Energy Community

Annual Implementation Report

Energy Community Secretariat

1 November 2020

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01 State of Implementation

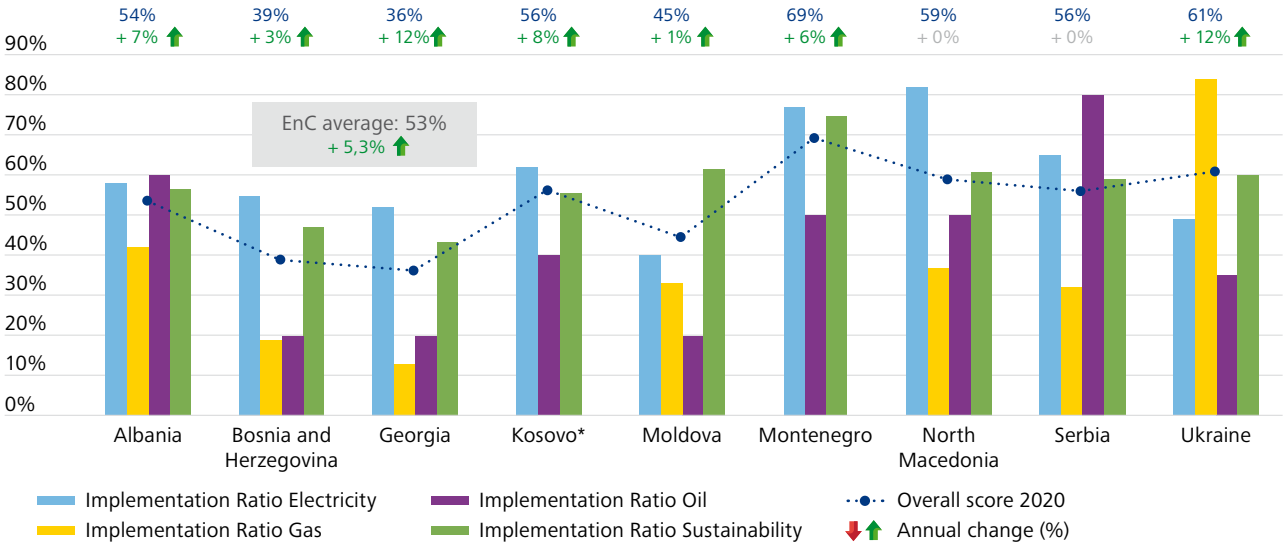
Energy Community at a crossroads

That the first year of the new decade would be challenging was clear even before the virus struck. The European Union, representing 87% of the Energy Community's population, had raised the energy transition bar high by announcing its Green Deal at the end of 2019. Would the Contracting Parties, with their specific socio-economic challenges and a lot of catching up in terms of energy reform still ahead of them, be able to follow the same path? Or would the rift created by slow implementation of the acquis by (some) Contracting Parties, the subject of many Implementation Reports in the past, widen further with the European Union having accelerated the transformation of the energy sectors.

Some of the recent developments did not really give rise to optimism. Decarbonisation, renewables and energy efficiency targets for 2030 were discussed as early as 2017 but have still not been set, and the Ministerial Council could not even agree on the adoption of non-binding decarbonisation guidelines in early 2020. What is more, the 2019 Ministerial Council failed to impose measures against two Contracting Parties in cases of clear-cut and long-standing breaches of the acquis communautaire – by joining up with each other they prevented the unanimity necessary to adopt those measures. One may recall that the enforcement procedures are the litmus test for the effectiveness of exporting European law to neighbouring countries which have committed to follow these rules, in other words the heart and soul of the Energy Community. Moreover, the announced introduction of carbon border adjustments for countries not pricing in carbon emissions – the majority of Contracting Parties – entailed discussions about the future of their energy imports to the European Union.

But then again, there are plenty of indications that the Energy Community is not stagnating but actually moving forward on the path of energy transition, and has in some cases passed the point of no return. Without a legal obligation to do so, many Contracting Parties are currently engaging in drafting integrated energy and climate plans in line with the Governance Regulation of the Clean Energy Package. Without participating in the EU's emission trading scheme, Montenegro has developed and launched its own cap-and-trade system. With the Energy Community's acquis on reducing pollution from coal-fired power plants not yet respected, air pollution became an important issue of public concern in many Contracting Parties. Despite not adhering to the Paris Agreement, the use of coal came closer to being abandoned in Kosovo*[1] with the failure of the Kosovo e Re project, against which the Secretariat had opened infringement procedures. North Macedonia publicly announced a coal phase-out programme. These are encouraging signs.

Overview of Implementation Performance by Contracting Parties

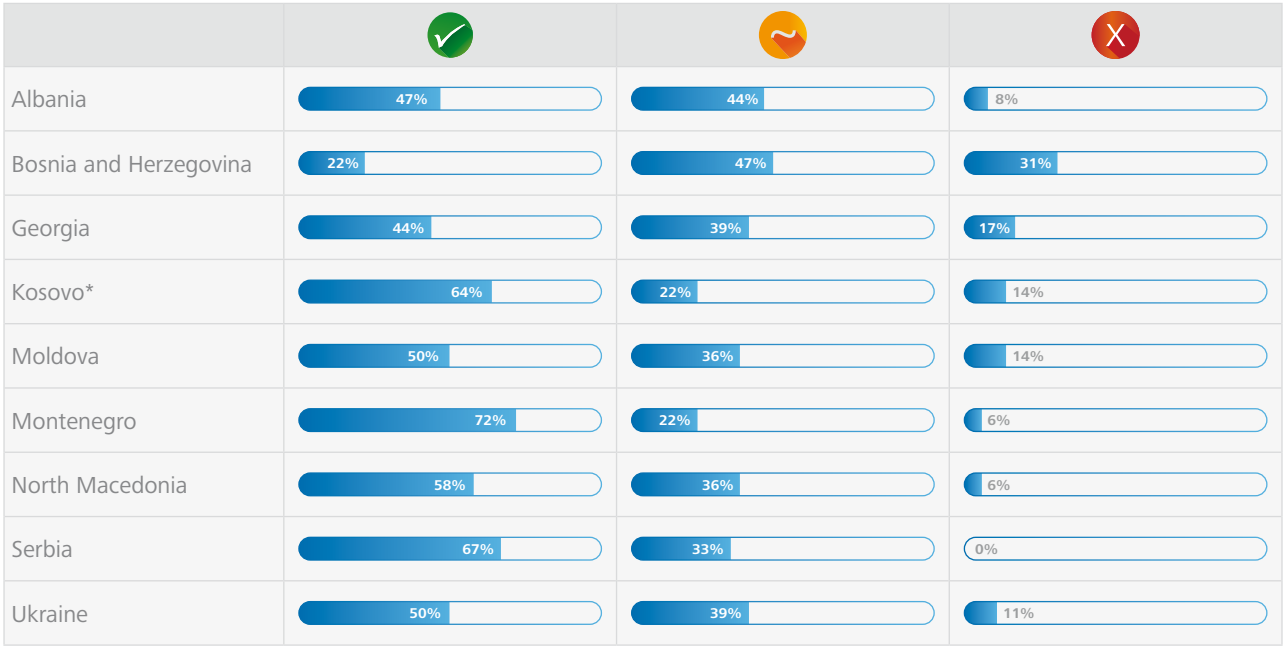


A detailed description of the methodology used for calculating the implementation indicators is available on page 202 of this report.

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



Full transposition or significant progress | Partial transposition and ongoing activities | No transposition progress

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

Source: compiled by the Energy Community Secretariat

Even without new renewables targets, the deployment of green electricity has been increasing in many Contracting Parties. Illustrating this positive trend, some Contracting Parties such as Albania, North Macedonia and Montenegro managed to achieve remarkable results with auctioning their support schemes, or even doing without subsidies. Persevering with administratively allocated support, on the other hand, led to crises and investor-state disputes, particularly in Ukraine. Support for the renewable energy source that affects the environment in the most adverse manner, small hydropower plants, increasingly faces opposition in several Contracting Parties and may eventually cease altogether.

And even in the area of market opening and integration, where the Western Balkan countries have come close to a standstill over the last years, the Contracting Parties in Eastern Europe have shown remarkable dynamics. 2020 saw the youngest member of the Energy Community, Georgia, be particularly active in this respect. Ukraine, which had unbundled its gas transmission system operator at the end of 2019, harvested the fruit of this achievement by concluding a new gas transit agreement with Russian Gazprom. And finally, most Contracting Parties' utilities, operators and authorities, supported by the Energy Community and international donors, passed the test of Covid-19 rather well and deserve a great deal of praise for that.

In the upcoming period, the Energy Community will have to prove that it can not only support the energy transition but actively boost and steer the process, taking the Contracting Parties along on the European pathway towards decarbonisation. The signs are looking good: after many years of negotiations, the amendments to the Energy Community Treaty will finally be sealed at the end of this year, which is expected to enhance compliance with the acquis by the Contracting Parties and at the same time unlock the potential for market integration between the European Union and the Western Balkans, at least in the electricity sector. A study identifying the scope for the 2030 energy efficiency, renewables and decarbonisation targets to be adopted, almost last minute, in 2021 together with the Clean Energy Package, has been launched. The European Union's interest in phasing out coal, pricing carbon and extending the "renovation wave" for non-efficient buildings also in its immediate neighbourhood is increasing. It has also pledged recovery and transition support to these countries. Taken together with the many bottom-up initiatives by and within the Contracting Parties, these activities forebode the revival of the Energy Community as a community for the European energy transition and integration across the entire continent.

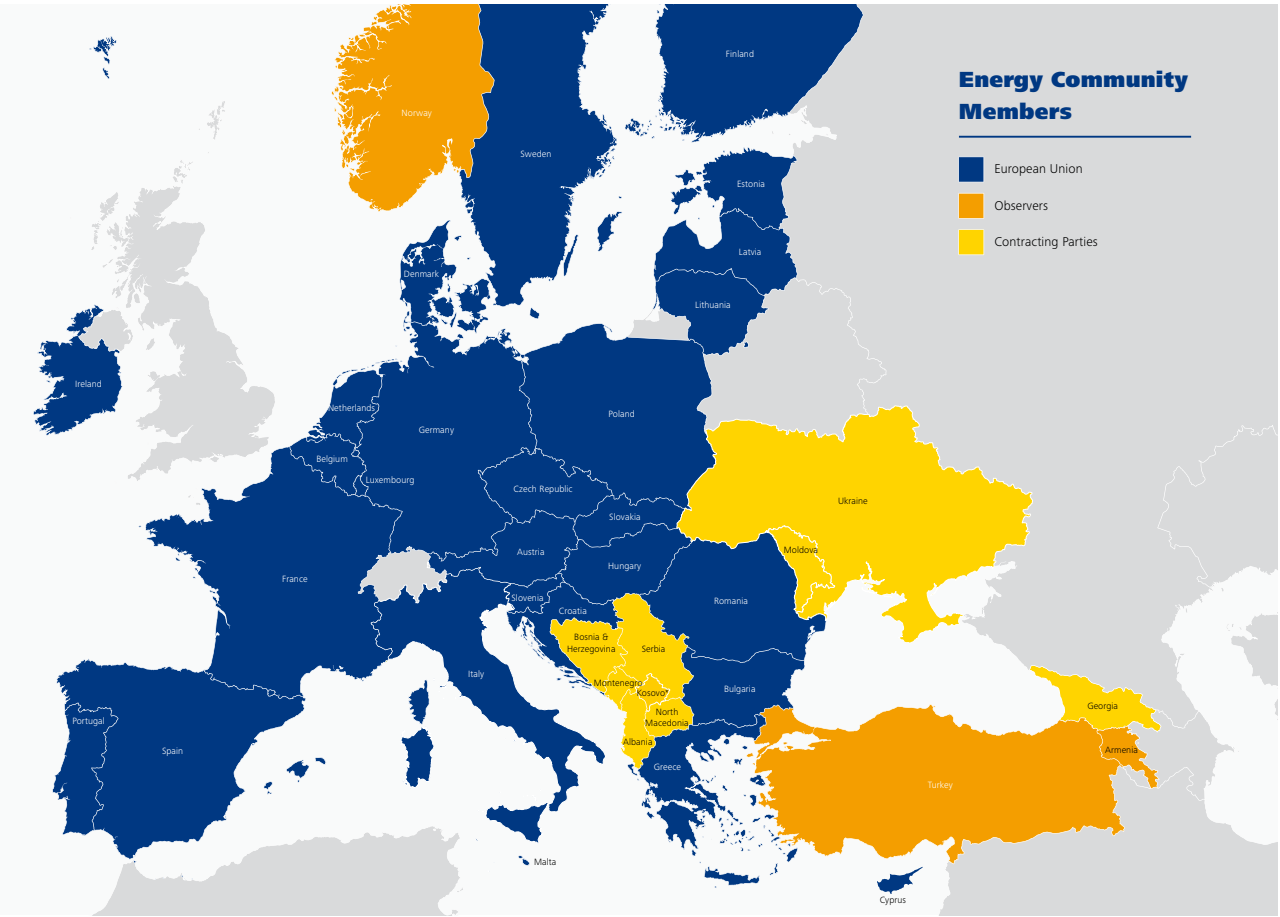
Janez Kopač

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 2020, 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.

Recognizing the need for continuous improvement, the Energy Community has been discussing how to modernize the Treaty for the last six years. The 2020 Ministerial Council is envisaged to finalize the negotiations on Treaty amendments.

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 to the case 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.

In the following chapter, the Secretariat reports about the open cases under both Article 91 and 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 adoption of the Clean Energy Package together with the 2030 targets will be tabled for the 2021 Ministerial Council.

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 force[2]. 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). Also this year, the assessment of Georgia's compliance against the acquis remains incomplete as some of the implementation deadlines set by the country's Accession Protocol are yet to expire.

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

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

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

General Policy Guidelines on the 2030 targets for the Contracting Parties of the Energy Community[3]

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

3 The General Policy Guidelines represent the political consensus reached in the 16th Ministerial Council on the 2030 targets for the Contracting Parties of the Energy Community in November 2018.

03 Annual Report

Annual Report on the Activities of the Energy Community 2019 - 2020

The Annual Report on the activities of the Energy Community outlines key actions and achievements in the period from 1 November 2019 to 1 November 2020 following the requirements of Article 52 of the Energy Community Treaty. It highlights the results of key activities set out in the Energy Community Work Programme for 2019 and 2020.

Spearheading the energy transition

Progressing the energy transition continued to be an integral part of all Energy Community activities during this reporting period. Convening under the Moldovan Presidency on 13 December 2019 in Chisinau, the 17th Energy Community Ministerial Council gave an important political impetus to advancing ambitious energy and climate reforms, including preparations for the adoption of key elements of the Clean Energy for All Europeans package.

The Secretariat continued to assist the Contracting Parties in the development of National Energy and Climate Plans, the central instrument to guide them in the energy transition. The Secretariat worked to strengthen modelling capacities and supported timely consultations among the Parties to ensure that regional challenges are tackled in the most secure and cost-effective way. North Macedonia was the first Contracting Party to submit its draft plan to the Secretariat for formal review.

As follow up to the Western Balkan 6 connectivity initiative, the Secretariat launched a new instrument to monitor the progress the WB6 parties are making on their energy transition path - the Energy Transition Tracker. It maps the Parties' emissions footprint, energy market development, penetration of renewables, energy efficiency measures and progress in the development of integrated National Energy and Climate Plans. The report also put in the spotlight the Secretariat's work on implementation monitoring of the Large Combustion Plants Directive, essential for the health of citizens, air quality as well as decarbonisation.

To guide informed decision-making, the Secretariat designed several policy guidelines, including on energy efficiency financing mechanisms, renewables self-consumers and small hydropower plants. The Secretariat continued to assist the Contracting Parties in designing competitive support schemes for renewables. The Energy Community stayed abreast of new developments important for the energy transition including energy storages and hydrogen.

In November 2019, the Secretariat supported by stakeholders embarked on a process of analysing carbon pricing options for the Energy Community. The aim is to propose an effective carbon pricing mechanism in the electricity sector and prepare the Contracting Parties to join the EU Emissions Trading Scheme in the future. The results of the study will be unveiled by the end of 2020.

This reporting period also saw the Secretariat intensify its awareness raising activities on methane emissions from the gas sector, including the importance of adequate reporting. The Contracting Parties' gas industry has begun to collect methane emissions data, based on the methodology applied by EU companies. In addition, the Secretariat joined, as a supporting organisation, the Methane Guiding Principles, a global initiative aiming at reducing methane emissions across the natural gas value chain.

Recognising that its supporting role does not come without environmental impact, the Secretariat launched the process of introducing the Eco-Management and Audit Scheme (EMAS). The Secretariat expects to obtain the EMAS certification in the course of 2021.

17th Energy Community Ministerial Council, 13 December 2019, Moldova, Chisinau

Energy reform in a time of crisis

Treaty implementation activities were strongly impacted by the Covid-19 pandemic. Assisting in addressing effectively the challenges posed by the crisis and putting in place the needed recovery measures was at the forefront of the Energy Community's activities.

At the outset of the crisis, the Secretariat made all its resources available to support the Contracting Parties in the management of the crisis and the recovery process. The Secretariat coordinated virtual meetings among regulators, distribution system operators and members of the Permanent High Level Group of the Energy Community. It continuously monitored the security of supply situation and published regular updates on its website. This included reporting on the current status of financial liquidity of the electricity sector; measures taken by energy regulators and distribution system operators to address the crisis; and information about support from international financial institutions and commercial banks.

The Secretariat advocated for a smart recovery, including focus on energy efficiency as a source of boosting economic regeneration after the crisis. It called for enhanced investments in building renovations, increased use of sustainable heating and cooling, support for economies to produce nationally and install energy efficient technologies in residential, public and commercial buildings.

Creating an integrated energy market

Despite the difficult circumstances, several Contracting Parties succeeded in making far-reaching progress in their energy reform paths with the assistance of the Secretariat. Georgia, the newest Contracting Party, made a giant leap forward by adopting a set of laws transposing the Third Energy Package, the Renewables Directive, the Energy Efficiency Directive and the Energy Performance of Buildings Directive.

During this reporting period, the Secretariat drafted numerous primary and secondary laws and reviewed more than 150 national legal acts to assist the Contracting Parties in the transposition of the acquis. The Secretariat was deeply engaged in several transmission system operator certification processes in Bosnia and Herzegovina, Moldova, Serbia and Ukraine. Work also continued on adopting a legally binding framework for market coupling based on the reciprocal application of the Regulation on establishing a guideline on capacity allocation and congestion management (CACM). In order to make some of its legal assessments of particular provisions of national laws and secondary legislation public, the Secretariat launched a new document series "compliance notes". The first such assessments focused on provisions on public service obligations and transmission tariffs.

The Secretariat continued its market monitoring activities through the Energy Community Regulatory Board (ECRB), and shared best practice experience with other regional regulatory bodies and deepened international cooperation with the Agency for Cooperation of Energy Regulators (ACER), the Council of European Energy Regulators (CEER) and the Association of Mediterranean Energy Regulators (MEDREG).

Secretariat's reviews of national legal acts per country in first to third quarter of 2020

Contracting Party	Number of reviews
Albania	10
Bosnia and Herzegovina	44
Georgia	14
Kosovo*	2
Moldova	13
Montenegro	4
North Macedonia	7
Serbia	4
Ukraine	37

Infrastructure as the backbone of market integration

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. The PECI 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 Secretariat monitors the yearly progress of existing PECIs and PMIs via its web platform (PLIMA) and reports to the Ministerial Council.

The Regulation defines the general eligibility criteria for the PECI 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 market driven projects from the candidate list, electricity and gas market models were used for the assessment, underpinned by a methodology that included 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). The monetized benefits that represent the socio-economic welfare impact of each project were also calculated. The Secretariat continuously aims to implement methodological improvements to the assessment process. 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 aim was to better reflect the future impact (benefit) of the projects and the actual development of the projects towards commissioning.

The PECI and PMI lists are expected to be adopted by the Ministerial Council during its forthcoming session, in line with the recommendation of the Permanent High Level Group.

Leading regional energy market connectivity in the Western Balkans

The so-called WB6 Initiative financially supported by the Grant Contract to "Technical Assistance to Connectivity in the Western Balkans - Component 2: Regional Energy Market", which is funded by the European Union and implemented by the Secretariat, concluded in December 2019. It contributed to strengthening regional cooperation among the six Contracting Parties of the Western Balkans. The project successfully delivered 11 national, one bilateral and five regional projects, which were instrumental in tackling some of the biggest challenges the WB6 were facing in creating a regional electricity market.

The WB6 regional electricity connectivity closing event brought together 80 stakeholders from all WB6 Contracting Parties on 5 December in Tivat, Montenegro. Event participants underlined that national projects delivered concrete results, while regional projects, e.g. day-ahead market coupling, cross-border balancing, capacity calculation, etc., need follow up to be implemented and reap the full benefits of the technical assistance.

Regional Energy Market Connectivity in the Western Balkans, project closing event, 5 December 2019, Tivat, Montenegro

EU4Energy Governance: Improving the legislative and regulatory environment in the Eastern Neighbourhood

The Energy Community Secretariat is one of the implementing partners of the "EU4Energy Governance" technical assistance project, funded by the European Union, under the EU4Energy Initiative. Within this four-year project initiated in June 2016, the Secretariat delivers technical assistance to Georgia, Moldova and Ukraine to improve the legislative and regulatory environment of their energy sectors in line with their Energy Community Treaty obligations and Association Agreements with EU.

In close collaboration with authorities, over 70 regulatory drafts and studies were prepared for Georgia, Moldova and Ukraine since the launch of the project. More than 200 workshops and 12 high-level policy talks were organized in order to address the need for specific reforms and accelerate the pace of adoption of legislation. Training, exchange of experience and best practice was provided to over 1.500 officials from the three beneficiary countries. The EU4Energy Governance project will complete its four-year Phase I at the end of 2020.

Signing of Memorandum of Understanding on Cooperation in the Area of Security of Gas Supply between Moldova and Ukraine, 13 December 2019, Chisinau, Moldova

EU4Energy Governance Workshop on Support in Development of Regulation on Protection of Vulnerable Customers in Natural Gas and Electricity Sectors, 4 December 2019, Tbilisi, Georgia

Supporting the energy digitalization future

To help address the twin challenges of market liberalization and decarbonization, the Secretariat issued a study on electricity system adequacy and capacity mechanisms in the Western Balkans. Another key element for maximizing system reliability that was in focus during this reporting period was the roll-out of smart grids. The Secretariat's scoping study on smart grid opportunities in the Energy Community pinpointed energy digitalization areas of most relevance for the Contracting Parties. It also proposed concrete regional projects that could be eligible for technical and financial assistance.

Given the increased shift towards energy system digitalization, enhanced cooperation in the field of cybersecurity continued at the level of the Energy Community. The central point of departure was the 2019 study on cybersecurity, which assessed the current state of development of the Contracting Parties with respect to the EU cybercrime legal framework. The Cyber Group set to work to develop guidelines for the early implementation of cybersecurity acquis and technical standards in the Energy Community.

Communications and outreach

The Energy Community continued to increase its visibility. Communication activities by the Secretariat played a central role in reaching this objective.

Due to the Covid-19 crisis, the Secretariat shifted its engagement with stakeholders to digital platforms. The majority of events, including the flagship Energy Community Electricity (Athens), Gas, Oil and Sustainability Forums, took place via video conference. The Secretariat launched a series of free educational webinars on energy topics, which took place on a weekly basis from mid-April until the end of June 2020. The online lectures offering insights into contemporary energy issues attracted a new audience to the Energy Community and its activities. To continue its knowledge sharing activities under the Energy Community Summer School, the Secretariat launched the webinar series "Eternal Summer" in October 2020 filled with lectures by representatives of the faculty, alumni and other friends of the Summer School.

Reaching out to citizens and stakeholders, the Secretariat conducted four public consultations covering hydropower, renewables self-consumers, energy infrastructure and fuel quality. It also launched two new discussion platforms dedicated to gas distribution and district heating and cooling.

