland oil pipeline (Brody - Adamowo)	360		2025

 PMI					
Project Code	Map Index	Project Name	est. CAPEX [MEUR]	Status	Commissioning year
Oil_2	19	Transportation of different crudes of oil via Southern Druzhiba pipeline	8		To Be Confirmed

 Investment on time
  Rescheduled
  Delayed

The Secretariat monitors the bi-annual progress of existing PE-CIs and PMIs via its web platform (PLIMA). During the course of 2021, the Secretariat, in cooperation with the project promoters, and in line with the requirements of Regulation (EU) 347/2013, updated the PLIMA platform based on the information supplied by the promoters.

A new TEN-E Regulation is in the legislative procedure within the European Union and will potentially be adopted by the first or second quarter of 2022. The new Regulation foresees a fundamental shift in the eligible project categories, particularly the removal of oil and most natural gas infrastructure project categories and the introduction of hydrogen and gas smart grid categories. Once the Regulation is adopted in the Europe-

an Union, the adaptation and adoption process in the Energy Community will follow. At the same time, based on the Regulation currently in force in the Energy Community, the Ministerial Council should adopt new PE-CI and PMI lists by the end of 2022. This would result in the forthcoming Energy Community PE-CI and PMI lists of 2022 staying in force until the end of 2024, and thus contradicting the possible new TEN-E Regulation in the EU.

In order to avoid this situation, the Ministerial Council is invited to take a decision that would postpone the adoption of new PE-CI and PMI lists until the updated TEN-E Regulation is in place in the Energy Community. This creates the opportunity to implement the new project categories foreseen by the updated TEN-E Regulation at an earlier stage.



15 Methodology Used For Calculating Implementation Indicators

Background

For its assessment underpinning the findings of this report, the Secretariat used specific indicators for the assessment of transposition and implementation, and a methodology to calculate the summary indicators and the overall implementation score. The implementation indicator tables are based on a methodology quantifying the Contracting Parties' success in transposing and implementing the acquis and having in place effective institutions. It is based on standardised assumptions and evaluations, cases under the Energy Community's dispute settlement mechanism, country missions, review of legislation, market analysis, expert interviews and desk research. The quantification of all figures used to measure implementation was performed by experts of the Energy Community Secretariat.

The final data set entailed more than 2.000 individual values that were used to produce 42 key implementation indicators across the areas of work assessed by this Implementation Report.

Approach

Transposition assessment

The transposition assessment is presented by using an easy to understand traffic light system.

	full transposition or significant progress
	partial transposition with ongoing activities
	no transposition progress

The summary table (Overview of Transposition Performance by Contracting Parties, see page 8) groups together all the transposition assessments indicators displayed in the implementation tables of the nine Contracting Parties.

Implementation assessment

The implementation assessment is based on a system of performance indicators aggregated at several levels.

1. A total of 42 implementation indicators aggregated per each Contracting Party across the areas of work: electricity, gas, oil, renewable energy, energy efficiency, environment, climate, infrastructure, statistics and cybersecurity. Aggregation is based on the weighting explained in the table below, and results presented for each Contracting Party (chapters 3-11);

2. Key sectoral implementation indicators aggregating the values at sectoral level: electricity, gas, oil, sustainability (including renewable energy, energy efficiency, environment, climate), used in summary visualization (Overview of Implementation Performance by Contracting Parties, see page 7);

3. Summary indicators – the overall implementation score for each Contracting Party and overall (average) implementation score for the Energy Community calculated based on the weighting explained in the table below, and presented on page 7.

All of the values are normalised to percentages between 0% and 100%, where 100% implies full implementation.

For the Contracting Parties where certain indicators are not applicable (for example due to the lack of a gas market in Kosovo* and Montenegro), these indicators were not taken into account in the overall score, but the remaining indicators were increased in weight, where justifiable.

Implementation indicator structure and weighting

Indicator name	Indicator weight
Overall Implementation Indicator	1,00
1. Electricity	0,27
Unbundling	0,20
Access to the system	0,20
Wholesale market	0,20
Retail market	0,20
Regional integration	0,20

2. Gas	0,27
Unbundling	0,25
Access to the system	0,35
Wholesale market	0,15
Retail market	0,15
Interconnectivity	0,10
3. Oil	0,09
Stockholding obligation	0,45
Emergency procedures	0,30
Fuel specifications of petrol, diesel and gas oil for non-road mobile machinery	0,15
Monitoring compliance and reporting including rules on penalties	0,10
4. Sustainability	0,27
4.1. Renewable Energy	0,30
National Renewable Energy Action Plan	0,35
Quality of support schemes	0,28
Grid integration	0,12
Administrative procedures and guarantees of origin	0,15
Renewable energy in transport	0,10
4.2. Energy Efficiency	0,30
Energy efficiency targets and policy measures	0,20
Energy efficiency in buildings	0,20
Energy efficiency financing	0,20
Energy efficient products - labelling	0,20
Efficiency in heating and cooling	0,20
4.3. Environment	0,30
Environmental impact assessment (EIA) and strategic environmental assessment (SEA)	0,25
Sulphur in fuels	0,25
Large combustions plants and industrial emissions	0,25
Nature protection	0,25
Environmental liability	n/a*
4.4. Climate	0,10
National greenhouse gas emissions monitoring and reporting systems	0,50
National Energy and Climate Plans (NECPs)	0,50
5. Institutions	0,045
Regulatory authority	0,50
Competition authority	0,25
State aid authority	0,25
6. Infrastructure	0,02
National competent authority	0,40
Manual of procedures	0,30
National regulatory authority involvement	0,30
7. Statistics	0,025
Annual statistics	0,40
Monthly statistics	0,20
Price statistics	0,40
8. Cybersecurity	0,01
Institutions and legislation	0,50
Requirements for operators and energy regulatory authority	0,50

* implementation not assessed this year, as the relevant Directive entered into force in the Energy Community on 1 January 2021

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