The Secretariat continued to improve the Energy Community public website making it an even more valuable tool for stakeholders. It expanded its legislative observatory of national secondary legislation, which now covers over 800 secondary legal acts and other national documents that have been assessed by the Secretariat. The website newly features a database on the sustainable use of biomass-based heating. All information is available in seven languages, Albanian, Bosnian, Croatian, English, Macedonian, Montenegrin and Serbian.

Communications and outreach in numbers

108 Events	4.125 Event participants	4 Public consultations
78.477 Unique website visitors	36.605 Website downloads	3.706 LinkedIn followers
4 Policy Guidelines	4 Studies	4 Compliance notes

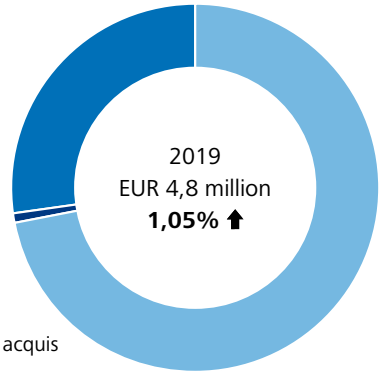
Staff

During the reporting period, the Energy Community Secretariat engaged 38 permanently employed professionals, covering diverse expertise from all areas covered by the Energy Community. Apart from its permanent staff members, fifteen interns, seven temporary staff members and one secondee made valuable contributions to the Secretariat's work.

Budget 2019

The Energy Community is funded by contributions from the Parties to the Energy Community Treaty. The final budget for 2019 amounted to EUR 4.812.073 (2018: EUR 4.761.931). This figure excludes EU4Energy Governance, Connectivity in the Western Balkans technical assistance funding and donations.

2019 indicative spending per activity



- A1, Implementation of acquis **3.465.831 EUR**
- A2, Donors coordination **38.901 EUR**
- A3, Administrative support to institutions and bodies **1.307.341 EUR**

04 Report on Enforcement and Dispute Resolution Activities

Based on Article 67(b) of the Treaty, the Secretariat reviews the proper implementation by the Parties of their obligations under the Treaty and initiates dispute settlement procedures where 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 (hereinafter, 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, together with Article 19(2) of the DSR 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 DSR 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, fourteen (14) cases were open in a preliminary procedure under Article 91 of the Treaty of which three (3) have been referred to the Ministerial Council by way of Reasoned Requests under Article 91 of the Treaty. Five (5) cases have been referred to the Ministerial Council under Article 92 of the Treaty.[4]

Reasoned Requests submitted to the Ministerial Council for a Decision under Article 91 of the Treaty

On 12 July 2019, the Secretariat submitted a Reasoned Request to the Ministerial Council under Article 91 of the Treaty in **Case ECS-13/17 against Serbia** related to the failure to ensure third party access to the Horgoš interconnection point between Serbia and Hungary. The Reasoned Request submitted by the Secretariat on 26 June 2020 in **Case ECS-10/18 against Bosnia and Herzegovina** concerns a guarantee granted by the Federation of Bosnia and Herzegovina in favour of the Export-Import Bank of China for a loan to the public utility Elektroprivreda BiH for the Tuzla 7 coal-fired power plant project. Finally, on 9 September 2020, the Secretariat submitted a Reasoned Request 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 (for existing plants) and Chapter III and Annex V of Directive 2010/75/EU on industrial emissions (for new plants).

Requests submitted to the Ministerial Council for a Decision under Article 92 of the Treaty

On 22 September 2020, the Secretariat submitted Requests to the Ministerial Council to extend measures imposed against **Bosnia and Herzegovina** in cases:

- **ECS-8/11 S** (concerning lack of compliance with the provisions of the gas acquis from the Second Energy Package) and failing to implement previous Ministerial Council Decisions (Decision 2013/04/MC-EnC under Article 91 and four decisions under Article 92: 2014/04/MC-EnC, 2015/10/MC-EnC, 2016/16/MC-EnC and 2018/17/1MC-EnC);
- **ECS-6/16 S** (concerning lack of transposition of the Third Energy Package) and failing to implement previous Ministerial Council Decisions (Decision 2016/07/MC-EnC in Case ECS-6/16 and 2018/16/MC-EnC in Case ECS-6/16 S);
- **ECS-2/13 S** (concerning lack of transposition and implementation of some provisions of Directive 1999/32/EC relating to a reduction in the sulphur content of certain liquid fuels) and failing to implement previous Ministerial Council Decisions (Decision 2016/03/MC-EnC in Case ECS-2/13 and 2018/13/MC-EnC in Case ECS-2/13 S).

On the same date, the Secretariat also submitted two Requests to the Ministerial Council to establish serious and persistent breaches in cases **ECS-10/17 S against Serbia** for not complying with requirements ensuring the effective unbundling of the gas transmission system operator Yugorosgaz-Transport and failing to implement previous Ministerial Council Decision 2019/02/MC-EnC, and **ECS-1/18 against Ukraine** concerning the non-transposition of Directive 2012/27/EU on energy efficiency and failing to implement previous Ministerial Council Decision 2018/6/MC-EnC.

Cases where breaches have been established by the Ministerial Council under Article 91 of the Treaty and have not been rectified by the Party in question

On 2 February 2018, the Ministerial Council adopted decisions under Article 91 of the Treaty establishing breaches in two case concerning lack of transposition and implementation of Directive 2006/32/EC on energy end-use efficiency and energy

4 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.

services, namely in **Case ECS-10/13 against Albania** Decision 2018/03/MC-EnC, and **Case ECS-1/14 against Bosnia and Herzegovina** Decision 2018/04/MC-EnC. In both cases certain activities aimed at rectifying the breach have been taking place but compliance has not been achieved and the Directive is not yet fully transposed in either of the two Contracting Parties.

Three more cases **(ECS-2/18 against Albania, ECS-3/18 against Bosnia and Herzegovina and ECS-4/18 against Ukraine)**, in which the Ministerial Council has adopted decisions under Article 91 on 29 November 2018 (Decision 2018/07/MC-EnC, Decision 2018/08/MC-EnC and Decision 2018/09/MC-EnC respectively), concern the non-transposition of Regulation (EU) 347/2013 on guidelines for trans-European energy infrastructure. National measures transposing this Regulation have not been adopted in either of the two Contracting Parties, and the breaches are not rectified.

Finally, on 16 March 2020, the Ministerial Council adopted a decision in **Case ECS-6/18 against Kosovo*** for failure to transpose Directives 2001/80/EC and 2010/75/EU related to large combustion plants. Kosovo* has still not complied with this Decision because the draft legislation aiming to transpose the two directives has not yet been adopted.

Open preliminary procedures in 2019

At the time of drafting this report, fourteen (14) cases were open in preliminary procedure against Contracting Parties, three of which have been opened after last year's Implementation Report. Those new cases are cases ECS-1/20 against Serbia concerning the lack of adoption of the National Emission Reduction Plan (NERP) under Directive 2001/80/EC on the limitation of emissions of certain pollutants into the air from large combustion plants, ECS-3/19 against Albania related to the environmental impact assessment procedure of the planned hydropower plant Poçem on the Vjosa river and ECS-4/19 against Kosovo* related to compliance of the contractual framework for the Kosova e Re coal-fired power plant project with the rules on State aid in the Treaty.

Other information

Twenty-one (21) more cases are currently registered at the Secretariat, but dispute settlement procedures have not or not yet been opened. Almost all of those cases are complaints lodged to the Secretariat under Article 90 of the Treaty.

There are currently no open cases against Georgia, Montenegro and North Macedonia.

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 year, this mechanism has been used two times.

In **Albania**, the Secretariat agreed to cooperate with the competition authority in the investigation regarding alleged anti-competitive conduct on the Albanian electricity market through manipulation of tender procedures and implementation of two exclusive contracts. The Secretariat assisted the Albanian Competition Authority with its assessment of the allegations contained in the complaint and in particular the application of competition law to these facts. The case has been concluded successfully with the termination of the respective contracts and commitments not to enact any similar contracts.

In **Ukraine**, the Secretariat was consulted by the Antimonopoly Committee of Ukraine (AMCU) regarding potential infringements of competition law through not utilizing cross-border transmission capacities to Burshtyn island and thereby achieving higher prices. The Secretariat shared with AMCU information on the definition of the relevant market and relevant case-law in the European Union. AMCU has finalised the collecting of information and evidence and issued preliminary conclusions; no decision has yet been rendered.

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, which increases regulatory stability for the benefit of investors and governments alike, and supports compliance with the Energy Community acquis.

The mediation proceedings between the **Secretariat and Bosnia and Herzegovina** regarding an ongoing dispute settlement proceeding (Case ECS-10/18 related to the guarantee for the Tuzla 7 power plant) ended on 5 December 2019 without an agreement. The negotiations became futile after, during the mediation and drafting of an interim agreement, the Federal Minister of Finance signed the guarantee whose non-compliance with Energy Community State aid rules constituted the subject of the case.

On 26 March 2020, the Secretariat's Dispute Resolution and Negotiation Centre was requested to facilitate discussions between the Moldovan regulator **ANRE**, and **Moldovagaz** related to the determination of the technological consumption and technical losses in the gas distribution networks of Moldovagaz' affiliated companies. As a result of the facilitation, Moldovagaz on 5 August 2020 agreed to submit to ANRE calculations and data for the period 2011 - 2019, on the basis of which ANRE will approve the final amount of technological consumption and technical losses for the purpose of distribution tariff calculation in the following months.

On 2 December 2019, negotiations in the dispute regarding the restructuring of the support mechanism for renewable energy projects in Ukraine commenced between **three associations of renewable energy producers (EUEA, UWEA and UARE) and the Ministry of Energy and Environmental Protection of Ukraine**. The Secretariat's Dispute Resolution and Negotiation Centre mediated these negotiations, which were aimed at avoiding a potentially large number of arbitration cases and

improving the prospect for renewables in Ukraine in general. A Memorandum of Understanding was signed on 10 June 2020 by the Prime Minister of Ukraine, the acting Minister of Energy and Environmental Protection of Ukraine as well as EUEA and UWEA. The central elements of the Memorandum of Understanding are: the restructuring of the feed-in tariff for existing photovoltaic and wind projects, increased financial liability of the renewable energy producers for imbalances, as well as the compliance with payment obligations to the renewable energy producers. On 21 July 2020, Law No. 3658, which implements the Memorandum of Understanding, was adopted by the Ukrainian Parliament.

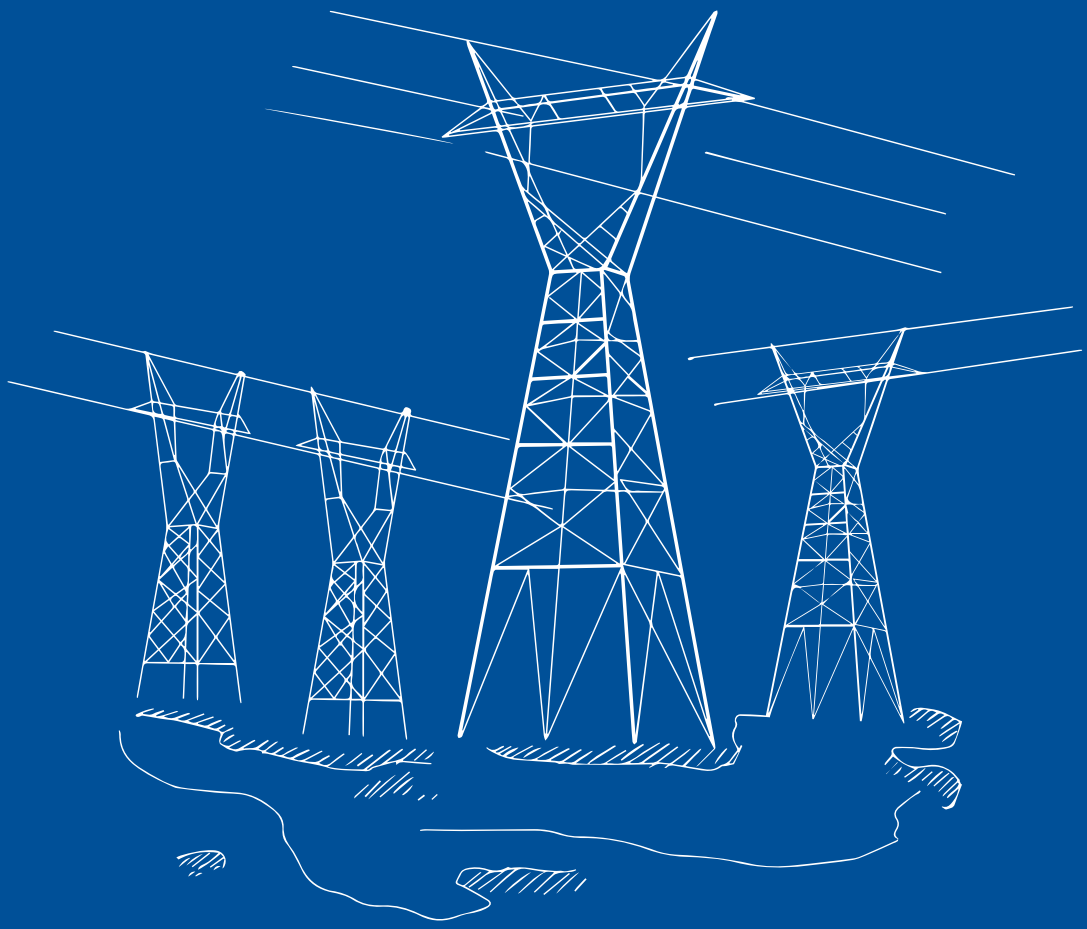
Implementation Report 2020

In the Contracting Party summary tables, the report displays 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 which 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 serious and persistent breach or imposing measures under Article 92 of the Treaty.

05

Albania



Albania

Summary Implementation

Summary Indicators	Transposition Assessement	Implementation Status	Descriptions
Electricity	✓	58%	Implementation in the electricity sector of Albania is moderately advanced.
Gas	✓	42%	Implementation in the gas sector of Albania is moderately advanced.
Oil	~	60%	Implementation in the oil sector of Albania is moderately advanced.
Renewable Energy	~	59%	Implementation in the renewable energy sector of Albania is moderately advanced.
Energy Efficiency	~	42%	Implementation in the energy efficiency sector of Albania is moderately advanced.
Environment	✓	74%	Implementation in the environment sector of Albania is well advanced.
Climate	~	40%	Implementation in the climate sector of Albania is still at an early stage.
Infrastructure	✓	28%	Implementation in the infrastructure sector of Albania is still at an early stage.
Statistics	~	77%	Implementation in the statistics sector of Albania is well advanced.
Cybersecurity	~	57%	Implementation in the cybersecurity sector of Albania is moderately advanced.

Overall number of cases: 3

Procedure by Article 91

- ECS-10/13 Energy efficiency
- ECS-4/17 Electricity
- ECS-03/19 Environment

Albania
State of Energy Sector Reforms

Albania has adopted framework legislation for electricity and gas in line with the Third Energy Package but implementation is lagging behind in some crucial aspects. Together with the Secretariat, the regulatory authority ERE certified both electricity and gas transmission system operators as unbundled. The electricity transmission system operator was immediately accepted as a full member of ENTSO-E in 2017. The distribution system operator OSHEE is legally unbundled, while functional unbundling is still ongoing. The electricity wholesale market is still determined by bilateral transactions between the state-owned generator KESH and utilities on the basis of excessive regulation under a public service obligation scheme.

However, during the reporting period, the long-awaited national power exchange came a decisive step closer. The transmission system operators of Albania and Kosovo*, as founding shareholders, established the company ALPEX, which will work to realize day-ahead market coupling planned for the second half of 2021. The retail market is being opened at a slow pace. A clause in the Power Sector Law unduly conditions the eligibility of customers below 35 kV to choose the supplier to technical requirements. Based on ERE's decision, standardized load profiles should be effective as of 1 January 2021 however.

Regulation of the nascent gas sector is developing well but still needs to stand the test of practice. The Trans Adriatic Pipeline (TAP) will bring gas by the end of this year to Europe. Albania must enhance its efforts to use this opportunity to develop a gas market. Otherwise, it will be reduced to the role of a transit country. Albania failed to adopt the draft Law on the establishment, maintenance and management of minimum security stocks of crude oil and petroleum products for the third year in a row.

In the area of climate and environment, adoption of the draft Law and Decision on a mechanism for monitoring and reporting of greenhouse gas emissions, transposing Monitoring Mechanism Regulation (EU) 525/2013, and the draft Climate Change Law are still pending. As regards intermittent renewables, a law of 2017 marked a shift from feed-in tariffs to contracts for difference, which still depends on the establishment of a day-ahead market. While the first auctions for solar feed-in tariffs in 2018 yielded favourable support rates, the contract with the winning consortium has not been signed. A second round of solar auctions ended with a record low price of 24,89 EUR/MWh. Both the Energy Efficiency Directive and the Energy Performance of Buildings Directive have not been fully implemented. Finally, the quality of environmental impact assessments, in particular for hydropower projects, is regularly giving rise to complaints. During the reporting period, projects on the rivers Vjosa and Valbona were in focus of the Secretariat's scrutiny.

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 and a number independent hydropower producers, the players on the electricity market are all state-owned. Albania will be a transit country for the TAP once operational, 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 TAP have not yielded concrete results. The production of electricity from solar plants is yet to begin. Like all Western Balkan Contracting Parties, it is well interconnected with its neighbours.

Albania
Electricity

Electricity Implementation

Electricity Indicators	Transposition Assessement	Implementation Status	Descriptions
Unbundling	✓	78%	The transmission system operator is unbundled and certified. The functional unbundling of the distribution system operator is ongoing, but not yet completed.
Access to the system	✓	75%	Network access tariffs are approved and published. Third party access to the new interconnection line with Kosovo* is still not ensured. The Transparency Regulation and Connection Network Codes are transposed, implementation is still to be completed.
Wholesale market	~	43%	The excessive public service obligation in the wholesale market impedes the development of competition. The power exchange company was established by the transmission system operators of Albania and Kosovo* as shareholders. The procedure for designation of the operator for market coupling is in place. REMIT has not been transposed.
Retail market	~	58%	The retail market remains regulated for all customers below 35 kV. Eligibility is unduly made conditional on the fulfilment of technical requirements.
Regional integration	✓	36%	Market coupling project with Kosovo* depends on the operationalisation of ALPEX. A market coupling project with Italy, Montenegro and Serbia is in an early phase. The transmission system operator signed a Load Frequency Control (LFC) agreement with the transmission system operator of Kosovo*. Cross-border capacities are allocated through SEE CAO, except split auctions with EMS of Serbia.

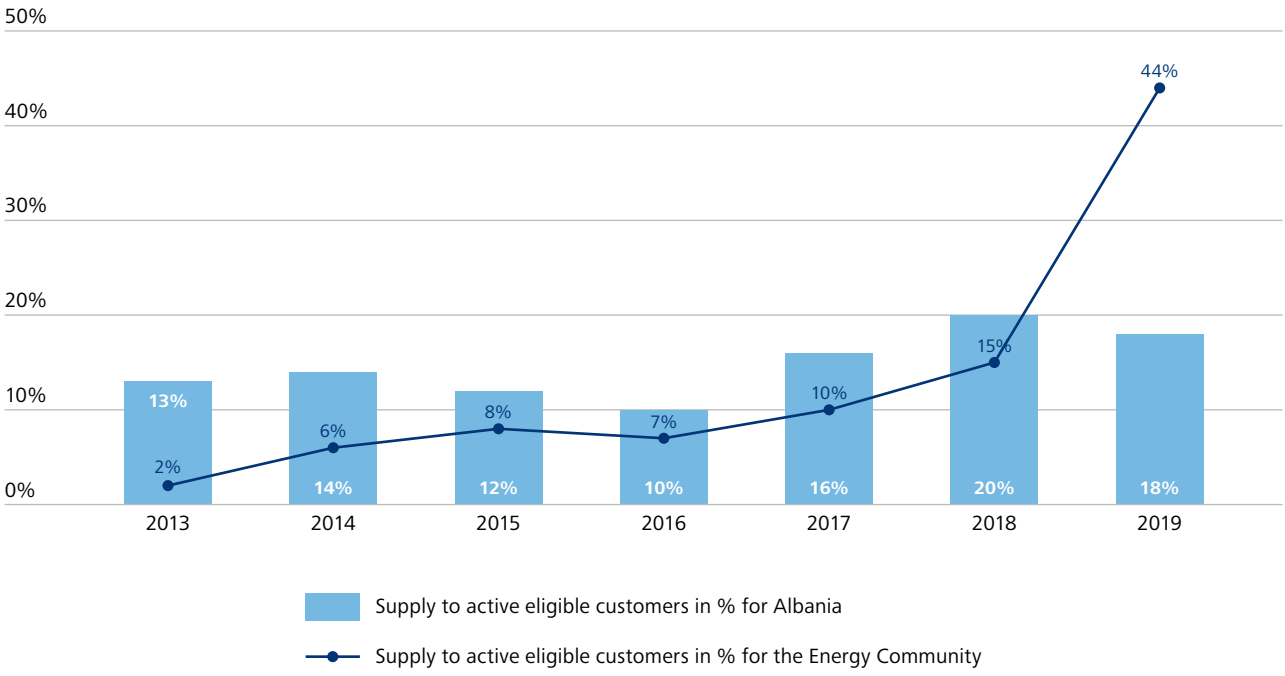
The reform of the electricity market is on track but progress this year has been slow with limited achievements in terms of implementation of the acquis.

The transmission system operator OST was certified and finally fulfils the independence conditions requested in the Secretariat's Opinion, following the adoption of amendments to the Power Sector Law in May 2020. The distribution utility OSHEE was transformed into a holding company with three subsidiaries, respectively licensed as the distribution system operator OSSH, the universal service supplier FSHU and the electricity market supplier FTL. Functional unbundling is currently being implemented and will be verified by the Secretariat.

The most notable progress was made in the process of establishment of the organized electricity market. Following the Government's 2019 decision on the establishment of a power exchange, to be established by the transmission system operator OST, an open tender for the selection of other shareholders was completed in 2020. It resulted in the selection of the transmission system operator of Kosovo*, KOSTT. The establishment and registration of the power exchange company ALPEX was completed in October 2020. According to the plan, the operation of ALPEX and market coupling of Kosovo* and Albania should be launched simultaneously in the first half of 2021.

An early implementation of the Capacity Allocation and Congestion Management (CACM) Guideline started by the transposition of the procedure to designate the nominated electricity market operator, adopted by the regulatory authority ERE in line with the recommendation of the Energy Community Regulatory Board. This is a precondition for market coupling.

Retail Market Opening



Source: Ministry of Infrastructure and Energy

Until the establishment of the power exchange, excessive public service obligations remain in place on the wholesale market. The universal service supplier FSHU and the distribution system operator OSSH are obliged to buy all the electricity required to supply customers under universal service and cover losses in the distribution system from the generation company KESH under regulated conditions. If electricity is purchased at market conditions, KESH is obliged to compensate the costs incurred from the price difference.

After an ongoing dry run, the balancing market is expected to start operating in 2021 according to the balancing rules approved by the regulatory authority in 2020, which allow for cross-border trading of balancing services.

All three Network Codes on network connections were transposed by ERE in 2018. The transmission system operator OST started publishing data on the ENTSO-E Transparency Platform. The REMIT Regulation is yet to be transposed and implemented. According to the amendments to the Power Sector Law of February 2018, all customers, except those connected to high voltage and 35 kV, continue to be supplied by the universal service supplier, FSHU, at regulated prices, until the distribution system operator OSSH informs the customer that technical preconditions related to the installation of interval meters are in place. For a period of two years after OSSH's decision the customers can be supplied by FSHU under the supply of last resort. This undermines the eligibility right of customers and the interest of new suppliers to enter the retail market.

Cross-border capacities are allocated through SEE CAO, except split auctions applied with EMS of Serbia. Allocation of capacities on the 400 kV interconnection line with Kosovo* is pending implementation of the recently signed connection agreement between the transmission system operator of Kosovo* KOSTT and the ENTSO-E.

In 2019, OST and KOSTT signed an agreement on establishing a new load frequency control (LFC) block Albania – Kosovo* (AK). The implementation will commence upon the establishment of the KOSTT system as a separate control area. It is expected that this is the first step of a future broader integration of Albania with organized regional electricity markets.

Albania
Gas

Gas Implementation

Gas Indicators	Transposition Assessement	Implementation Status	Descriptions
Unbundling		65%	Two transmission system operators were unbundled and certified in Albania. The Trans Adriatic Pipeline (TAP) has to fulfil the certification conditions before its commercial operation date. Albgaz has not yet fulfilled the conditions in the certification decision.
Access to the system		50%	Albgaz and TAP adopted network codes, which were approved by ERE. ERE transposed the Gas Network Codes in Albania. Third party access to the transmission system is regulated by tariffs adopted in line with an entry/exit methodology.
Wholesale market		0%	Albania does not have a natural gas wholesale market. REMIT is not in place.
Retail market		26%	All customers are eligible. Supply and customer protection legislation is developed.
Interconnectivity		40%	Albania may be connected to international gas networks once the TAP becomes operational by the end of 2020. The gas emergency rules are in place.

Albania has been developing natural gas by-laws since the adoption of the Gas Law in 2015. The regulatory framework established so far in Albania is at a much higher level than its infrastructure development progress.

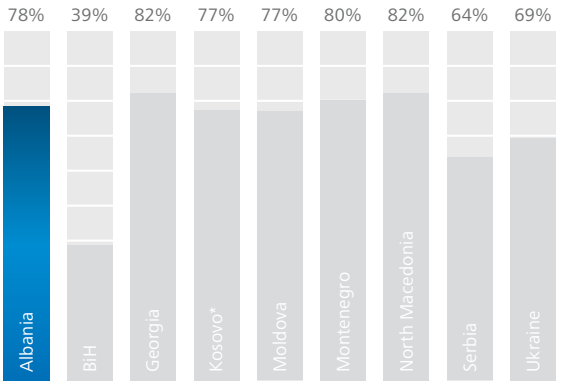
Albgaz, a state-owned company, has been unbundled and certified under the ownership model. However, the certification decision conditions requiring the complete transfer of competences over investment decisions to the ministry exercising control over Albgaz have not been fulfilled for the second year in a row, which seriously affects its independence of the ministry controlling the energy sector. Albgaz acts as a combined operator for both transmission and distribution activities. The compliance officer's report is regularly forwarded to ERE and the Secretariat. The other certified transmission system operator, TAP, has to fulfil the certification conditions before the commercial operational date, in November 2020.

The major progress during this reporting period was the adoption of the Albgaz network code for its future transmission system and the adoption of the TAP network code, the latter in line with the exemption decision of ERE and Italian and Greek national authorities. The regulatory authority ERE transposed the Network Codes for gas in Albania.

The gas market rules in Albania have still not been adopted. As envisaged in the market model, these should provide for bilateral trading on the natural gas retail and wholesale markets and day-ahead and balancing markets. Albania has also not accelerated the implementation of the Gas Master Plan during this reporting period. In this situation, TAP could be limited to transit through Albania, without the possibility to supply Albania. By contrast, supply rules and customer protection by-laws are in place. A gas emergency plan was adopted by the Government with the Secretariat's assistance.

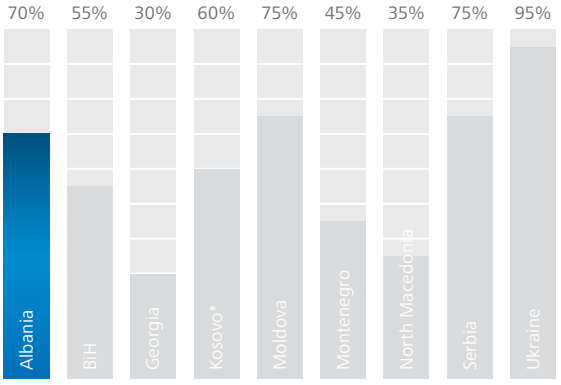
Albania
National Authorities

Regulatory Authority



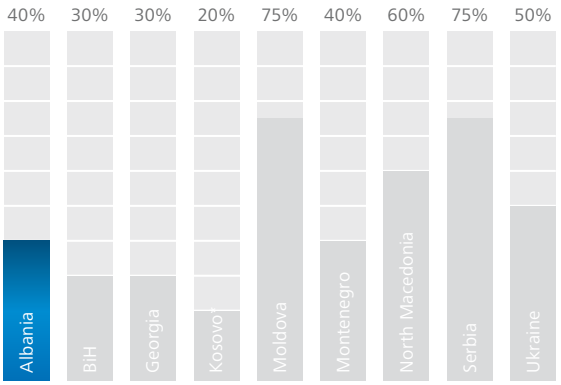
In the reporting period, the Energy Regulatory Entity (ERE) was one of the four Contracting Party regulators which transposed the electricity and gas Network Codes. However, only regulatory derogation criteria for electricity generators have been developed so far. Measures for implementation of the REMIT Regulation depend on legal reforms. Since 2015, ERE has not done enough to enforce functional unbundling of the electricity distributor. On the positive side, ERE was one of only two regulators that adopted rules for designation of a Nominated Market Operator as an instrument for early implementation of the Regulation on Electricity Capacity Allocation and Congestion Management.

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. Based on a complaint transmitted by the Secretariat, the ACA found that the national generation incumbent KESH abused its dominant position through the implementation of two contracts with the traders GSA and EFT; the decision has been implemented by terminating the respective contracts by KESH.

State Aid Authority



Due to the merger of the Ministry of Economy and the Ministry of Finance, 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. Therefore, the SACU is effectively not operational, with staff being appointed to complete tasks on an ad hoc basis. Furthermore, the independence of the members of the SAC from the Ministry of Economy and Finance is questionable. In the reporting period, the SAC approved State support to the TAP project in the form of a limitation of applicability of future increases of profit tax. The SAC has assessed the Albanian renewables support scheme.

Albania
Oil

Oil Implementation

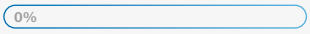
Oil Indicators	Transposition Assessement	Implementation Status	Descriptions
Stockholding obligation		40%	The oil industry is required by law to hold stocks equal to at least 90 days of average sales. The precise quantity of these stocks is determined based on the previous year's operations. However, the reporting system and calculation methodology do not comply with Directive 2009/119/EC.
Emergency procedures		40%	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. Current emergency procedures are not sufficient to meet the Directive's requirements.
Fuel specifications of petrol, diesel and gas oil for non-road mobile machinery (NRMM)		80%	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		80%	A system for fuel quality control is in place and specified in legislation. Fuel quality monitoring is ensured through Annual Monitoring Programmes.

For the third 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. However, the legislation should be amended to ensure that sulphur content in gas oil for non-road mobile machinery (NRMM) is less than 10 mg/kg. Despite many efforts by the Government, some challenges are still to be tackled, including contamination that may occur during distribution, which is difficult to identify unless rigorous monitoring and analysis systems are in place.

Albania
Renewable Energy

Renewable Energy Implementation

Renewable Energy Indicators	Transposition Assessement	Implementation Status	Descriptions
National Renewable Energy Action Plan			Albania submitted its NREAP, amendments as well as all three Progress Reports on implementation of the Directive to the Secretariat. With a share of 34,86% of renewable energy in its energy mix in 2018, Albania is in a slight delay compared to the planned trajectory of 35,6% for 2017 - 2018.
Quality of support schemes			The support scheme for renewable energy in Albania is, as prescribed by law, based on administratively set feed-in tariffs and contracts for difference, which are still to be introduced upon the establishment of a day-ahead market. So far, two solar PV auctions were conducted for which power purchase agreements are yet to be signed.
Grid integration			Renewable energy producers have priority access to the grid. They are balance responsible, with the exemption of existing producers, which are exempted from balancing responsibility until the balancing market is established, but no later than the end of 2022.
Administrative procedures and guarantees of origin			The administrative procedures for authorization, permitting and licensing are not streamlined and require simplification, including the designation of a one-stop shop. An electronic system for issuing, transfer and cancellation of guarantees of origin is not yet in place.
Renewable energy in transport			Provisions related to the sustainability of biofuels are still not transposed and the legal framework remains completely non-compliant with Directive 2009/28/EC.

In the reporting period, Albania held a second and very successful auction for solar PV. Otherwise, there were no improvements in the implementation of the renewable energy acquis. Although the electricity sector is almost completely renewable in Albania, additional efforts are needed in heating and cooling as well as in the transport sector to reach the overall target for renewables in 2020.

In May 2020, amendments to the Decision on approving the methodology for determining the annual purchase price of electricity to be paid to existing renewable power generators were adopted. The amendments envisage a decrease of the coefficient for the calculation of the feed-in tariff for existing hydro power plants based on a financial analysis by the Ministry of Infrastructure and Energy. It is contested by investors.

The energy regulatory authority has still not adopted the methodology for the calculation of the renewable energy surcharge to be paid by the final consumers of electricity. Currently, the surcharge is included in a non-transparent way in the distribution tariff and paid only by the final electricity customers connected to the distribution grid, which discriminates against the final customers connected to the transmission network exempted from the charge, and could amount to State aid.

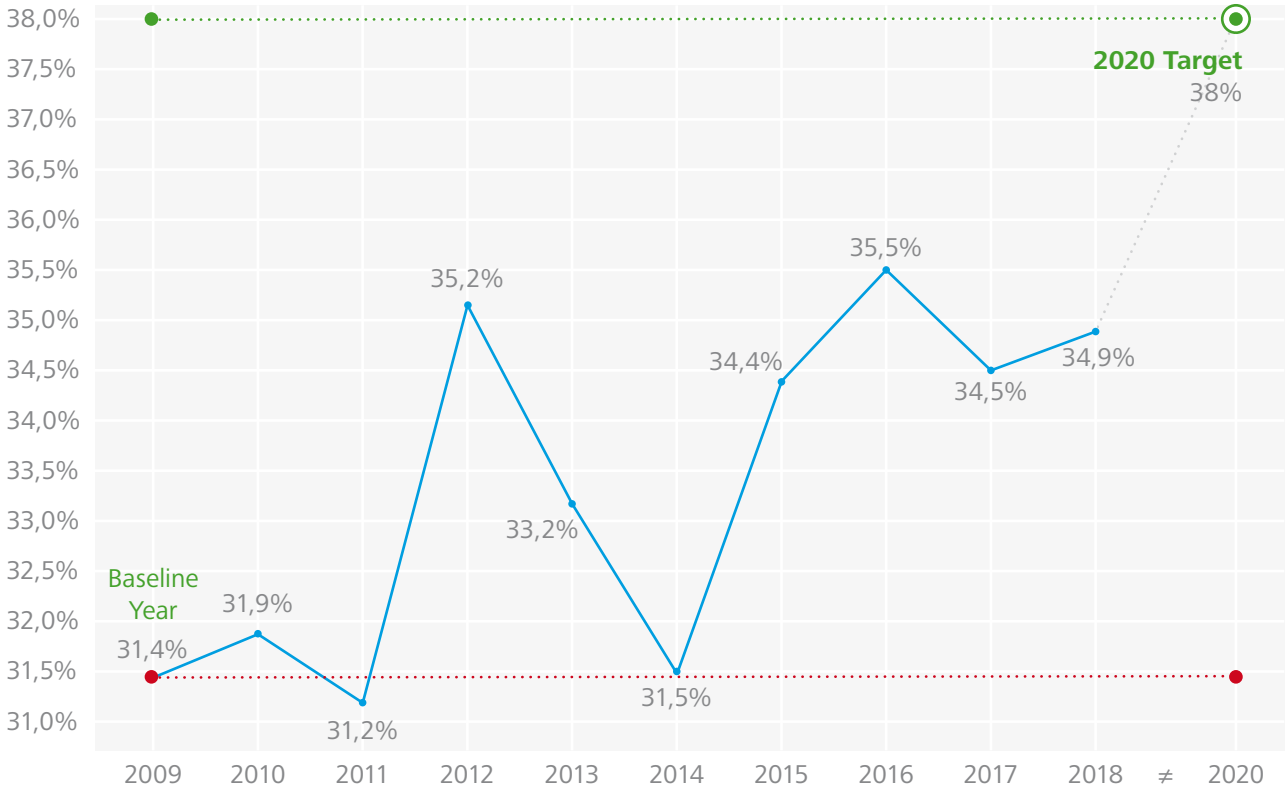
Although the Renewables Law envisages the appointment or creation of an agency responsible for renewable energy, which, among others, will be in charge of keeping a register of producers and their energy balances, it has not been established yet.

In December 2019, the regulator adopted a secondary act to enact guarantees of origin as required by the Renewables Law. However, an electronic system for the issue, transfer and cancelation of guarantees of origin compatible with the standardized European Energy Certificate System has not been implemented yet.

Increased production and consumption of biofuels in Albania, as indicated in the latest Progress Reports, cannot be counted towards the transport target due to non-transposition of provisions related to the sustainability criteria.

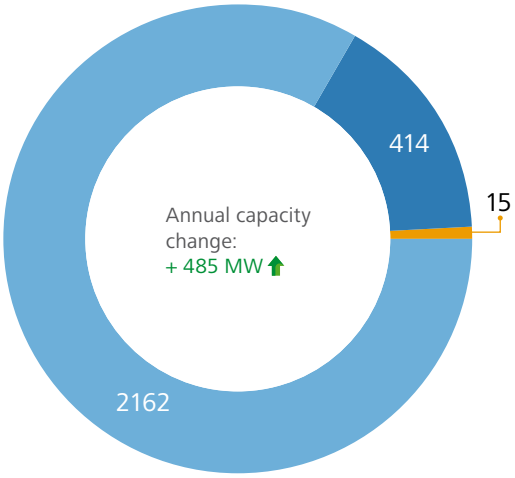
Despite the progress made in conducting the first auctions, Albania should focus on adopting the necessary secondary legislation to assure clarity and predictability of the contract for difference scheme introduced by the Renewables Law. Other priorities are the transposition of provisions related to the 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 2019 (MW)



- Large hydropower
- Small hydropower <10 MW
- Solar

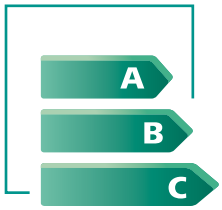
Source: Ministry of Infrastructure and Energy

Albania's high dependence on hydropower means that its achievement of the 2020 target is significantly impacted by hydrology. According to the amendments to the National Renewable Energy Action Plan, additional efforts are envisaged for the diversification of the electricity sector by adding 490 MW of solar PV and 150 MW of wind by the end of 2020. However, this timing is evidently unrealistic.

In 2020, Albania held its second solar PV auction, which resulted in a price of 24,89 EUR/MWh. 70 MW are envisaged to be supported via an offtake agreement for 15 years while an additional 70 MW will be sold on the market. The auction was designed to convert the fixed purchase price awarded to the producer into a contract for difference once a day-ahead market is operational. The power purchase agreement with the auction winner is under negotiation at the moment. The contract from the solar PV auction held already in 2018 has never been signed.

Total capacities of renewable energy (MW):

2290



Albania
Energy Efficiency

Energy Efficiency Implementation

Energy Efficiency Indicators	Transposition Assessement	Implementation Status	Descriptions
Energy efficiency targets and policy measures	~	54%	The NEEAP set the general 2020 target but not the specific targets required by the Energy Efficiency Directive. The revised Energy Efficiency Law (finalised in cooperation with the Secretariat) is in governmental procedure and awaits adoption. The fourth Annual Progress Report was submitted in June 2020.
Energy efficiency in buildings	~	56%	The 2016 Law on Energy Performance of Buildings remains not implementable as two key drafted by-laws (on setting minimal energy performance requirements and certification of buildings) remain to be adopted. The calculation methodology for cost optimal levels of energy performance of buildings was adopted in July 2020.
Energy efficiency financing	~	42%	No financing framework (fund) for energy efficiency exists. Draft amendments to the Energy Efficiency Law envisage support for the development of the ESCO market. Several international technical assistance and investment programmes (EU, EBRD/GEFF, GGF, KfW) support energy efficiency improvements, especially in the building sector.
Energy efficient products - labelling	~	36%	There was no progress with respect to updating the existing or adopting new regulations as required by the Ministerial Council Decisions adopted in September 2014 and November 2018.
Efficiency in heating and cooling	X	22%	Albania has no district heating or cooling systems in place. Draft amendments of the Energy Efficiency Law envisage obligations to assess the country's high-efficiency cogeneration and efficient district heating and cooling potential.

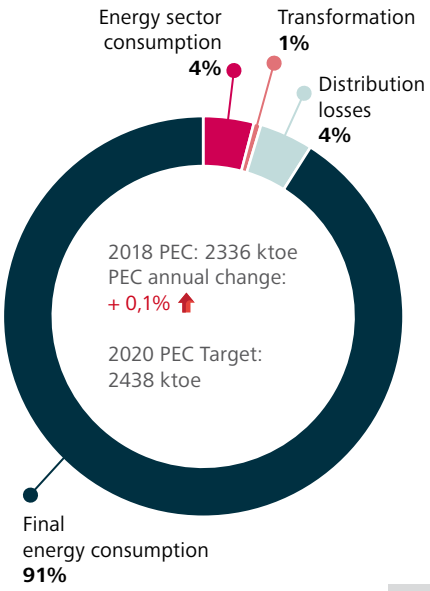
Albania's progress in the energy efficiency sector hinges upon the adoption of drafted legislative amendments transposing Directive 2012/27/EU and the adoption of missing by-laws implementing the Energy Performance of Buildings Directive and new labelling regulations. To rectify these non-compliance issues remains a priority for Albania, especially the adoption of the new Energy Efficiency Law.

As Albania failed to update its National Energy Efficiency Action Plan (NEEAP) in 2019 as required under the reporting obligations of Directive 2012/27/EU, the country should now focus on the timely finalization and adoption of its integrated National Energy and Climate Plan. The Plan should include an extensive energy efficiency chapter.

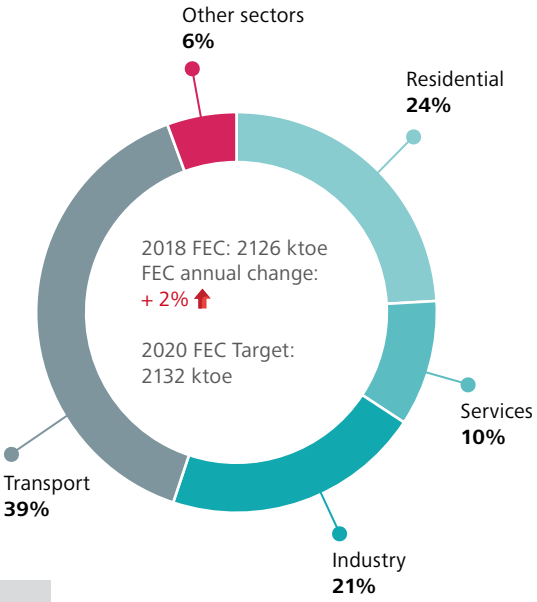
With the Energy Efficiency Agency's strengthened implementation role, the national energy efficiency fund, once in place, will provide additional financing opportunities and support the development of greater professional expertise in this sector.

2018 Energy Efficiency Indicators and Trends

Primary Energy Consumption (PEC)



Final Energy Consumption (FEC)



Energy intensity,
2018 value and trends:
0,22 ktoe/mil EUR, - 4,8%

Source: EUROSTAT 2020 data and the 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

Albania
Environment

Environment Implementation

Environment Indicators	Transposition Assessement	Implementation Status	Descriptions
Environmental impact assessment (EIA) and strategic environmental assessment (SEA)	✓	46%	The quality of environmental reports (in particular the assessment of effects on nature and biodiversity and the assessment of the cumulative impacts of projects) must be improved. The competent authorities have to ensure early and effective opportunities for the public concerned to take part in the assessment procedures and foster dialogue when conflicts in relation to energy projects emerge.
Sulphur in fuels	✓	85%	Secondary legislation for the quality control of sampling and analysis of the fuels is not yet completed. Further efforts for proper implementation and enforcement must be taken in order to reduce the sulphur content of the fuels falling under the scope of the Directive.
Large combustions plants and industrial emissions	✓	97%	The thermal power plant Vlora is still not in operation. The 2019 tender for awarding concession for the plant was cancelled. As any new plant, it must comply with the emission limit values of the Industrial Emissions Directive.
Nature protection	✓	67%	Nature protection studies for the protected areas network, as well as for specific protected areas, that should secure effective protection are being prepared but not adopted yet. The lack of sufficient capacities and adequate financial instruments limits the administration's power to enforce nature protection legislation. Energy projects, in particular the numerous planned hydropower projects, must comply with national and international nature protection rules and obligations.

Serious efforts are needed for proper implementation and enforcement of the Environmental Impact Assessment Directive. A lack of early and effective opportunities for the public concerned to participate in the assessment procedures prevails in a large number of cases. During the reporting period, the Secretariat initiated dispute settlement procedures against Albania concerning the non-compliant environmental impact assessment of the HPP Poçem project. Following the initiation of the dispute settlement procedures, the Ministry of Environment rejected the environmental impact assessment report of HPP Kalivac, another project planned on the Vjosa river. Concerns are also being raised related to the environmental impact assessments of projects on the Valbona river. The cumulative impact of small hydropower projects and possible transboundary impacts are not assessed in a systematic manner. The competent authorities should ensure the implementation of the Directive with the support of the recently published Policy Guidelines on the development of small hydropower projects.

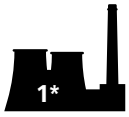
As regards the Strategic Environmental Assessment Directive, the Government should ensure that a strategic environmental report for the foreseen National Energy and Climate Plan is prepared as early as possible and that the public has early and effective opportunities to participate in the process.

No steps towards the implementation of the Government's Decision on the quality of certain liquid fuels used for thermal, civil, industrial use and sea transport of June 2019 took place. The Decision transposes the provisions of the Directive on marine fuels, which applies to Albania as a coastal state. The Government must complete the legal framework (with adoption of the relevant by-laws) in order to implement and enforce the obligations for reduction of the sulphur content of certain liquid fuels.

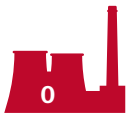
The only large combustion plant in Albania, thermal power plant Vlora, is not in operation. The tender for awarding a concession for the plant was cancelled in early 2020 due to the fact that none of the received offers met the required conditions. A WBIF project for the Fier-Vlora gas pipeline was launched in June 2020. 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 shall 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.

A detailed study on the revision of the protected areas network in Albania was completed in December 2019, but not yet approved by the Government. The study provides proposals for new revised boundaries and reliable coverage of the existing protected areas network. In February 2020, a study on the protected area Vjosë-Nartë, an area where a number of hydropower projects are planned (including the Poçem project, which is subject to dispute settlement procedures), has been prepared, but not adopted yet. A dialogue with civil society to address the concerns about the risk of reduction of the proposed Vjosë-Nartë protected area due to the planed hydropower projects has to be conducted. Finally, nature protection considerations have to be properly taken into account in environmental assessment procedures.

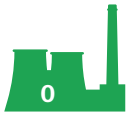
Installations under the Large Combustion Plants Directive



of plants falling under the LCPD



of which opted out plants

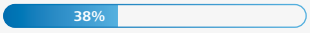


of which plants falling under the NERP

* not in operation

Source: compiled by the Energy Community Secretariat

Albania
Climate

Climate Indicators	Transposition Assessement	Implementation Status	Descriptions
National greenhouse gas emissions monitoring and reporting systems			The preparatory work on the development of a national greenhouse gas emissions monitoring and reporting system has started with the Law and Decision on a mechanism for monitoring and reporting of greenhouse gas emissions. Since it has not yet been adopted, the Monitoring Mechanism Regulation (EU) 525/2013 has not been transposed.
National Energy and Climate Plans (NECPs)			As one of the first Contracting Parties, Albania submitted draft chapters of the NECP to the Secretariat for informal review in early June 2020. However, the process is slow. Submission of the final draft is expected in Q1 2021.

Under the Paris Agreement, Albania committed to reduce its CO_2 emissions by 11,5% compared to the baseline scenario for the period 2016 to 2030 in its first Nationally Determined Contribution (NDC). In 2019, the country joined the NDC Partnership - a global initiative to help countries achieve their national climate commitments and ensure financial and technical assistance is delivered as efficiently as possible. It plans to revise its NDC by the end of 2020. The Government prepares for the fourth National Communication due in 2020 and the first Biennial Update Report expected since 2014.

In 2019, the Government endorsed the National Climate Change Strategy, representing the country's low carbon-development strategy towards the implementation of the Paris Agreement. However, the country is yet to adopt an overarching legal framework for climate. A draft Climate Change Law exists. Adoption of the Law and a Decision on a mechanism for monitoring and reporting of greenhouse gas emissions, transposing Monitoring Mechanism Regulation (EU) 525/2013 are still pending.

The Law and the Decision will establish the institutional framework and arrange the rules for monitoring, reporting and verification of GHG emissions at the level of sectors/resources in line with the Monitoring Mechanism Regulation. While the draft Law includes provisions on establishing a national climate change policy, it lacks specific reference to setting up a system on projections which would be required to be fully compliant with the Monitoring Mechanism Regulation. The establishment of a national inventory system for greenhouse gas emissions monitoring and reporting in line with the Monitoring Mechanism Regulation (EU) 525/2013 is still missing.

The Prime Minister's Order of 7 March 2019 indicates the governance structure and timeframe for elaboration of the National Energy and Climate Plan (NECP), including the setting up of a dedicated national working group supported by five technical working groups and the appointment of focal points in line ministries. For the preparation of the analytical basis of the Albanian NECP, the Government relies on external expertise supported by international donors and experts. At the time of publication of this report, data collection and modelling were ongoing.

The first two chapters of the NECP were drafted and submitted to the Secretariat for informal review in June 2020. Affected by the Covid-19 outbreak, the process is aimed to be finalised only in Q1 2021. It is strongly recommended that the different policy planning processes under the NDC update and the NECP are harmonized and streamlined.

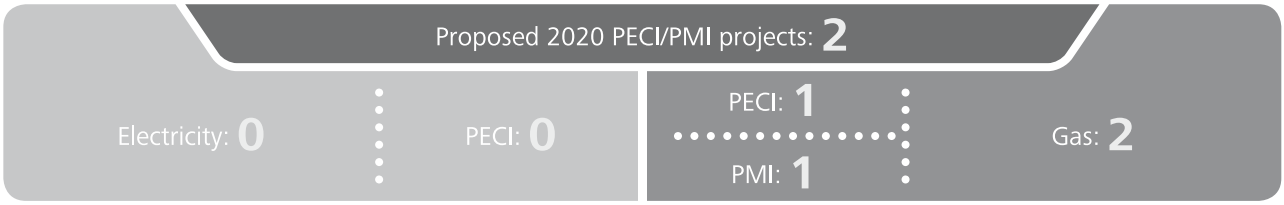
Albania
Infrastructure

Infrastructure Implementation

Infrastructure Indicators	Transposition Assessement	Implementation Status	Descriptions
National competent authority	~	70%	The Ministry of Infrastructure and Energy, designated as the national competent authority, does not report progress of its PECI and PMIs to the relevant Energy Community working groups and the Secretariat.
Manual of procedures	~	0%	The manual of procedures has not been published to date.
National regulatory authority involvement	X	0%	The regulator has not published the methodology and evaluation criteria to be used to evaluate infrastructure investments.

There was no progress in the transposition of Regulation (EU) 347/2013. In November 2018, the Government of Albania approved a decision on the adoption of practices for promoting joint regional investments in energy sector infrastructure, which transposed Regulation (EU) 347/2013. Further actions are necessary to implement all provisions of the Regulation. The national competent authority should publish a manual of procedures for the permit granting process, applicable to Projects of Energy Community Interest, and start reporting on project developments to the corresponding PECI Groups and the Secretariat as soon as possible. Another pending task is the publication by the regulatory authority of the methodology and criteria to be used to evaluate investment in electricity and gas projects and the higher risks incurred by them.

Full implementation of the Regulation in Albania is particularly urgent due to its potential to facilitate the realization of ongoing strategic infrastructure projects, particularly the 400 kV OHL interconnection between Albania and North Macedonia (PECI 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 (proposed PECI 2020) and the Ionian Adriatic Pipeline (proposed PMI 2020).



Albania
Statistics

Statistics Implementation

Statistics Indicators	Transposition Assessement	Implementation Status	Descriptions
Annual statistics	✓	100%	The five annual questionnaires and the questionnaire on final energy consumption of households for 2018 were transmitted to EUROSTAT.
Monthly statistics	✓	50%	Monthly data on coal, on petroleum products and all short-term data are missing and thus are not reported to EUROSTAT.
Price statistics	~	67%	Prices charged to industrial end-users and the breakdown of price components for 2019 are not transmitted to EUROSTAT.

Compliance with the statistics acquis in Albania has improved remarkably. The main achievement is the start of publication and reporting of half-yearly prices charged to industrial end-users.

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 and IEA preliminary data for 2019.

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 (EU) 1099/2008, with the view to monitor stock building obligations under the oil acquis, remain unsatisfactory. Monthly coal data are not available yet.

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 2019 has not been transmitted to EUROSTAT for publication on time.

Priority should be given to meeting the acquis obligations on price statistics and the completion of monthly data reporting. The responsible institution should be equipped with the necessary human and financial resources to fulfil the remaining tasks in a timely manner.

Albania
Cybersecurity

Cybersecurity Implementation

Cybersecurity indicators	Transposition Assessement	Implementation Status	Descriptions
Institutions and legislation			A Law on Cybersecurity is in place but incomplete. A new Strategy is being drafted. Rules on critical information infrastructure apply only to public utilities in the power sector. Private infrastructures and services and the gas sector need to be included. A CIRT for electricity is planned, one for gas is also needed.
Requirements for operators and energy regulatory authority			Self-assessment of risks by the energy operators and reporting was requested by ERE; however, a compliant methodology for the energy sector is needed. Security requirements and obligations for operators are in place. Improvements are needed in the domain of public-private cooperation, regional measures and energy-specific criteria. The powers of the energy regulator in cybersecurity need to be reinforced.

The crosscutting Digital Agenda of Albania 2015 - 2020 and a corresponding Action Plan aim to achieve compliance with EU policies on preventing cybercrime and supporting security of information networks and systems, including the energy sector. A new national Cybersecurity Strategy 2020 - 2025, involving all relevant institutions and sectors is in drafting stage. The Law on Cybersecurity adopted in 2017 partially transposes Directive 2016/1148/EC (NIS Directive) but cross-border aspects and the regional dimension are missing. No energy-specific cybersecurity provisions are included in the Law.

The National Authority for Electronic Certification and Cyber Security (NAECCS) is tasked to implement the Cybersecurity Law and acts as a focal point, cybersecurity regulator, incident-reporting centre and a national Computer Security Incident Response Team (CSIRT). The Cybersecurity Law requests sectoral CSIRTs, including an energy CSIRT, to be established by the operators of critical infrastructures and coordinated by the responsible ministry. The energy regulatory authority ERE adopted in 2020 rules on cybersecurity of critical infrastructures in the power sector.

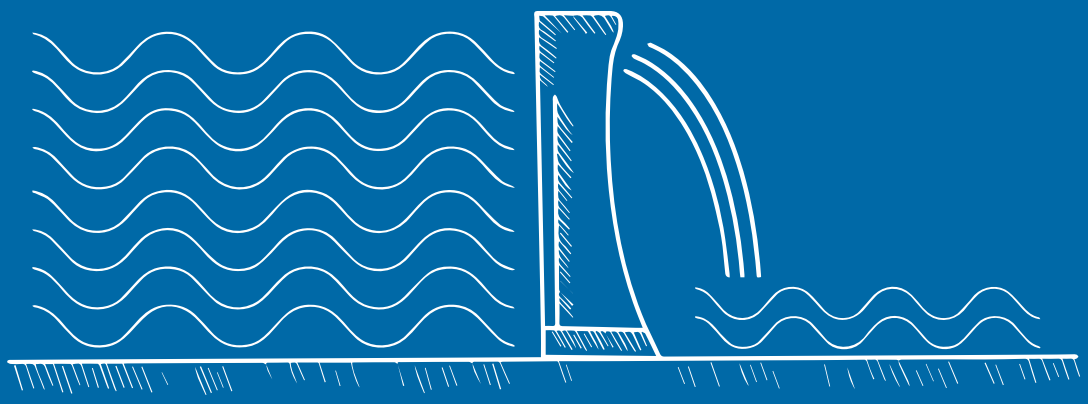
The Law on Cybersecurity creates a category of "critical" infrastructure or service, followed by another category of less stringent, "important" one. In July 2020, the Government approved a list of critical information infrastructure and services in the public domain, including the main information and operation (SCADA) systems and services of the state-owned power companies OST, OSSH and KESH.

NAECCS is responsible for risk assessment but a common, national methodology has not been established yet. In its roadmap published in 2018, NAECCS announced to make an analysis and, supported by ERE, define a compliant methodology for risk assessment in energy. Self-assessment of risk is also required in the rules adopted by ERE. Each operator must define, apply and submit its own risk methodology, action plan and financial impact. The operators' cybersecurity requirements and reporting obligations cover the following aspect: information protection, risk and incident management, organizational structure, asset and human resources, assessment of new projects and technologies, continuous monitoring, reporting and cybersecurity audit. Notification obligations for cybersecurity incidents are included in the Law on Cybersecurity and enforced by penalties.

Cybersecurity competences and powers of the energy regulatory entity ERE are not explicitly enforced by the law. Current activities of ERE are based on its basic competences and security requirements defined in the Power Sector Law of 2015.

06

Bosnia and Herzegovina



Bosnia and Herzegovina

Summary Implementation

Summary Indicators	Transposition Assessement	Implementation Status	Descriptions
Electricity	~	55%	Implementation in the electricity sector of Bosnia and Herzegovina is moderately advanced.
Gas	X	19%	Implementation in the gas sector of Bosnia and Herzegovina is yet to begin.
Oil	~	20%	Implementation in the oil sector of Bosnia and Herzegovina is yet to begin.
Renewable Energy	~	49%	Implementation in the renewable energy sector of Bosnia and Herzegovina is moderately advanced.
Energy Efficiency	~	48%	Implementation in the energy efficiency sector of Bosnia and Herzegovina is moderately advanced.
Environment	~	48%	Implementation in the environment sector of Bosnia and Herzegovina is moderately advanced.
Climate	~	36%	Implementation in the climate sector of Bosnia and Herzegovina is still at an early stage.
Infrastructure	~	8%	Implementation in the infrastructure sector of Bosnia and Herzegovina is yet to begin.
Statistics	✓	89%	Implementation in the statistics sector of Bosnia and Herzegovina is almost completed.
Cybersecurity	~	21%	Implementation in the cybersecurity sector of Bosnia and Herzegovina is still at an early stage.

Overall number of cases: 8

ECS-1/15 Environment

ECS-5/17 Electricity

ECS-10/18 State aid

ECS-1/14 Energy efficiency

ECS-3/18 Infrastructure

Procedure by Article 91

Procedure by Article 92

ECS-8/11S Gas

ECS-2/13S Environment

ECS-6/16S Third Energy Package

Bosnia and Herzegovina
State of Energy Sector Reforms

In the past, Bosnia and Herzegovina has generally not been performing well in terms of energy sector reform, which to some extent is due to the country's complex constitutional structure. As a result, it has been impossible until now to transpose the Third Energy Package on the state level, and in the gas sector not even the Second Energy Package. The electricity transmission system operator is not unbundled, and neither are the distribution system operators under the jurisdiction of the two entities. The State regulatory authority SERC lacks important competences. The creation of a spot market in electricity as well as market coupling with Croatia, Serbia and Montenegro are prevented by the missing legal basis as well. On the other hand, Bosnia and Herzegovina has achieved progress where not blocked by inertia and dispute on the legislative level. A balancing and ancillary services market is effectively operated through secondary legislation.

The gas sector operates outside European law and practice, without a state-level law and regulatory authority. Only Republika Srpska has adopted a law governing the gas sector which is largely compliant with the Energy Community acquis but, in absence of state institutions, insulates this entity from the State. During the reporting period, the certification of one gas transmission system operator has started. There is no legislation on compulsory oil stocks on the state level and no progress was achieved during this reporting period.

In terms of climate and environment, the 2018 Framework Energy Strategy essentially locks the country in a number of projects for more coal-fired power production of which the extension project for thermal power plant Tuzla – Block 7 is subject to an infringement procedure related to the Federation's public guarantee issued to secure a loan from the Chinese Exim Bank.

As regards renewable energy, the country's 2020 target of 40% is not likely to be met. Market-based support schemes are still missing. Yet, a new support package based on auctions, including amendments to the relevant entities' legislation, is planned to be adopted by the end of 2020, with first auctions to be held in 2022. There is no appropriate system for guarantees of origin in place.

In the area of energy efficiency, the entity legislation is not fully compliant, and the existing laws are not properly implemented. Work on the National Energy and Climate Plan is already relatively advanced, but entity and state level plans need to be streamlined.

For the emissions from large combustion plants, Bosnia and Herzegovina has adopted a National Emission Reduction Plan (instead of complying with the emission limit values on an individual basis), but it is not implemented in practice (for sulphur dioxide). Bosnia and Herzegovina also opted out three thermal power plants. Two of them will reach the end of their operation already in early 2021. The country paid direct subsides worth some EUR 22,7 million to support coal-fired power generation in 2019.

Bosnia and Herzegovina's three public utilities generate electricity predominantly from hydropower and lignite. Several new lignite-fired power plants are planned or currently under construction. The country is a major exporter of electricity to the regional market, including the European Union. It purchases natural gas imported from Russia through one interconnector with Serbia. The first wind farm in the country started operating in 2018.

Bosnia and Herzegovina
Electricity

Electricity Implementation

Electricity Indicators	Transposition Assessement	Implementation Status	Descriptions
Unbundling	✗	3%	The legal basis for the unbundling and certification of the transmission system operator is still missing. Distribution system operators are not even legally unbundled yet.
Access to the system	✓	90%	Network access is ensured in a compliant manner. The Transparency Regulation and the Connection Network Codes are transposed and implemented to a large extent.
Wholesale market	~	65%	The wholesale market is deregulated except in Republika Srpska where the generation price continues to be regulated. The creation of a day-ahead market is pending adoption of a new state-level law. REMIT is transposed and started to be implemented.
Retail market	✓	75%	The retail market is generally open and universal service supply applies to households and small customers only. Market dominance of the incumbent utilities on their respective geographic area still impedes competition development.
Regional integration	~	42%	Cross-border capacities are allocated through SEE CAO except with Serbia where bilateral joint auctions apply. Balancing cooperation exists within the LFC block with Croatia and Slovenia, and bilaterally with Montenegro and Serbia. Market coupling initiatives have ceased.

The legal basis for electricity market reforms on the state level is still missing, as Bosnia and Herzegovina continues to fail adoption of a new state-level law transposing the Third Energy Package. The new Electricity Law of Republika Srpska, adopted in 2020, brings legal compliance in the unbundling of distribution and price deregulation in the electricity sector of this entity.

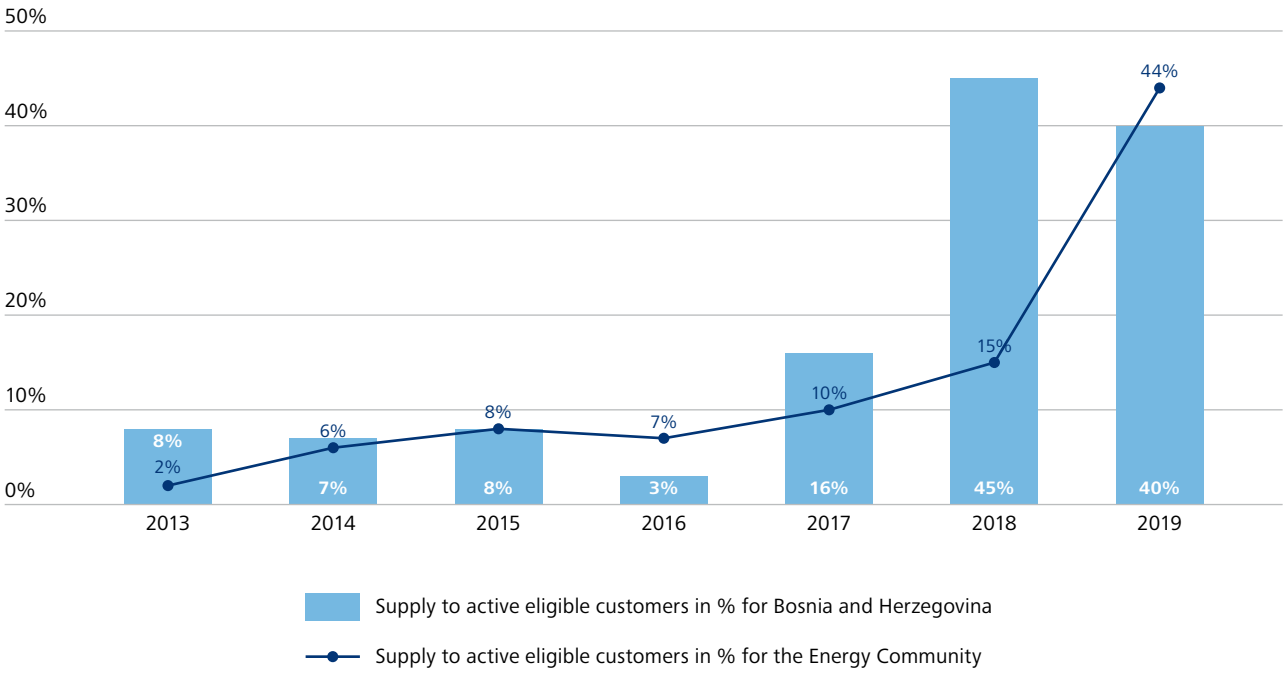
The transmission system is operated by two legal entities - the independent system operator NOS BIH and the transmission company Elektroprenos, owned by the two entities and controlled by their Governments, which are also owners of generation and supply utilities. In the absence of the necessary legal basis, the transmission operator cannot be unbundled and certified according to the Third Energy Package. The infringement cases of the Secretariat and the decisions of the Ministerial Council since 2016 failed to make a difference.

The provisions for legal unbundling of distribution are transposed in both entities. In Republika Srpska, the new Law transposed functional unbundling. Nevertheless, distribution is still legally and functionally bundled with supply in five companies of the state-owned holding Elektroprivreda Republike Srpske. In the Federation, the obligation for the compliance programme is missing. Two power utilities in the Federation operate as legally and functionally bundled undertakings for generation, distribution and supply. An infringement procedure against Bosnia and Herzegovina on this issue is open since 2018.

All three regulatory authorities implemented compliant conditions for network access. The Network Codes on connection are transposed by the state-level regulator SERC only in the domain of transmission which is regulated by this body – entity regulators have not yet transposed complementary provisions related to the generation and supply facilities. Publication of data on the ENTSO-E transparency platform is still not complete, and should be improved.

Generation prices are deregulated in the Federation. The new Law in Republika Srpska imposed a "sunset clause" on the regulated component in the electricity sold for universal supply over a four-year period starting in 2022.

Retail Market Opening



Source: State Electricity Regulatory Commission of Bosnia and Herzegovina

The existing state-level law does not envisage any tasks and competences related to the set-up and functioning of a day-ahead market. An efficient balancing market is operated by NOS BIH since 2016, covering both energy and reserve capacity. Improved balancing rules in force since September 2019 resulted in higher liquidity and lower prices. In the course of 2020, SERC adopted a set of acts transposing the REMIT Regulation for electricity, developed and implemented a corresponding reporting mechanism.

The retail market is formally open. Supplier switching is increasing, however, most consumers choose to have a new contract with their incumbent rather than an alternative supplier. Each incumbent supplier is still dominant in its respective area of operation. The market dominance of the bundled utilities on the territory of their (network) operation is among the reasons for the relatively low level of competition. Universal service is available only to households and small customers. All eligible customers are protected through a "last resort" supply service available for two months. Vulnerable customer programmes are enforced in both entities and the Brčko District.

Interconnection capacity on the borders with Montenegro and Croatia is allocated through regionally coordinated auctions at SEE CAO. The allocation mechanism on the border with non-SEE CAO member Serbia is bilaterally coordinated between the transmission operators, as are the intraday capacity auctions on all borders of Bosnia and Herzegovina. NOS BIH actively participates in cross-border balancing cooperation – pursuant to bilateral agreements with Serbia and Montenegro, and pursuant to the operational agreement of the SHB control block with the transmission system operators of Slovenia and Croatia.

Day-ahead market integration of Bosnia and Herzegovina is conditioned on the adoption of a new state-level law, and the initiatives for market coupling are not being pursued anymore. Other missing prerequisites include establishment of a local power exchange in Bosnia and Herzegovina and mutual recognition of trading licences.

Bosnia and Herzegovina
Gas

Gas Implementation

Gas Indicators	Transposition Assessement	Implementation Status	Descriptions
Unbundling	X	18%	The rules for unbundling are in place only in one entity. Only one out of the three existing transmission system operators in Bosnia and Herzegovina has applied for certification. Distribution of gas is performed together with supply and trade of natural gas as allowed by the Directive's de minimis clause.
Access to the system	X	26%	Third party access is granted under regulated tariffs for only a part of the country's network in Republika Srpska. In the Federation, negotiated third party access still applies to both transmission and distribution networks. No regulated tariffs were adopted. REMIT is not in place.
Wholesale market	X	7%	Bosnia and Herzegovina has not one but two parallel gas markets. The gas market segment of Republika Srpska is deregulated, but a virtual trading point is not operational. In the Federation, the market is foreclosed.
Retail market	X	10%	Customers in the 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	X	30%	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.

Once again, Bosnia and Herzegovina failed to adopt a state law which would transpose the Third Energy Package in gas. The long lasting infringement case against Bosnia and Herzegovina, the longest and the most severe "serious and persistent breach" in the Energy Community, continues to be subject to a request for measures by the Ministerial Council.

In the absence of a single legislative framework, Bosnia and Herzegovina's two entities have adopted two distinct regulatory regimes. Republika Srpska transposed the Third Energy Package in the gas sector in its primary law (the Gas Law of 2018). Its entity regulator, RERS, has adopted a series of acquis-compliant by-laws related to the certification of the gas transmission system operator, direct pipelines, supply of last resort and supply switching rules, tariffs for transmission and distribution networks. The distribution system operators supply less than 100.000 customers.

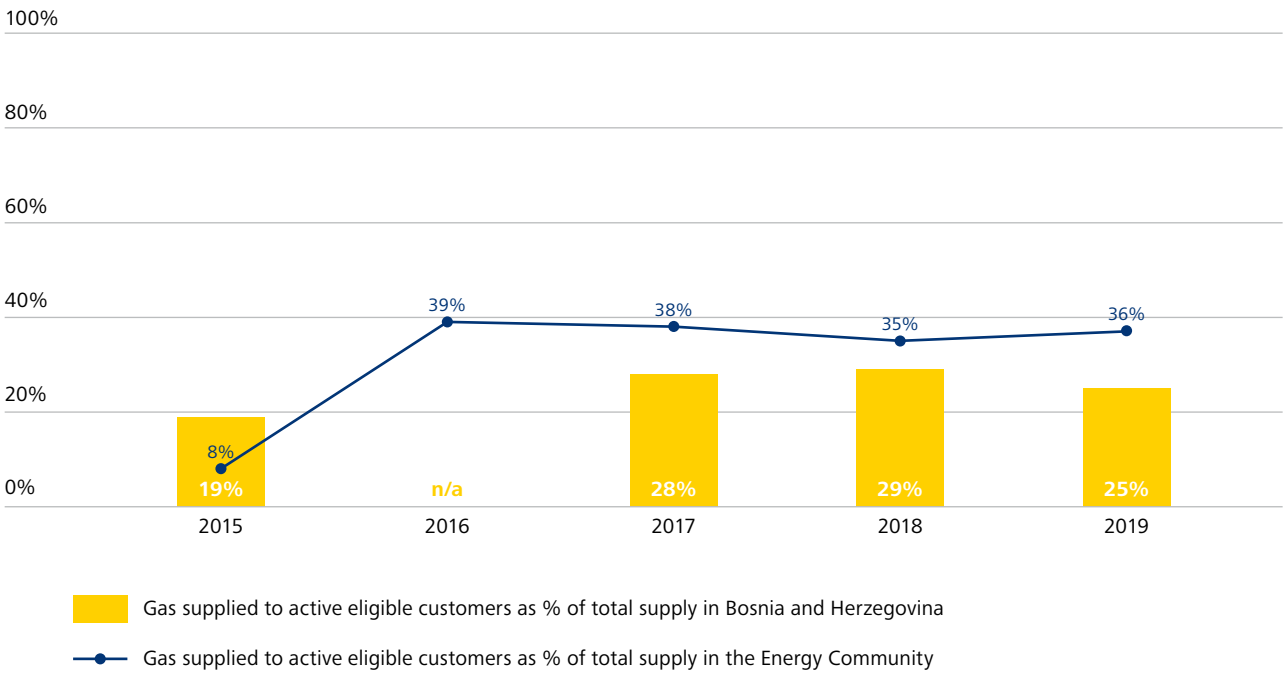
Gas Promet Pale a.d, one of the entity's transmission system operators, operates under network system rules adopted by RERS, which do not comply with the network codes on capacity allocation and congestion management. It signed an interoperability agreement with the Serbian operator. The adopted rules established a virtual trading point for Republika Srpska, which at present is non-functional. All transactions are based on bilateral contracts. The entity regulator received Gas Promet's application for certification under the ownership unbundling model and issued a preliminary positive decision in April 2020. The Secretariat, in its Opinion 2/20, requested fundamental improvements to ensure compliance. The other operator is Sarajevo-gas a.d. Istocno Sarajevo, a vertically integrated undertaking. In Republika Srpska, only 3,28% of the market share is supplied under public supply conditions. The dominant supplier, the public GAS RES, serves 87% 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 virtually any principle of the gas acquis such as regulated third party access or market opening and eligibility of all customers. BH-Gas is a vertically integrated undertaking, established by the Government of the Federation, which dominates the wholesale market in this entity. It holds an import contract with Gazprom Export and acts as a transmission system operator.

The Agreement on Removal of a Serious and Persistent Breach under the Energy Community Treaty in the gas sector, signed at the highest level in 2016 in Sarajevo, exists only on paper and has no actual relevance anymore.

For Bosnia and Herzegovina, the priorities remain the same as in all previous reporting years. Without an agreement on the implementation of the Third Energy Package in gas on its entire territory, the country will not be able to rectify its long lasting breaches of Energy Community acquis nor deliver the ambitious gas investment agenda which would enable the phasing out of its reliance on coal.

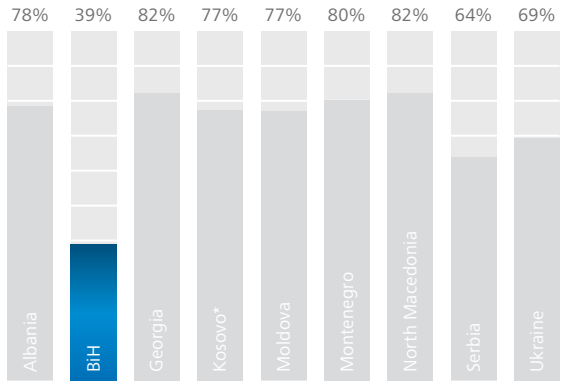
Retail Market Opening



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

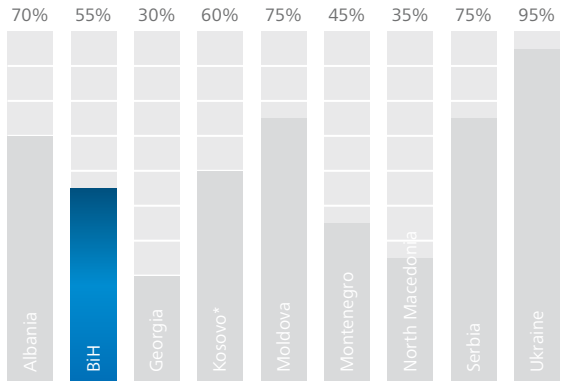
Bosnia and Herzegovina
National Authorities

Regulatory Authority



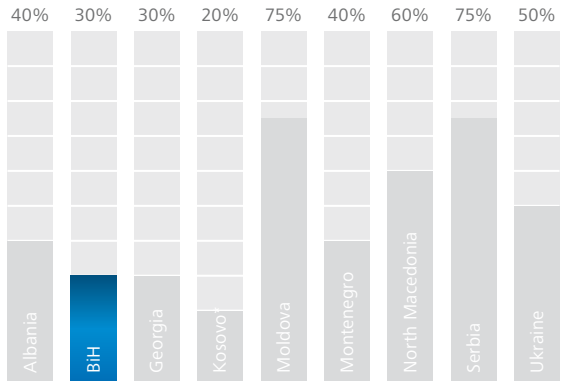
The State Electricity Regulatory Commission (SERC) continued to be pro-active in implementing the acquis. This deserves particular acknowledgement having in mind that SERC is the only Contracting Party regulator whose set-up does not comply with the Third Package requirement for a single regulatory authority for electricity and gas. SERC adopted the electricity Network Codes and is the only Contracting Party regulator that complies with the obligation to publish criteria based on which derogations from these Network Codes can be granted. SERC is also a front-runner in transposing and implementing the REMIT Regulation.

Competition Authority



The Competition Council's enforcement activities in the energy sectors are mainly focused on concentrations. However, it also regularly follows up on cases of abuse. In the reporting period, it rendered a decision regarding the abuse of dominance by the incumbent on the market for district heating in the city of Tuzla.

State Aid Authority



The State Aid Council (SAC) and its secretariat have become very active recently, and would benefit from additional human resources. The decision by the SAC finding that the guarantee provided by the 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 is subject of an infringement procedure. The SAC did not assess the renewables support schemes in force in both entities.

Bosnia and Herzegovina
Oil

Oil Implementation

Oil Indicators	Transposition Assessement	Implementation Status	Descriptions
Stockholding obligation	X	0%	Bosnia and Herzegovina does not have legislation on compulsory stocks of oil and petroleum products at the state level and thus no stocks are in place in the meaning of Directive 2009/119/EC. The current state level model has not been harmonized with the requirements of Oil Stocks Directive 2009/119/EC.
Emergency procedures	X	0%	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)	X	20%	The current standards for fuel quality allow a too high sulphur content of up to 350 ppm for diesel and 150 ppm for petrol compared to the 10 ppm limit on sulphur content required by the Directive.
Monitoring compliance and reporting including the lay down the rules on penalties	~	60%	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 specified in the Decision on Liquid Petroleum Fuels, as amended.

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 the oil stocks model at the state level in compliance with the Oil Stocks Directive 2009/119/EC, but this did not result in any outcomes. Regarding monthly oil statistics, institutional cooperation was improved allowing the Ministry to access databases containing information on petroleum products on a monthly/daily basis.

The current legal framework is outdated and fails to meet the requirements of the Fuel Quality Directive. The Decision on Liquid Petroleum Fuels of 2002 was amended several times, with the latest amendment taking place in 2010 in order to allow the domestic Brod refinery to market liquid petroleum fuels below the standards set by the 2002 Law, which in turn are not compliant with the Directive. A new decision of the Council of Ministers should be adopted to incorporate the EU standards relating to fuel quality and environmental requirements. In particular, the maximum limit for the sulphur content in petrol, diesel and gas oil for non-road mobile machinery (NRMM) must be set at 10 mg/kg.

Bosnia and Herzegovina
Renewable Energy

Renewable Energy Implementation

Renewable Energy Indicators	Transposition Assessement	Implementation Status	Descriptions
National Renewable Energy Action Plan	✓	60%	Bosnia and Herzegovina submitted its NREAP and the first and third Progress Reports on implementation of the Renewables Directive to the Secretariat. The country has registered a 35,97% renewables share, however, this is below the 2018 trajectory of 38,4%.
Quality of support schemes	✓	40%	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 conducted an analysis to move towards a market-based scheme, however, it is yet to be adopted and implemented.
Grid integration	~	60%	Connection to the transmission system is regulated by the state regulator, which stipulates that renewable electricity producers connected to the grid pay 50% of the fixed part of the connection costs. On the distribution level, priority dispatch and connection are provided. Renewable power producers who are in the incentive system have a guaranteed offtaker and are released from balancing responsibility, which is not in line with the State Aid Guidelines.
Administrative procedures and guarantees of origin	~	59%	In order to simplify complex administrative procedures, the recommendations of a 2018 analysis on removing existing obstacles to investment in the energy sector are being implemented. 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	X	3%	Provisions related to the 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 is only at 0,44% compared to the objective of 10% in 2020.

There were slight improvements in the renewable energy sector in Bosnia and Herzegovina during the reporting period.

In September 2020, upon the proposal of the independent system operator (NOS BiH), the State Electricity Regulatory Commission of Bosnia and Herzegovina (SERC) increased the permitted capacity of wind power plants which may be connected to the transmission network (from 460 MW to 840 MW) and solar power plants (from 400 MW to 825 MW). Priority or guaranteed access to the grid for renewable energy producers remains unsecured.

In May 2020, Bosnia and Herzegovina sent to the Secretariat a proposal for a market-based support scheme mechanism and all accompanying legal acts prepared by relevant stakeholders. The Secretariat assessed it as generally in line with acquis. Unfortunately, it has not been adopted yet.

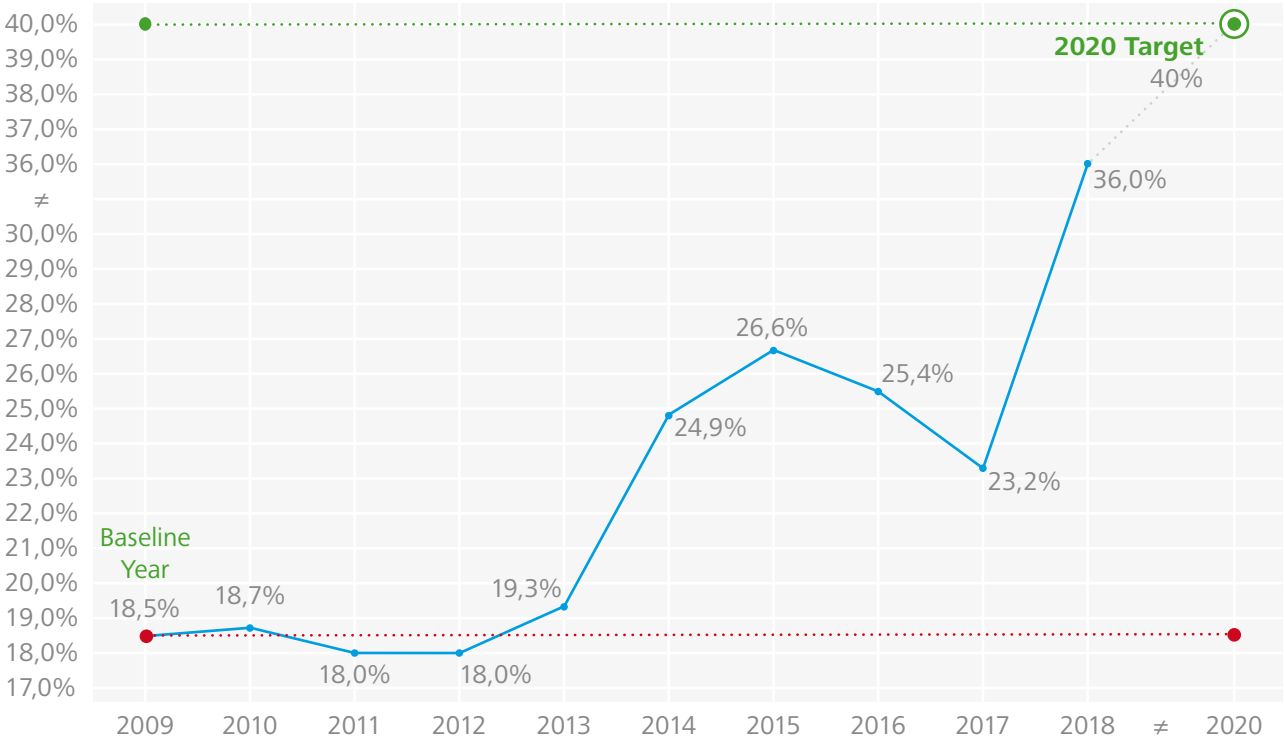
In June, the Parliament of Federation of Bosnia and Herzegovina adopted a Declaration on the Protection of Rivers and conclusions calling for a prohibition of the construction of small hydro power plants on the territory of Federation of Bosnia and Herzegovina. The Federation government was supposed to within three months review related legislation and propose necessary changes in order for the conclusions to be implemented in practice.

The regulator in Republika Srpska and operator for renewables in Federation of Bosnia and Herzegovina, the bodies designated by law to establish systems of guarantees of origin, have adopted

the necessary secondary acts in 2013 and 2015 respectively. However, an electronic system compatible with the European Energy Certificate System has not been implemented.

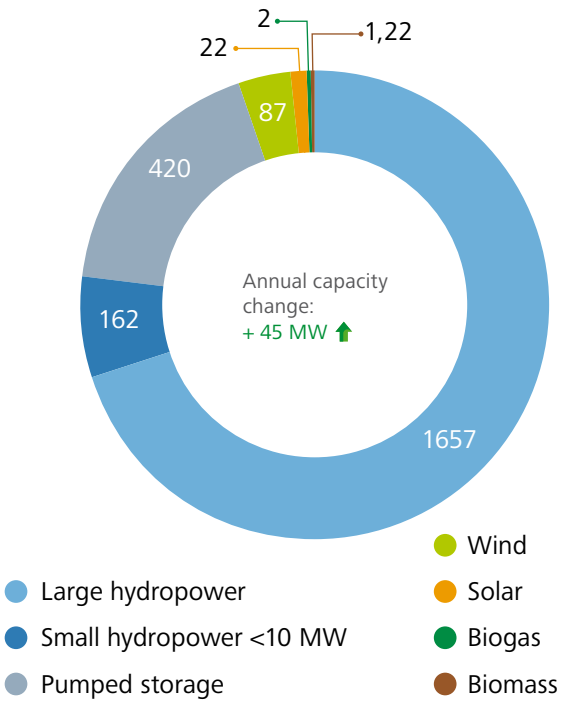
Bosnia and Herzegovina should transition towards a market-based renewables support scheme. The transposition of provisions on the sustainability of biofuels and the establishment of the electronic system for guarantees of origin should also be prioritized.

Shares of Energy from Renewable Sources



Source: EUROSTAT

Total Capacities of Renewable Energy 2019 (MW)



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

Due to the second revision of biomass consumption data, 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. Nevertheless, additional efforts are needed to increase the use of renewable energy in the electricity sector as well as in transport to reach the overall target of 40% of renewable energy in gross final energy consumption by 2020.

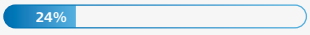
After Mesihovina (51 MW, in operation since 2018), a second wind park in Bosnia and Herzegovina (Jelovača, 36 MW) was commissioned in 2019. In addition, 3 MW of solar PV, 2 MW of biogas and biomass and 3 MW of small hydropower were installed in 2019.

Total capacities of renewable energy (MW):

2351

Bosnia and Herzegovina
Energy Efficiency

Energy Efficiency Implementation

Energy Efficiency Indicators	Transposition Assessement	Implementation Status	Descriptions
Energy efficiency targets and policy measures			The NEEAP 2019 - 2021 has still not been formally submitted to the Secretariat or adopted. The fourth Annual Progress Report was submitted in August 2020, meets the requirements of the Energy Efficiency Directive, and reports on targets for 2020 and 2021 and projections up to 2030. A specific target and policy measures (for building renovation and the energy efficiency obligation scheme) have also been finalized and supported with proposals for legislative changes, but not adopted.
Energy efficiency in buildings			Long-term building renovation strategies have been drafted on state and entity levels, together with necessary amendments to primary legislation (so far only adopted in Republika Srpska). Implementation progressed in Federation of Bosnia and Herzegovina with the adoption of rulebooks for energy performance requirements of buildings and regular inspections of heating and air conditioning systems in November 2019.
Energy efficiency financing			Each entity has established an energy efficiency and environmental fund, which also covers monitoring of implementation and reporting on achieved savings. The adopted 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 in e.g. public procurement, multi-year budgeting and adoption of model ESCO contracts.
Energy efficient products - labelling			No progress took place with respect to the update of the labelling regulation in the reporting period, as required by the Ministerial Council decision adopted in November 2018. To date, only a part of the regulation was adopted back in 2016 in Republika Srpska.
Efficiency in heating and cooling			Bosnia and Herzegovina has 32 district heating systems, covering around 8% of total heat demand in 2018. They are regulated by local self-governments, and the majority charge lump sums per square meter of the heated space (instead of accurate consumption based billing). Modernisation of district heating systems is ongoing, including several biomass-based district heating projects supported by EBRD. The assessment of high-efficiency cogeneration and efficient district heating and cooling potential required by the Energy Efficiency Directive is not yet finalised.

In the reporting period, Bosnia and Herzegovina submitted its fourth Annual Progress Report under the Energy Efficiency Directive and adopted secondary legislation to underpin the implementation of the Energy Performance of Buildings Directive. However, implementation of energy efficiency legislation is still not sufficient and further action is necessary to achieve full compliance with the energy efficiency acquis.

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

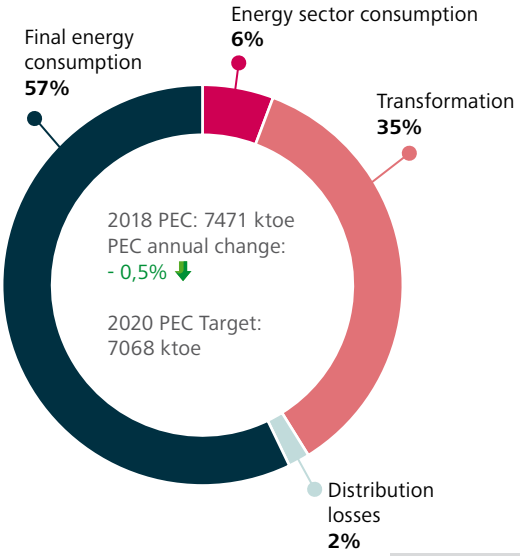
Efficiency Directive and the Energy Labelling Regulation through amendments of the existing primary legislation in the two entities and adoption of the draft Energy Efficiency Law in the Brčko District.

The second priority is 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 finalisation of the assessment of the potential for the application of high-efficiency cogeneration and efficient district heating.

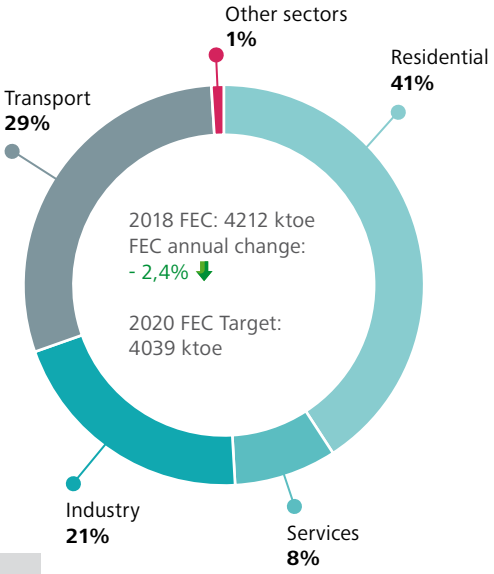
Energy efficiency criteria should be introduced in state public procurement procedures and public–private partnership schemes made attractive for energy efficiency projects in order to boost the creation of an energy efficiency market in Bosnia and Herzegovina.

2018 Energy Efficiency Indicators and Trends

Primary Energy Consumption (PEC)



Final Energy Consumption (FEC)



Energy intensity,
2018 value and trends:
0,50 ktoe/mil EUR, - 3,6%

Source: EUROSTAT 2020 data and the 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

Bosnia and Herzegovina
Environment

Environment Implementation

Environment Indicators	Transposition Assessement	Implementation Status	Descriptions
Environmental impact assessment (EIA) and strategic environmental assessment (SEA)			New legislation to transpose of the amendments introduced by Directive 2014/52/EU and for further alignment with the Strategic Environmental Assessment Directive is in the adoption procedure. Further improvements of the Law on Environmental Protection are necessary in order to fully transpose the amendments to the EIA Directive. Challenges related to the environmental assessments of planned hydropower projects should be assessed with the support of the Policy Guidelines on the development of small hydropower projects.
Sulphur in fuels			Legislation for transposing the 1,00% threshold for heavy fuel oil as well as the 0,10% threshold for gas oil is still lacking. A governmental working group with the task to prepare a decision on the quality of petroleum liquid fuels was established, without however a specific timeline. The Ministerial Council declared this as a serious and persistent breach.
Large combustions plants and industrial emissions			New legislation for further alignment with the provisions of the Large Combustion Plants and Industrial Emissions Directives was prepared and is in the adoption procedure. Serious efforts must be made in order to ensure proper implementation of the National Emission Reduction Plan.
Nature protection			The recent Declaration on the Protection of Rivers as well as the conclusions calling for a prohibition of the construction of small hydro power plants on the territory of Federation of Bosnia and Herzegovina is an achievement. The missing secondary legislation for the proper implementation of the Wild Birds Directive must be adopted. The network of protected areas is lacking effective protective measures and administrative capacity that can properly assess the impacts of energy projects on the protected sites.

In Federation of Bosnia and Herzegovina, the new Law on Environmental Protection is in parliamentary adoption procedure. It is foreseen that the relevant by-laws will follow. Amendments to the Law on Environmental Protection were also adopted by the National Assembly of Republika Srpska. In both entities, the new legislation should further align the provisions with the Strategic Environmental Assessment Directive and transpose the amending provisions of Directive 2014/52/EU. However, both laws should be improved in order to ensure that projects likely to have significant effects on the environment are duly assessed before development consent is given. During the reporting period, a complaint concerning an alleged breach of the EIA Directive related to the hydropower project Gornja Neretva on the Neretva, Igaščica and Grebenac rivers was submitted to the Secretariat. The competent authorities must secure early and effective opportunities to the public concerned to participate in the assessment procedures and foster stakeholder dialogue.

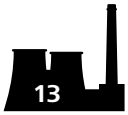
As regards legislation on the sulphur content of liquid fuels, some steps are implemented at the level of Federation of Bosnia and Herzegovina. A working group was formed with the task to prepare a draft decision on the quality of petroleum liquid fuels at national level in line with the needs of the oil market in Bosnia and Herzegovina and in accordance with its international

obligations. Given the fact that the serious and persistent breach remains unaddressed, the Secretariat had to apply for measures to be taken against the country.

Further alignment with Directive 2001/80/EC on Large Combustion Plants and the provisions of the Directive 2010/75/EU on Industrial Emissions is foreseen with the new Laws on Environmental Protection and on Air Protection in the Federation of Bosnia and Herzegovina, which are in parliamentary procedure. Three plants are being opted out, meaning that they can only remain in operation for not more than 20.000 operational hours until December 2023. Based on the current load factor, two plants are expected to reach the limit earlier than the provisioned deadline. The 2019 emissions from large combustion plants under the NERP show compliance with the ceiling for nitrogen oxides, while the ceilings of sulphur dioxide and dust are not complied with. The serious non-compliance with the ceiling on sulphur dioxide elevates the urgent need to secure sufficient financing for proper implementation of the National Emission Reduction Plan.

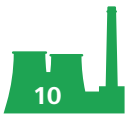
Legislation that will impose effective measures against the deliberate killing or hunting of wild birds, deliberate destruction or damaging of nests and eggs and/or removal of their nests is still not in place in Federation of Bosnia and Herzegovina. In Republika Srpska, serious efforts must be made for improving the assessment of energy projects that might have significant impacts on protected areas.

Installations under the Large Combustion Plants Directive



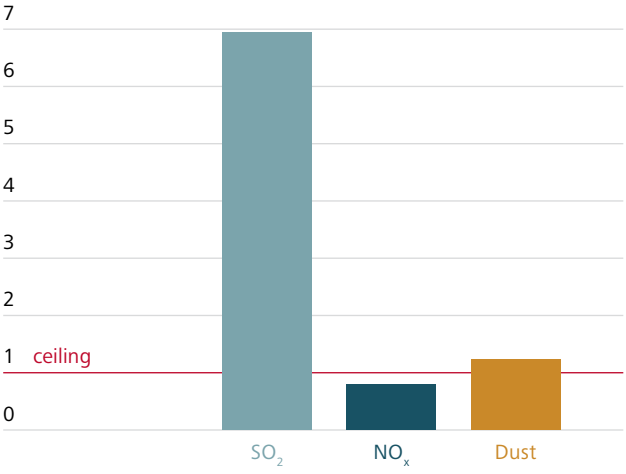
of plants falling under the LCPD

of which opted out plants



of which plants falling under the NERP

2019 emissions versus NERP ceilings



	SO_2	NO_x	Dust
2019 emissions by all plants under the LCPD	214,187	18,745	3,126
2019 emissions by plants under the NERP	189,115	14,415	2,731

Source: compiled by the Energy Community Secretariat

Amount of operational hours used from opt-out period

TPP Kakanj 5 	Expected expiry of opt-out period	October 2021
	Remaining hours	9.413
	Operating hours consumed in 2018 and 2019	10.587
TPP Tuzla 4 	Expected expiry of opt-out period	July 2022
	Remaining hours	11.114
	Operating hours consumed in 2018 and 2019	8.856
TPP Tuzla 3 	Expected expiry of opt-out period:*	April 2023
	Remaining hours	12.479
	Operating hours consumed in 2018 and 2019	7.521

*Calculations for the expected expiry of the opt-out period are based on 2018 and 2019 average load factor.

Source: compiled by the Energy Community Secretariat

Bosnia and Herzegovina
Climate

Climate Indicators	Transposition Assessement	Implementation Status	Descriptions
National greenhouse gas emissions monitoring and reporting systems		32%	Bosnia and Herzegovina still needs to define the 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 projection.
National Energy and Climate Plans (NECPs)		41%	Drafting of the NECP of Bosnia and Herzegovina is ongoing. No draft has been submitted to the Secretariat for comments by the cut-off date of this report.

In its Nationally Determined Contribution (NDC) under the Paris Agreement, Bosnia and Herzegovina aims to achieve emission reductions of 2% by 2030, compared to the business-as-usual scenario. This would mean 18% higher emissions compared to 1990. The NDC is currently being updated. Work on the fourth National Communication and the third Biennial Update Report to the UNFCCC has been ongoing since 2018.

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 national level. As a base for a future Long Term Strategy, the first draft strategy and roadmap with an action plan for the period 2020 - 2030 was developed in 2020. The adoption of the strategy is envisaged only by April 2022.

Bosnia and Herzegovina has launched a national working group for developing the National Energy and Climate Plan (NECP). Most of the relevant institutional representatives have been nominated for all five thematic working groups. The legal basis needed for the NECP and entity energy and climate plans adoption is supposed to be defined by the two energy ministries of the entities and at state level. In parallel with the NECP, entity energy and climate plans will be developed. It is strongly recommended that the processes for the development of entity and integrated NECPs are streamlined. For the preparation of the analytical basis of the NECP, the Government of Bosnia and Herzegovina relies on international donors and external experts. While drafting has started, the Secretariat has not yet received the draft NECP.

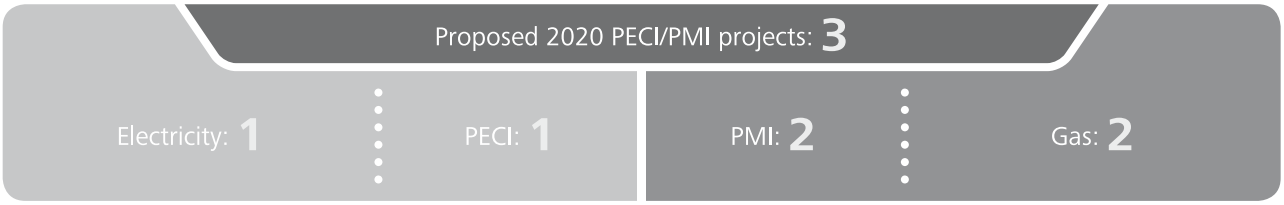
Bosnia and Herzegovina
Infrastructure

Infrastructure Implementation

Infrastructure Indicators	Transposition Assessement	Implementation Status	Descriptions
National competent authority	~	20%	Bosnia and Herzegovina has not established a national competent authority. The Ministry of Foreign Trade prepared a draft decision on the competent authority, and is harmonizing positions with the entities' relevant institutions.
Manual of procedures	~	0%	The manual of procedures was not published to date, neither by the entities' nor by state-level authorities.
National regulatory authority involvement	X	0%	The national regulatory agency did not publish the methodology and criteria used to evaluate investments in electricity and gas infrastructure projects and the higher risks incurred by them.

In the previous reporting period, Bosnia and Herzegovina already prepared a draft decision on the national competent authority's establishment but still works to harmonize positions with the competent entity institutions. Guidelines for Investors in the Electricity Sector were published in November 2018, providing investors with information on the construction process of an electricity facility and detailing procedures for the issue of different permits. However, the guidelines fall short of properly transposing Regulation (EU) 347/2013. Therefore, the infringement based on the non-transposition of the Regulation, according to the Ministerial Council Decision 2018/08/MC-EnC, is still not rectified. Bosnia and Herzegovina's authorities must urgently adopt a legal act to transpose the Regulation into its national legislation.

The Regulation's transposition in this Contracting Party 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 PECI electricity project (Transbalkan corridor), and in two PMI gas projects (interconnectors Bosnia and Herzegovina – Croatia North and South), recognized as projects of domestic significance and with a great regional impact.



Bosnia and Herzegovina
Statistics

Statistics Implementation

Statistics Indicators	Transposition Assessement	Implementation Status	Descriptions
Annual statistics	✓	100%	The five annual questionnaires for 2018 were transmitted to EUROSTAT, although after the deadline. The questionnaire on final energy consumption of households for 2018 was transmitted to EUROSTAT and published.
Monthly statistics	✓	46%	Monthly reporting for oil and natural gas is not compliant and all short-term monthly data are missing.
Price statistics	✓	100%	Price statistics for electricity and natural gas for 2019 were compiled and transmitted in accordance with the acquis.

Bosnia and Herzegovina has made progress during this reporting period, notably with the transmission of complete annual statistics for 2018 to EUROSTAT and the annual renewables shares questionnaire. In addition, the drafting of a methodology needed to establish a reporting system for monthly oil statistics was launched.

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 full set of annual energy statistics has been compiled and transmitted to EUROSTAT although with a delay caused by 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 2019 data were also prepared and transmitted to EUROSTAT on time. The breakdown of the energy consumption in households is reported in accordance with the acquis. The quality report for annual statistics was transmitted to EUROSTAT.

BHAS has been compiling and transmitting monthly reports for electricity and coal. Natural gas data are collected but not transmitted to EUROSTAT in a compliant manner. Monthly oil data are still missing. The Ministry of Foreign Trade and Economic Relations has begun to collect oil and natural gas data and preliminary questionnaires have been exchanged, but the process has failed to ensure timely and complete transmission to EUROSTAT. In the meantime, BHAS started drafting a methodology for the JODI questionnaire as a first step in establishing a reporting system for oil statistics. The national statistical plan for 2020 envisages work on a methodology for data collection on monthly oil statistics with a focus on establishing data providers /reporting units.

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 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 Assessement	Implementation Status	Descriptions
Institutions and legislation	X	20%	Computer incident response is generally provided by security and defence authorities. Only the computer emergency response team (CERT) of Republika Srpska is established to support the entity security. There is no cybersecurity strategy or legal framework in force, and there are no legal references to critical energy infrastructures. The Guidelines for development of a cybersecurity framework, designed in 2019 with support from OSCE, provide a good starting point.
Requirements for operators and energy regulatory authority	~	22%	The CERT of Republika Srpska is engaged in the exchange of information on cybersecurity incidents in this entity, and constitues the sole cybersecurity risk-related source in Bosnia and Herzegovina. The energy operators started implementing cybersecurity standards. Implementation of the Guidelines should provide concrete rules for cybersecurity risk assessment and impose requirements to the energy operators. Cybersecurity competences of the energy regulatory authorities need to be upgraded.

Bosnia and Herzegovina is in the early stages of developing a compliant legal framework and institutional cybersecurity environment for the energy sector on state and entity level.

There is no comprehensive cybersecurity strategy or legislation on state level. Some cyber defence aspects are touched upon in the strategies on combating organized crime and terrorism adopted by the Council of Ministers. Guidelines for a strategic cybersecurity framework were developed in 2019 by a multi-stakeholder task force including energy representatives. The Strategy on the establishment of a computer emergency response team (CERT) adopted in 2011 has never been implemented and there is no CERT responsible for energy covering the whole territory. Computer incident response in general is provided by the defence, security and law enforcement agencies.

The Strategy of 2011 defines critical infrastructure as "information and automated systems of general public relevance", with no reference to energy. The guidelines of 2019 envisage the development of a legal framework and mechanisms for identification, designation and protection of critical information infrastructure and services, and establishment of a CERT, including the energy sector. The Ministry of Foreign Trade and Economic Relations coordinates a project to develop a roadmap and streamline implementation of Directive 2016/1148/EC (NIS Directive) in energy. The project completion deadline is May 2022.

There are no adopted cybersecurity strategies or compliant laws on entity level. The Law on Information Security of Republika Srpska identifies the entity Ministry as the competent authority. The Computer Emergency Response Team of Republika Srpska operates within the Agency for Information Society of this entity since 2015, providing computer incident prevention, incident response and general protection of the cyberspace. In Federation of Bosnia and Herzegovina, prevention from cybercrime is provided mainly by the Ministry of Interior.

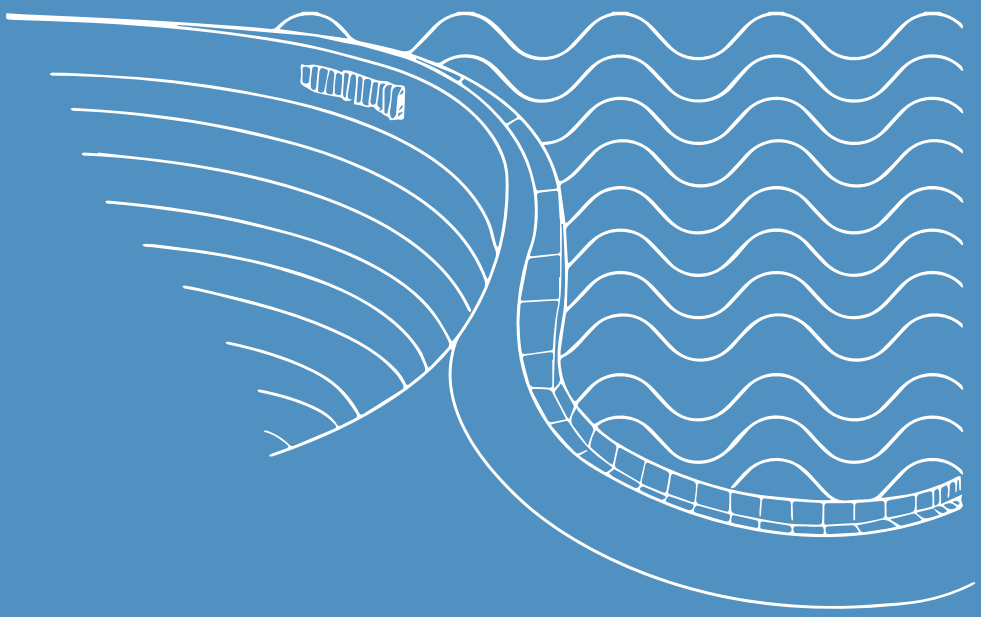
The independent electricity system operator NOS BIH started implementing an information security management system and security controls pursuant to the ISO 27001 standard in function of cybersecurity. The development of corresponding risk assessment and risk management policies, business continuity plan and disaster recovery plan is scheduled for the end of 2020. The guidelines of 2019 address incident prevention measures and reporting obligations in compliance with the NIS Directive. The CERT of Republika Srpska is collecting and exchanging information on cybersecurity threats and events with other CSIRTs.

The legal provisions defining competences of the energy regulators in Bosnia and Herzegovina do not refer to cybersecurituy.

It is imminent for Bosnia and Herzegovina to promptly adopt laws and set up mechanisms addressing critical infrastructure and cybersecurity, and establish a CERT responsible for energy at state level.

07

Georgia



Georgia

Summary Implementation

Summary Indicators	Transposition Assessement	Implementation Status	Descriptions
Electricity	✓	52%	Implementation in the electricity sector of Georgia is moderately advanced.
Gas	✓	13%	Implementation in the gas sector of Georgia is yet to begin.
Oil	~	20%	Implementation in the oil sector of Georgia is yet to begin.
Renewable Energy	~	33%	Implementation in the renewable energy sector of Georgia is still at an early stage.
Energy Efficiency	✓	44%	Implementation in the energy efficiency sector of Georgia is moderately advanced.
Environment	~	53%	Implementation in the environment sector of Georgia is moderately advanced.
Climate	~	43%	Implementation in the climate sector of Georgia is moderately advanced.
Infrastructure	✗	3%	Implementation in the infrastructure sector of Georgia is yet to begin.
Statistics	✓	95%	Implementation in the statistics sector of Georgia is almost completed.
Cybersecurity	~	29%	Implementation in the cybersecurity sector of Georgia is still at an early stage.

Georgia
State of Energy Sector Reforms

The adoption of the Law on Energy and Water Supply compliant with the Third Energy Package at the end of 2019 paved the way for the liberalization of the electricity and gas markets in the country. The Law provides the legal basis for unbundling of the transmission and the distribution systems in both sectors, as well as for market opening at both wholesale and retail level. Georgia started to adopt secondary legislation in line with the set timetable. Adoption of an electricity market model concept in April 2020 and the electricity market rules, which will enter into force on 1 July 2021, provide a framework for the gradual opening of the wholesale and retail markets. Day-ahead and balancing markets, which are to be launched on 1 July 2021, are in the testing phase. The gas market concept is still under discussion. Georgia continues not to have emergency oil stocks and no progress during the reporting period has taken place.

As regards climate and environment, Georgia, unlike other Contracting Parties, is not subject to a binding renewable energy target for 2020. A renewable energy law was adopted together with the Law on Energy at the end of 2019. An energy efficiency law is currently pending in Parliament. In the area of environment, Georgia has not yet transposed the Energy Community rules related to emissions into the air, despite operating four large combustion plants. Work on the National Energy and Climate Plan is under way and draft chapters of the plan have been submitted to the Secretariat for informal review.

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 and Russia. 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.

Georgia
Electricity

Electricity Implementation

Electricity Indicators	Transposition Assessement	Implementation Status	Descriptions
Unbundling	✓	43%	Unbundling of transmission and distribution system operators is ongoing. According to the new Law on Energy and Water Supply, it has to be finalized by the end of 2020.
Access to the system	✓	68%	Connection fees and network tariffs are published. The Connection Network Codes and the Transparency Regulation are transposed and their implementation has started.
Wholesale market	✓	45%	The wholesale market is based on bilateral contracts. Excessive public service obligations still apply to all thermal power plants and a large portion of hydro power capacity. According to the Electricity Market Concept Design of April 2020, day-ahead, balancing and ancillary services markets are to be launched by 1 July 2021. The Georgian Energy Exchange has been established and the organized markets are in the testing phase. REMIT is not transposed.
Retail market	✓	53%	All consumers are still supplied at regulated prices, except for customers consuming more than 5 mil. kWh per month and connected to 35-100 kV or 6-10 kV. The Electricity Market Concept Design defines gradual retail market opening, starting with large and medium voltage customers on 1 July 2021.
Regional integration	n/a	n/a	Georgia is not interconnected with other Contracting Parties nor EU Member States. Thus, no regional integration at the Energy Community level is taking place at present.

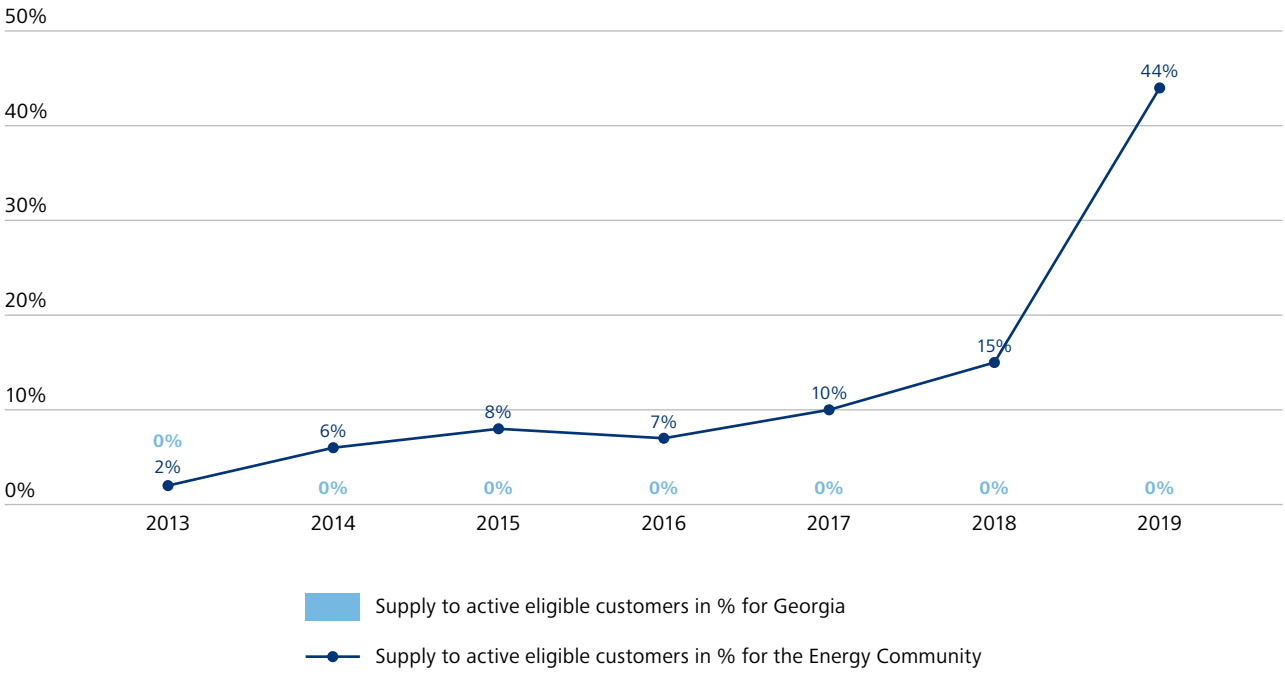
Georgia has made significant progress during the last reporting period. A landmark development in the reform of Georgia's electricity market was the adoption of the Law of Georgia on Energy and Water Supply on 20 December 2019. The Law transposes obligations on unbundling, third party access, wholesale trade, retail trade and regional cooperation and defines concrete timelines for their implementation.

The Law includes the obligation to finalize transmission system unbundling until the end of 2020. The national regulatory authority, GNERC, has submitted an ownership unbundling plan to the Government of Georgia, where it is currently discussed. According to the Law, the unbundling of distribution system operators also has to be finalized until the end of 2020. The distribution system operators submitted their unbundling plans to the regulator GNERC in October 2020.

Non-discriminatory, published, transparent and cost reflective connection tariffs are ensured by the network rules, setting the standard fees for connection based on the voltage of the connection and requested capacity. Transmission and distribution tariffs are adopted and published by GNERC.

The Connection Network Codes incorporated in the Energy Community so far were transposed and will enter into force in July 2021. General principles on congestion management including the use of congestion revenues have not been implemented yet. The Transparency Regulation was transposed and publication of data started on the ENTSO-E Transparency Platform.

Retail Market Opening



Source: Georgian National Energy and Water Supply Regulatory Commission (GNERC)

Gradual liberalisation of the wholesale and retail markets is defined by the Government's Electricity Market Concept Design adopted in April 2020 and the electricity market rules, which will enter into force on 1 July 2021. According to the Electricity Market Concept Design, day-ahead, balancing and ancillary services markets will be operational from 1 July 2021 and the intraday market from 1 July 2022. The operation of the day-ahead and balancing markets are currently being tested by the Georgian Energy Exchange and the transmission system operator. On the retail side, all customers connected to the 35 - 110 kV voltage level and consuming not less than 0,4 mil. kWh per month will be obliged to choose their supplier by 1 July 2021. All medium voltage customers as well as customers connected to 6 - 10 kV, consuming not less than 1 mil. kWh, will have to choose their supplier by 1 July 2022. All remaining customers except households and small enterprises will have to choose their suppliers until 1 July 2026.

The newly adopted electricity market rules contain day-ahead, intraday and balancing market rules, including imbalance settlements. According to the Law, GNERC will conduct market monitoring in line with the terms and conditions defined by the market monitoring rules, which are to enter into force on 1 January 2021. REMIT is yet to be transposed.

GNERC has adopted retail electricity market rules, which comprise specific provisions to support the supplier switching process, regulate the retail electricity market and allow for the enforcement of competition rules. Furthermore, GNERC adopted several resolutions determining rules on dispute resolution, market monitoring, quality of service, etc. The Law on Energy and Water Supply also includes provisions on vulnerable customer protection that enable public authorities to develop and implement mechanisms for the protection of vulnerable customers. GNERC carried out a smart metering system cost-benefit analysis which proved positive for the electricity market. At present, GNERC is working on a regulatory strategy for the implementation of smart metering systems.

As Georgia has no physical interconnection with the EU or Energy Community electricity markets, a derogation from cross-border cooperation is granted to the country until this happens. At this stage, there is no coordinated capacity allocation of cross-border capacities with neighbouring countries, except bilateral cross-border capacity allocation on the interconnection with Turkey.

Georgia
Gas

Gas Implementation

Gas Indicators	Transposition Assessement*	Implementation Status	Descriptions
Unbundling		2%	The Law on Energy and Water Supply of December 2019 envisages the ownership unbundling and independent system operator models for the unbundling of the transmission system operator. No unbundling plan exists yet.
Access to the system		19%	A system of transparent and non-discriminatory third party access is in place, however, an entry/exit transmission tariff methodology is not yet applied. No capacity allocation is performed.
Wholesale market		10%	Wholesale gas prices are deregulated and based on long-term contractual arrangements. There is no virtual trading point and all contracts are concluded bilaterally. The market remains highly concentrated and illiquid.
Retail market		11%	The customers' eligibility right is formally granted. End-user gas retail prices remain regulated for households and thermal generation and deregulated for the commercial sector. Customer protection by-laws are yet to be adopted.
Interconnectivity		33%	Georgia has well-developed cross-border connections with all neighbouring gas systems, yet exempted from the Network Codes.

The transposition of the Third Energy Package and provisions on security of supply means major progress (also) for the gas sector of Georgia. Georgia must accelerate work on adoption of the relevant secondary acts, and implement the law in practice. For the regulation of interconnection points, Georgia benefits from exemptions until 2026 which benefit also the South Caucasus Pipeline and the North South Gas Pipeline.

Georgia's energy regulator, GNERC, adopted certification rules for the transmission system operator in March 2020. However, the Law stipulates that the unbundling of the gas transmission system operator should be performed only by 31 December 2021, which is not in line with Georgia's obligations. The country's transmission system operator, the Georgian Gas Transportation Company (GGTC) has to start preparations for the unbundling process in order to meet the deadline.

The rules for unbundling of distribution system operators were adopted by GNERC in July 2020. They establish the mandatory criteria for unbundling of the distribution system operator and set out requirements and rules for the development, introduction, adoption and publication of a compliance programme by the distribution system operator as well as activities of the compliance officer.

Georgia is exempted from performing capacity allocation on the interconnection points. However, third party access to the network is not hampered by that exemption. Georgia met its deadline for transposition of the balancing Network Code in September 2020. The introduction of an entry/exit tariff methodology is envisaged as from 2023. Under the current natural gas Network Code, the gas transportation licensee is obliged to sign interconnection agreements with adjacent transmission system operators. REMIT has not been transposed.

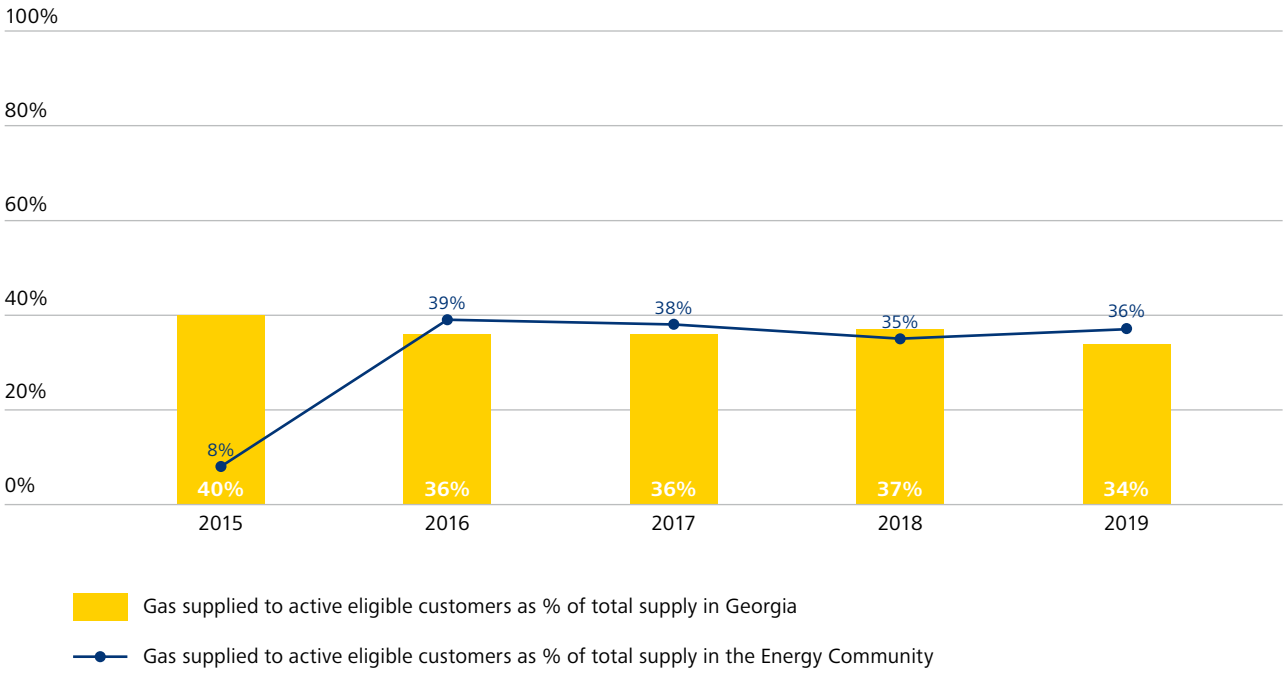
Georgia is a net importer of gas and intergovernmental agreements and long-term contracts continue to frame gas supplies to Georgia while keeping the Georgian wholesale and retail gas

markets illiquid and foreclosed. The development of a well-functioning gas hub could diversify Georgia's gas market and provide opportunities for increased trading and a more strategic role for Georgia in the region. The gas market is open according to the Law. Wholesale prices are deregulated for the commercial sector including industry and small enterprises. There is no virtual trading point in Georgia. The gas market concept design is being discussed with the Secretariat.

The Law allows the imposition of public service obligations on gas undertakings to provide regulated public supply to households, small enterprises and thermal power plants. The regulator was tasked to review its necessity every two years. Moreover, the Law envisages a supplier of last resort. A category of vulnerable customers representing household customers in need of special treatment due to their status or health condition is also subject to social programmes and additional protection by the Government.

Georgia transposed the security of supply acquis in the Law. The natural gas emergency plan elements are being elaborated together with the Secretariat and relevant Georgian stakeholders. Nevertheless, Georgia has not submitted its first Security of Supply Statement to the Secretariat, despite the deadline having passed two years ago.

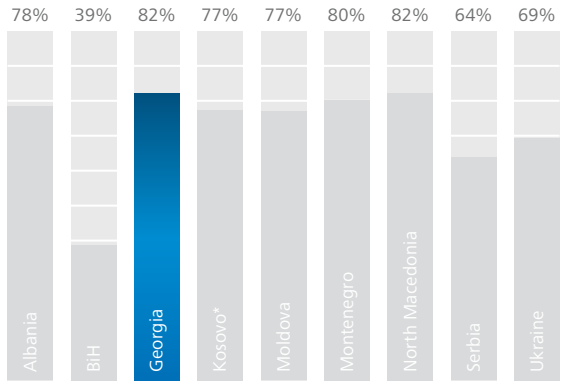
Retail Market Opening



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

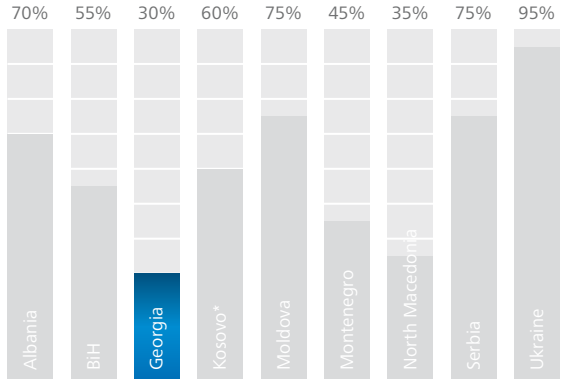
Georgia
National Authorities

Regulatory Authority



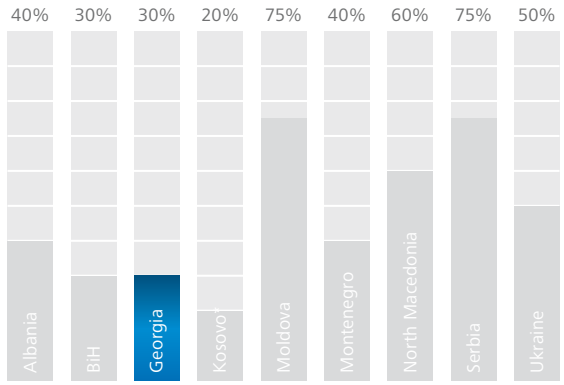
The Georgian National Energy and Water Supply Regulatory Commission (GNERC) continued to demonstrate its technical expertise and strong regulatory independence also as expected under the 2019 Energy Law. Transposition of the electricity Network Codes and the Network Code on gas balancing into national rules ahead of the deadline stipulated by national legislation are a proof of the regulator's commitment to align the regulatory framework with requirements of the acquis. However, the transposition of the REMIT Regulation, rules for designation of a Nominated Energy Market Operator and adoption of criteria based on which derogations from the electricity Network Codes can be granted are still pending.

Competition Authority



While the Competition Agency is responsible for the enforcement of competition law in general, the regulatory authority GNERC, is responsible for its enforcement in the electricity and natural gas sectors. GNERC does not have the same effective enforcement tools as the Competition Agency; however, amendments to the Law on Competition addressing these concerns are currently under discussion. GNERC has never pursued a case based on infringements of competition law.

State Aid Authority



The enforcement of the State aid acquis is limited due to a narrow definition of State aid, which only covers decisions with regard to an undertaking, but not any other acts with regard to certain energy resources as well as support schemes, and does not give GNERC the power to render negative decisions. Amendments to the Competition Law addressing this are currently under discussion, including changes to the State aid rules.

Georgia
Oil

Oil Implementation

Oil Indicators	Transposition Assessement	Implementation Status	Descriptions
Stockholding obligation		0%	Georgia does not have emergency oil stocks. The current draft of the Oil Stockholding Act is being consulted with economic operators. The adoption process is expected to start by the end of this year.
Emergency procedures		0%	Currently, there are no procedures in place to release emergency oil stocks. Under the draft Law, 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)		40%	From 2017, the allowed sulphur content in petrol has been reduced to maximum 10 ppm. As to the sulphur content in diesel fuel, it lags behind the Directive's standards. Instead, it was set at 50 ppm in 2019. However, it will be decreased to 10 ppm from 1 January 2021. There are no specifications relating to gas oil used for NRMM.
Monitoring compliance and reporting including the lay down the rules on penalties		40%	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 still does not have emergency oil stocks and showed no progress during the reporting period. The current draft Oil Stockholding Act is being consulted with economic operators (importers and owners of tanks). Several issues (e.g. the lack of storage facilities, the impact of the oil stocks obligations on small importers, market competition and retail prices) remain to be resolved prior to the adoption of the legislation, expected to commence by the end of this year.

The quality of fuel is regulated by the 2014 Decree of the Government on the qualitative norms of motor petrol and the 2005 Decree on diesel fuel composition norms, analysis methods and their introduction. The Decrees should be amended in order to reflect the current EU standards for petrol, diesel and gas oil for non-road mobile machinery (NRMM).

Georgia
Renewable Energy

Renewable Energy Implementation

Renewable Energy Indicators	Transposition Assessement	Implementation Status	Descriptions
National Renewable Energy Action Plan		25%	Due to its late accession to the Energy Community, Georgia adopted the NREAP only at the end of 2019. The document contains a set of measures to promote renewable energy. However, there is no obligatory 2020 target.
Quality of support schemes		38%	For years, hydropower was promoted through guaranteed power purchase agreements (PPAs). In July 2020, the Government of Georgia adopted a secondary act introducing a feed-in premium (FiP) for hydropower plants with installed capacity higher than 5 MW. A support scheme for other renewables technologies is not yet in place.
Grid integration		56%	The newly adopted Law on Promoting the Production and Use of Energy from Renewable Sources envisages guaranteed and priority access to renewable energy producers, which is still to be implemented through regulations. Current hydro producers supported with feed-in tariffs under a PPA are exempted from balancing responsibility, which is not in line with the State Aid Guidelines.
Administrative procedures and guarantees of origin		49%	Licensing and permitting procedures need to be simplified and streamlined. There is no single administrative body established. An electronic system for issuing, transfer and cancellation of guarantees of origin is not yet in place.
Renewable energy in transport		0%	Provisions related to the sustainability of biofuels are still not transposed and the legal framework remains completely non-compliant with Directive 2009/28/EC.

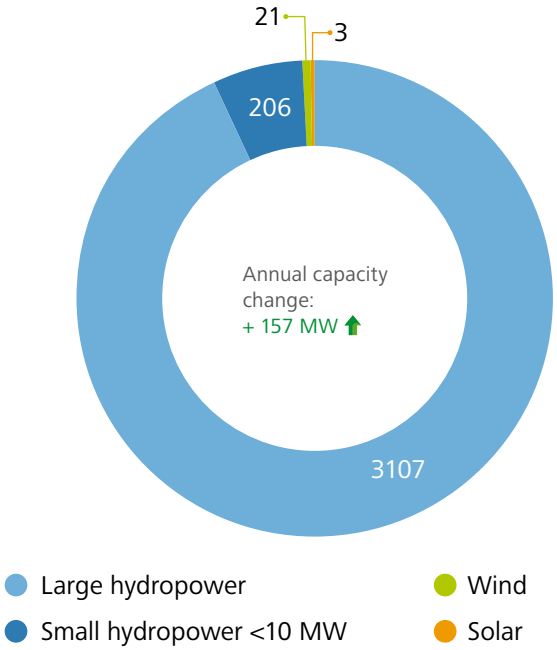
In December 2019, Georgia adopted the Law on Promoting the Production and Use of Energy from Renewable Sources aiming to transpose the renewables acquis. The Law sets the basis for adoption of 2030 targets, introduction of a market-based support scheme for renewable energy as well as implementation of other articles from Directive 2009/28/EC. The Law prescribes adoption of several acts, some of which were adopted in 2020, including a Rule for accounting the energy received from thermal pumps, Rule on developing minimum requirements for the template for national renewable energy action plans and Rule for normalization of accounting for electricity generated from hydro energy and wind energy.

In July 2020, the Georgian Government adopted an act setting a feed-in premium (FiP) at up to 1,5 USc/kWh for hydropower plants with installed capacity higher than 5 MW. According to the act, producers are obliged to sell electricity at the market and they are entitled to receive a FiP if the market price is less than 5,5 USc/kWh. In such a case, the amount of the FiP is the difference between 5,5 USc/kWh and the market price but no more than 1,5 USc/kWh. An EU4Energy Governance project is developing a template for a contractual agreement for this mechanism.

The net-metering system for self-consumption is implemented in Georgia since 2016. 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 adoption of secondary legislation and implementation in line with the 2019 Law and Energy Community law.

Total Capacities of Renewable Energy 2019 (MW)



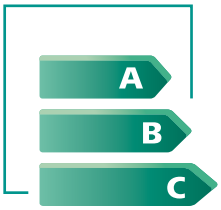
Source: Ministry of Economy and Sustainable Development

The Georgian renewable power portfolio is mostly based on hydropower. Although without a binding target for 2020, the country is putting efforts to diversify production and promote the use of renewable energy. At the moment, Georgia is working on the preparation of a first solar PV auction, however without the necessary legal framework in place yet.

Besides more than 3.000 MW of large hydropower plants and more than 200 MW of small hydropower, Georgia has in operation one wind park (Gori, 20,7 MW) and 2,5 MW of mostly solar rooftop installations.

Total capacities of renewable energy (MW):

3336



Georgia
Energy Efficiency

Energy Efficiency Implementation

Energy Efficiency Indicators	Transposition Assessement	Implementation Status	Descriptions
Energy efficiency targets and policy measures	✓	61%	The general 2020 target was set in the NEEAP, adopted in December 2019. The specific targets required by the Energy Efficiency Directive were set in the Energy Efficiency Law, adopted in May 2020. Georgia submitted its first Annual Progress Report to the Secretariat in September 2020.
Energy efficiency in buildings	✓	45%	The Law on Energy Performance of Buildings was adopted by the Georgian Parliament on 21 May 2020. Secondary legislation remains to be adopted, but six by-laws (methodology for energy performance calculation, certification rules, Regulation on inspection of heating and air-conditioning systems, Regulation on minimum energy performance requirements for buildings, report on heating and cooling systems, alternative measures of regularity compliance inspection) have been prepared for adoption by the Government
Energy efficiency financing	~	47%	The Energy Efficiency Law promotes the use of energy service companies but does not include a framework to support public financing (i.e. an energy efficiency fund). Nevertheless, a large number of international technical assistance and financing programmes support energy efficiency measures, especially in the building sector.
Energy efficient products - labelling	✓	41%	The Law on Energy Labelling was adopted in December 2019. The adoption of the fifteen product regulations required by the Law is pending.
Efficiency in heating and cooling	~	26%	Georgia has no district heating or cooling systems. An assessment of high-efficiency cogeneration and efficient district heating and cooling potential is still to be conducted.

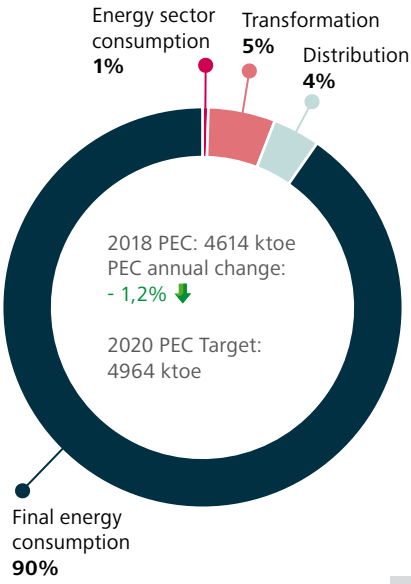
During this reporting period, Georgia made giant strides in the transposition of the energy efficiency acquis. It transposed the Directives on energy labelling, energy efficiency and the energy performance of buildings, as well as the National Energy Efficiency Action Plan (NEEAP). The institutional framework received a boost following the decision of the Ministry of Economy and Sustainable Development to allocate more staff to the energy efficiency field.

Georgia's focus now needs to turn to the adoption of a very large number of by-laws in order to implement the three Laws adopted during the latest reporting period. Until then, Georgia will remain non-compliant in many areas of the energy efficiency acquis.

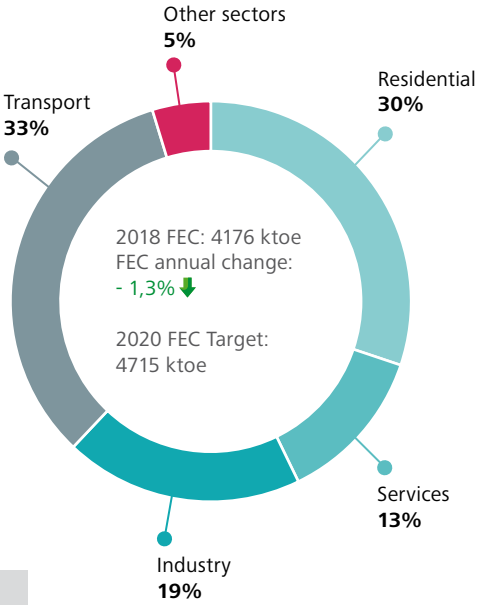
Currently, there is no national fund for energy efficiency, but large EU and IFI grants and lending programmes for energy efficiency in buildings are being implemented. Adequate engagement of the private sector requires the further development of the ESCO market.

2018 Energy Efficiency Indicators and Trends

Primary Energy Consumption (PEC)



Final Energy Consumption (FEC)



Energy intensity, 2018 value and trends: 0,37 ktoe/mil EUR, - 5,3%

Source: EUROSTAT and World Bank 2020 data and the Contracting Party's Annual Report 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 Assessement	Implementation Status	Descriptions
Environmental impact assessment (EIA) and strategic environmental assessment (SEA)	✓	57%	The Environmental Assessment Code and related secondary legislation transpose the directives on environmental assessments into national law. The competent authorities should ensure the implementation of the Directive with the support of the recently published Policy Guidelines on the development of small hydropower projects.
Sulphur in fuels	~	n/a	The rules on land-based fuels are in force since 2017 and are compliant with the Directive's provisions. Rules on sampling and analysis and on marine fuels are not yet adopted. Georgia's Accession Protocol to the Energy Community Treaty requires that the provisions of the Directive are fully implemented by 1 September 2021.
Large combustions plants and industrial emissions	~	50%	Georgia has not yet transposed the provisions of either Directives related to the abatement of emissions from large combustion plants. Provisions on the limits and the reporting of emissions into air from stationary sources exist but are not yet compliant.
Nature protection	~	53%	The deadline in the Accession Protocol of Georgia to transpose Article 4(2) of the Wild Birds Directive expired on 1 September 2019. Georgia should focus its efforts on the adoption of the draft Law on Biodiversity and the continuation of designating special protective areas.

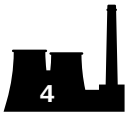
Georgia's Environmental Assessment Code is in force since January 2018. It complies with the provisions of the Directives on environmental impact assessments and strategic environmental assessments. Secondary legislation related to the implementation of the Environmental Assessment Code were also adopted. The Ministry of Environmental Protection and Agriculture acts as competent authority for both types of environmental assessments, including transboundary ones. Draft amendments to the Environmental Assessment Code, aimed at improving procedural issues, were prepared during the latest reporting period. However, their adoption was postponed due to the Covid-19 situation. During the reporting period, a total of 41 network energy-related environmental impact assessments were carried out, out of which 19 received development consent, including two small hydropower projects.

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 and marine fuels are planned for the first half of 2021.

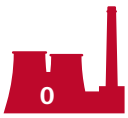
With regard to large combustion plants, Georgia has four gas-fired installations falling under the scope of the Directive, the emissions of which are in line with the Directive. Georgia complied with its reporting obligations under the Large Combustion Plants Directive in April 2020 by submitting its emissions data to the European Environment Agency for the reporting year 2019. The adoption of the draft Law on Industrial Emissions and a by-law on special provisions for combustion plants was postponed to 2021 due to the Covid-19 situation. The drafts were developed in line with the provisions of the Industrial Emissions Directive.

With regard to nature protection, the draft Law on Biodiversity is in its final development stage, with the provisions related to the protection and preservation of wild birds being one of the most essential elements of the draft. The draft law initiates 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 submission of the draft law to the Government is planned by the end of 2020. Furthermore, Special Protection Areas for Birds (SPAs) are established. At this stage, there are a total of 24 SPA sites in Georgia. The database of SPA sites, together with an interactive map, is publicly available and actively used in environmental impact assessments.

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

2019 emissions of NO_x versus applicable emission limit values (ELV)

Estimated emission concentration of NO_x in 2019	143,4 mg/Nm³	206,1 mg/Nm³	77,4 mg/Nm³	30,0 mg/Nm³

Source: calculated by the Energy Community Secretariat

Georgia
Climate

Climate Indicators	Transposition Assessement	Implementation Status	Descriptions
National greenhouse gas emissions monitoring and reporting systems		41%	The legislative framework and software tool for GHG data management, the Climate Action Plan and Long-Term Strategy are under development, while compliance with provisions of Regulation (EU) 525/2013 should be ensured.
National Energy and Climate Plans (NECPs)		45%	Draft chapters of the NECP have been submitted to the Secretariat in August 2020. Work on the analytical part of the plan, in particular on the policy scenarios, is still ongoing.

Georgia's NDC under the Paris Agreement set an unconditional 15% target below the business as usual (BAU) scenario by 2030 and conditional 25% reduction below BAU by 2030. Georgia is currently working on its NDC revision. Preparations of the fourth National Communication are ongoing while the document should be submitted this year.

For the preparation of the national GHG inventory, Georgia leverages on external assistance and outsourced technical expertise. There is still a need for a unified common framework for different sectors including generally applicable reporting formats. The legal framework as a basis for a binding Measurement, Reporting and Verification (MRV) system is lacking in Georgia. The legislative framework and software tool for the GHG emissions data management is under development. The processes related to the development of Georgia's Low Emissions Development Strategy has started in the second half of 2020. Since 2019 the country is in the process of creating a national system for policies, measures and projections and updating its legislation to be in line with EU standards trough the support of the EU4Climate project.

Georgia has no dedicated climate change legislation. According to the Georgian Law on Energy and Water Supply, the NECP should be an "Annex of the Energy Policy". It is treated as an overarching strategic document in contrast to the three-year action plans required under the new Law on Energy Efficiency and the Law on the Promotion of the Generation and Use of Energy from Renewable Sources. Georgia has set up a core team for NECP development and sent draft chapters of the NECP to the Secretariat for informal comments in August 2020.

Georgia
Infrastructure

Infrastructure Implementation

Infrastructure Indicators	Transposition Assessement	Implementation Status	Descriptions
National competent authority	X	0%	The national competent authority has not been appointed yet.
Manual of procedures	X	0%	The manual of procedures has not been drafted.
National regulatory authority involvement	X	10%	The Georgian National Energy and Water Supply Regulatory Commission has approved investment evaluation rules and is currently working on defining a cost-benefit analysis methodology for evaluation of investment projects in the transmission system, both in electricity and gas.

Georgia should adopt a legal act to transpose Regulation (EU) 347/2013 into its national legislation. In the reporting period, there was no progress in this regard.

Given that the deadline has already expired, Georgia should proceed with the Regulation's transposition as soon as possible.

Swift implementation of the Regulation is to follow. 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).

Proposed 2020 PECI/PMI projects: 3

Gas: 3

PECI: 3

Georgia
Statistics

Statistics Implementation

Statistics Indicators	Transposition Assessement	Implementation Status	Descriptions
Annual statistics	✓	100%	The five annual questionnaires for 2018 were transmitted to EUROSTAT. The questionnaire on final energy consumption of households for 2018 was compiled and transmitted.
Monthly statistics	✓	76%	Monthly data are collected and disseminated timely in accordance with Annex C of the Regulation, except for oil stocks. Short-term monthly datasets are not available in defined timeframes.
Price statistics	✓	100%	Price statistics for electricity and natural gas for 2019 were compiled and transmitted in accordance with the acquis.

Although Georgia was the last Contracting Party to begin implementation of the acquis on energy statistics, it has achieved a very high level of compliance.

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 for the period from 2013 onwards have been transmitted to and published by EUROSTAT. In addition, disaggregated data on final energy consumption of households are reported to EUROSTAT in the defined questionnaire format. Preliminary questionnaires with data for 2019 were prepared and transmitted on time.

As for the monthly statistics, Georgia collects and disseminates monthly data for solid fuel, natural gas, oil and electricity and transmits them to EUROSTAT. The timeliness of these collections has improved and with adding monthly oil questionnaires in September 2020 Georgia has been transmitting all monthly data collections from Annex C of Regulation (EC) 1099/2009. Short-term monthly data collections for oil and gas pursuant to Annex D of Regulation (EC) 1099/2008 are provided, although with a time lag of two months instead of one.

GEOSTAT introduced quality assurance procedures and prepares quality reports for different domains. The metadata for the available quality report for transmitted energy data was not transmitted to EUROSTAT as required under the Regulation.

The transmitting of 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. The only shortcomings are related to the timeliness of short-term collections, mainly due to the lack of resources.

Georgia
Cybersecurity

Cybersecurity Implementation

Cybersecurity indicators	Transposition Assessement	Implementation Status	Descriptions
Institutions and legislation			An updated cybersecurity strategy is not yet adopted and the current legal framework does not transpose compliant cybersecurity requirements in energy. The identification and designation of critical energy infrastructures and services is not completed. The computer emergency response team covering the energy sector is in restructuring.
Requirements for operators and energy regulatory authority			Energy-specific risk analysis is missing. There are general obligations to develop individual information security rules by stakeholders and obligations for reporting incidents. Rules and obligations for energy stakeholders are missing. Cybersecurity competences and powers of the energy regulator are not enforced.

In Georgia, cybersecurity competences are shared between the defence sector and the economic sector. The economic branch is less developed with certain aspects of compliance and security measures completely missing.

The Cybersecurity Strategy 2012 - 2015 set the basis on combatting terrorism and cybercrime, promoted cyber threat analysis, institutional coordination, public awareness, international cooperation and protection of critical information systems, and requested establishment of computer security incident response teams (CSIRTs). The follow-up Strategy 2017 - 2018 goes a step further by calling for compliant legislation, risk assessment rules and public-private partnership. It does not specifically address energy. The adoption of the draft cybersecurity strategy for 2020 - 2022 was postponed due to ongoing restructuring of the administration responsible for data security.

The Digital Governance Agency (DGA) operates as the national cybersecurity authority under the Ministry of Justice, according to the Law on Information Security amended in June 2020. The Law defines security of critical information systems both in the public and private domains of the economy, including information security audits, security management and services, and the concept of CERT operation. Energy is not specifically referenced in the Law, and international cybersecurity cooperation measures are missing.

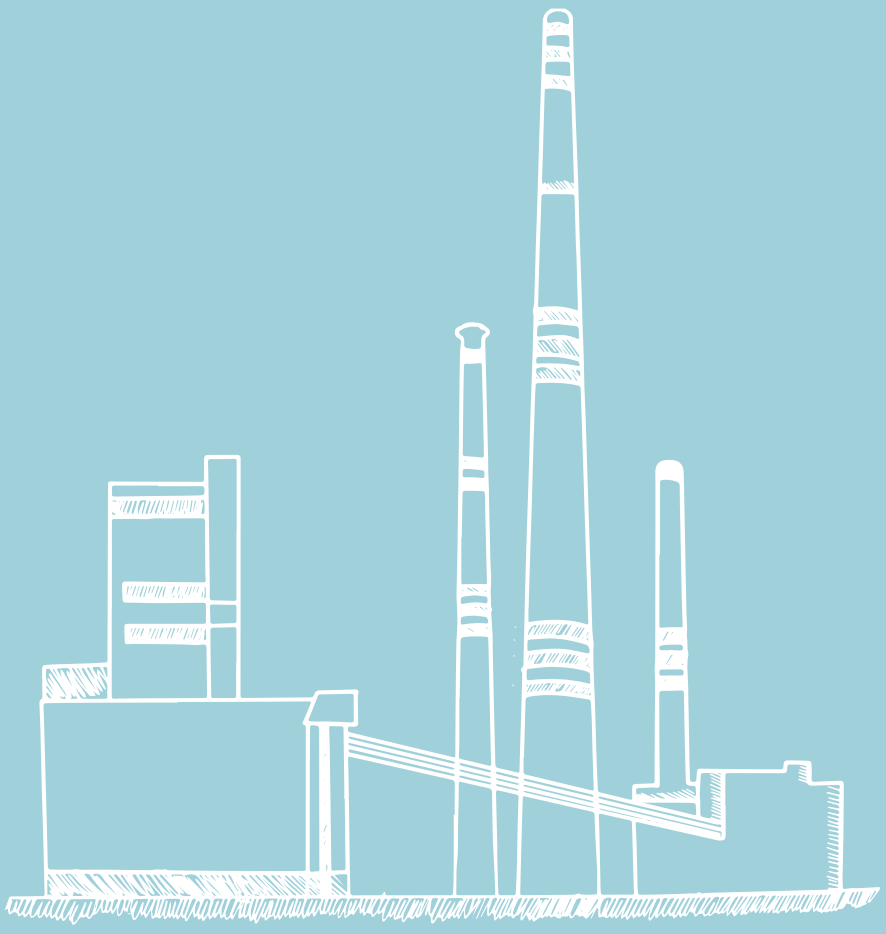
Security of critical information infrastructure is the main objective of both the strategy and the Law. However, the criteria for identification and designation of critical energy infrastructure and essential services are not defined. The implementation is guided by the DGA, with the assistance of the energy regulator GNERC. DGA has not yet completed the assessment of information submitted by companies in a recent survey of the critical infrastructure. The computer emergency response team operating within the Agency (CERT-GOV-GE) must be notified on security incidents. Pursuant to the 2020 amendments of the Law on Information Security, the CERT's activities are going to be carried out by the Computer Management Agency governed by the DGA.

Cybersecurity risk assessment is barely addressed in the Strategy and not covered by the Law on Information Security. The Law provides general requirements for information security audits and obligations for performing tests. DGA is tasked to set and monitor the overall policy and assess the internal information security rules, which each operator of critical information system has to submit. Specific criteria for risk assessment in energy are not defined.

The energy regulatory authority GNERC supports activities related to security and identification of critical infrastructure and services in the energy sector. However, it has no specific cybersecurity tasks or powers defined by law.

08

Kosovo*

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Kosovo*

Summary Implementation

Summary Indicators	Transposition Assessement	Implementation Status	Descriptions
Electricity	✓	62%	Implementation in the electricity sector of Kosovo* is well advanced.
Gas*	✓	29%	Implementation in the gas sector of Kosovo* is still at an early stage.
Oil	~	40%	Implementation in the oil sector of Kosovo* is still at an early stage.
Renewable Energy	~	56%	Implementation in the renewable energy sector of Kosovo* is moderately advanced.
Energy Efficiency	✓	61%	Implementation in the energy efficiency sector of Kosovo* is well advanced.
Environment	~	56%	Implementation in the environment sector of Kosovo* is moderately advanced.
Climate	~	40%	Implementation in the climate sector of Kosovo* is still at an early stage.
Infrastructure	✓	88%	Implementation in the infrastructure sector of Kosovo* is almost completed.
Statistics	~	80%	Implementation in the statistics sector of Kosovo* is well advanced.
Cybersecurity	~	38%	Implementation in the cybersecurity sector of Kosovo* is still at an early stage.

* 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: 3

Procedure by Article 91

ECS-7/11 State aid

ECS-6/18 Environment

ECS-4/19 State aid

Kosovo*

State of Energy Sector Reforms

Kosovo's* electricity transmission and distribution system operators are unbundled in a manner compliant with the Energy Community rules. The wholesale electricity market and the supply of (three) high voltage customers are deregulated, but liberalization has stalled for customers on medium voltage levels. The contract for the Kosovo e Re project was terminated by the investor, which also ended infringement procedures initiated by the Secretariat. Kosovo* was the first Contracting Party to transpose the REMIT Regulation. A draft law on compulsory oil stockholding was again not adopted.

In the area of renewable energy, support in the form of feed-in tariffs defined by the regulatory authority ERO is still being awarded administratively, most recently for 25 MW of solar in a manner raising doubts as to the integrity of the procedure. A concept for market-based support schemes is being developed. The share of renewables in gross final energy consumption in 2018 was 24,9%, which puts Kosovo* on the trajectory for its 2020 target.

An energy efficiency law including a set of by-laws for implementation was adopted and an energy efficiency fund was established as an independent entity. Kosovo* is the only Contracting Party which, as a non-UN member, is not a signatory of the Paris Agreement. Yet, a climate change concept paper was drafted as well as national GHG inventories, and the 2019-2028 national strategy and action plan on climate change was approved by the Government. A law on climate change was also drafted. Work on the National Energy and Climate Plan is still at relatively early stages, but catching up.

For the emissions from large combustion plants, Kosovo* has adopted a National Emission Reduction Plan (instead of complying with the emission limit values on an individual basis). It is not implemented in practice (for nitrogen oxide and dust). Kosovo* paid direct subsides worth some EUR 6,5 million to support coal-fired power generation in 2019.

Kosovo* depends almost exclusively on two ageing lignite plants for its electricity. The contract for building a new one, the Kosovo* e Re project, was cancelled. The development of the electricity sector has suffered from a dispute with the transmission system operator of neighbouring Serbia, which 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. A gas interconnector with North Macedonia would be a cost-efficient option for the import of gas, which could contribute to replacing lignite in power generation, as would market coupling with neighbouring countries. 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

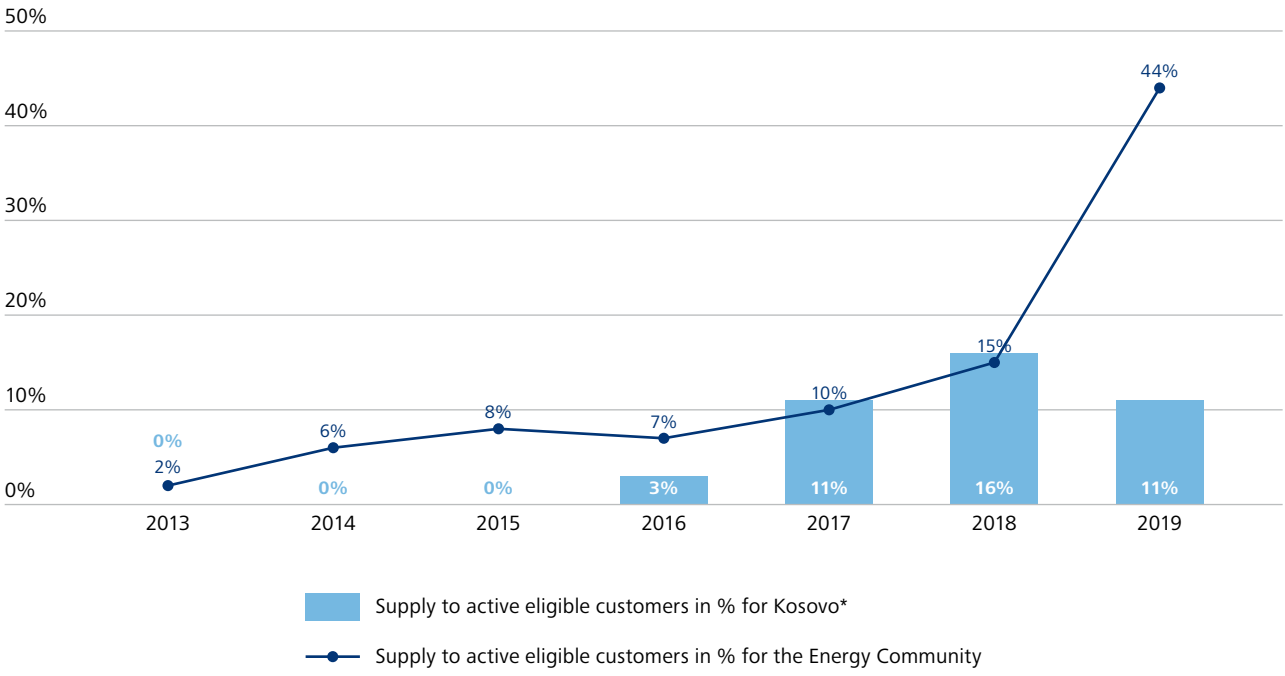
Electricity Implementation

Electricity Indicators	Transposition Assessement	Implementation Status	Descriptions
Unbundling		100%	The transmission system operator is ownership unbundled and was certified in line with the Secretariat's Opinion. The distribution system operator is legally and functionally unbundled.
Access to the system		69%	Network tariffs are non-discriminatory and publicly available. Third party access to the new interconnection line with Albania is still not ensured. ~~The Transparency Regulation is transposed and implemented.~~ The Connection Network Codes are implemented but not formally transposed by a legislative or regulatory act.
Wholesale market		60%	The wholesale market is deregulated. The transmission system operator signed a shareholders agreement with the transmission system operator of Albania for the establishment of the power exchange company ALPEX. A balancing market is yet to be established. REMIT was transposed but remains to be implemented.
Retail market		58%	The retail market continues to be predominantly regulated. Only industrial customers connected to 220kV and 110kV are supplied on the open market. The deadline of April 2020 for customers connected to the 35 kV voltage level to choose their suppliers at unregulated prices was not met. KESCO continues to act as the universal service supplier until 31 March 2021.
Regional integration		24%	The implementation of the connection agreement with ENTSO-E will finally make possible day-ahead and balancing market integration of the electricity markets of Kosovo* and Albania, including the allocation of capacities on the interconnection line with Albania. Other cross-border capacities, currently allocated by EMS of Serbia, are planned to be allocated by SEE CAO as of 2021. The transmission system operator signed an agreement on establishing a Load Frequency Control (LFC) block with the transmission system operator of Albania.

The reporting period was marked by the signing of the connection agreement between the transmission system operator of Kosovo*, KOSTT, and ENTSO-E, which entered into force in October 2020. The contract for the new Kosovo e Re coal-fired power plant was terminated by the investor. These developments are expected to give rise to day-ahead market coupling and cross-border balancing cooperation, with Albania in the first place.

A contract on the establishment of a joint load frequency control (LFC) block between the transmission system operators of Kosovo* and Albania was signed in November 2019. Procedures for the dimensioning of balancing reserves and exchange and activation of balancing energy in the control areas and the LFC block were drafted, a public consultation was completed in September 2020.

Retail Market Opening



Source: Ministry of Economic Development

Furthermore, KOSTT signed a shareholders agreement with the transmission system operator of Albania to establish the power exchange company ALPEX. The establishment and registration of the company was completed in October 2020. The operation of ALPEX and the market coupling of Kosovo* and Albania should be launched simultaneously in the first half of 2021. Following a recommendation of the Energy Community Regulatory Board, the regulatory authority (ERO) adopted rules setting the procedure for designating the Nominated Electricity Market Operator in line with the Capacity Allocation and Congestion Management Regulation.

In June 2020, ERO approved the Rule on Wholesale Energy Market Integrity and Transparency, transposing the REMIT Regulation.

Following the entry into force of the connection agreement with ENTSO-E, the allocation of capacities on the new 400 kV interconnector between Albania and Kosovo*, as well as on the interconnectors currently allocated by the transmission system operator of Serbia, will be performed by SEE CAO. Allocation is expected to start with yearly auctions for 2021.

The certification of KOSTT was completed in line with the Third Energy Package in February 2019, following a positive Opinion of the Secretariat. The distribution system operator KEDS is unbundled from supply activities already since 1 January 2015. Amendments to the compliance programme of 2015 were approved by ERO in February 2020, following which KEDS appointed a compliance officer.

Transmission and distribution tariffs for the period from April 2020 to March 2021 were approved by ERO. The network tariff to be paid by generators connected to the transmission network was decreased in 2020. However, it still exceeds the maximum value allowed by Regulation (EU) 838/2010.

KOSTT set up a transparency platform and started publishing data in line with Regulation (EU) 543/2013. The data are not yet published on the ENTSO-E Transparency Platform. The Connection Network Codes are implemented through amendments to the grid code, however, formal transposition by a legislative or regulatory act is still missing.

For the third consecutive year, there was no progress towards opening of the retail market for medium voltage customers. Despite the deadline for 35 kV customers to choose their supplier on the free market until 1 April 2020, they continue to be supplied by the universal supplier at regulated prices. In July 2020, the regulator adopted a decision extending the obligation imposed on the supply company KESCO to perform universal supply until 31 March 2021. The extension was justified by reference to the Covid-19 crisis.

Kosovo*
Gas

Gas Implementation

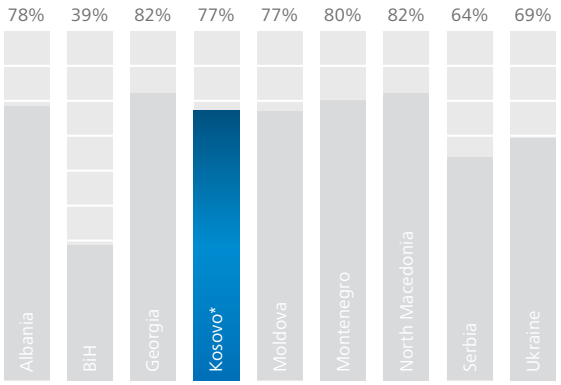
Gas Indicators	Transposition Assessement	Implementation Status	Descriptions
Unbundling	✓	0%	Ownership unbundling will be the only applicable model for a future transmission system operator.
Access to the system	✓	0%	Kosovo* does not have a gas network and thus has not adopted any tariff methodology or network code.
Wholesale market	✓	0%	Market rules do not exist in Kosovo*.
Retail market	✓	10%	There are no gas supplies and consequently no retail market exists in Kosovo*.
Interconnectivity	~	12%	Kosovo* developed some security of supply rules. Options to enable access to a gas market are under discussion.

Kosovo* has no gas market at present. Despite its ambitious plans to establish a national gas market as part of a wider decarbonisation agenda, no activities took place in adopting gas market secondary legislation. The creation of an adequate regulatory framework is crucial for the future of gas supply to Kosovo*.

However, during the reporting period, Kosovo* started engaging in developing a feasible and realistic supply route from North Macedonia, in addition to or instead of the favoured connection with Albania's gas network. The North Macedonia – Kosovo* interconnector is gaining momentum and could receive assistance from international funds.

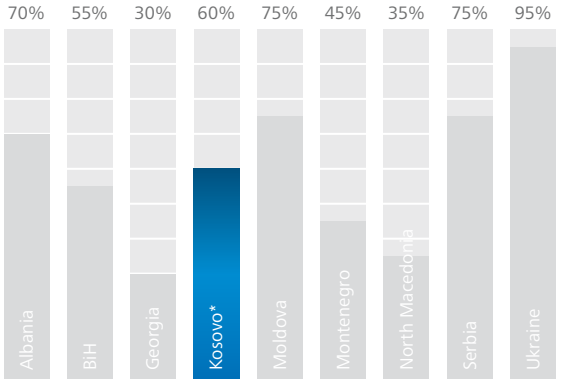
Kosovo*
National Authorities

Regulatory Authority



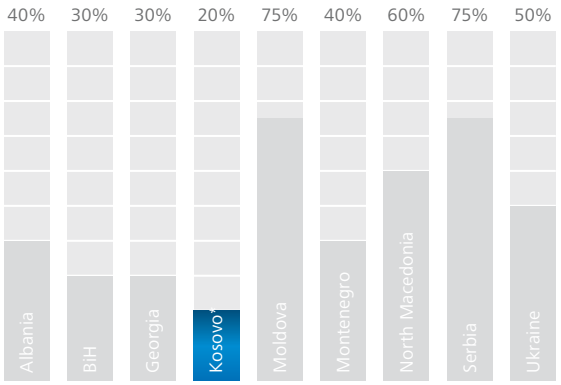
The Energy Regulatory Office (ERO) continued transposing new acquis. The electricity Network Codes are part of secondary regulatory rules. Regulatory criteria based on which derogations from the Codes can be granted are not in place yet. Adoption of the REMIT Regulation and rules for approval of a Nominated Energy Market Operator underline ERO's commitment to advance energy reforms. On the other hand, the Secretariat monitored shortcomings in the allocation of support for additional 20MW of solar capacity. Also, ERO, since April 2018, delayed market opening several times for customers connected on 35 and 10 kV. Should the vacant chair post not be filled by mid December 2020 when the term of two board members will expire, ERO will lose its decision-making quorum which jeopardizes functional independence.

Competition Authority



In the reporting period, the Kosovo Competition Authority closed an investigation on the market for oil derivatives against sixteen companies, imposing a fine on 14 of them of EUR 4 million in total. No further enforcement activities in the energy sectors (in particular following the sector inquiry of the electricity market initiated in June 2019) have taken place.

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 coal and renewable energy sectors. However, so far, no decision enforcing the State aid acquis has been rendered and there have been no enforcement activities in the energy sectors since the Law on State Aid first entered into force in 2014. A case regarding state support to the Kosova e Re project is still pending.

Kosovo*
Oil

Oil Implementation

Oil Indicators	Transposition Assessement	Implementation Status	Descriptions
Stockholding obligation	✗	0%	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.
Emergency procedures	✗	0%	Kosovo* is currently lacking legislation concerning the release of emergency oil stocks.
Fuel specifications of petrol, diesel and gas oil for non-road mobile machinery (NRMM)	✓	80%	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	✓	80%	The suppliers are obliged to guarantee the quality of petroleum-derived liquid fuels placed on the market. The quality is verified by 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.

There was no progress during the reporting period. The Oil Market Law of 2005, as amended in 2009, fails to meet the requirements of the Oil Stocks Directive. Back in 2014, the Ministry of Trade and Industry finalized a compliant draft Law which was expected to be adopted in the fourth quarter of 2016 or first quarter of 2017. Despite the Secretariat's backing of the draft Law, the Government has not approved it so far.

Kosovo* has transposed the main provisions of the Fuel Quality Directive. Certain diesel specifications (manganese maximum limit, cetane number, oxidation stability and distillation) should be improved by amending the 2017 Administrative Instruction. 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 Assessement	Implementation Status	Descriptions
National Renewable Energy Action Plan	✓	78%	Kosovo* submitted its NREAP as well as all three Progress Reports on implementation of the Renewables Directive to the Secretariat. Kosovo* has registered a 24,9% share of energy from renewable sources in 2018, putting it back on the trajectory to reach its 25% target in 2020.
Quality of support schemes	✓	40%	The support scheme for renewable energy is currently based on administratively set feed-in tariffs. A concept for a market-based support scheme is being drafted. Renewables producers admitted to the support scheme are entitled to sell their electricity output to the market operator.
Grid integration	✓	68%	Based on the electricity law, the regulator amended the methodology on connection conditions and approved rules on charges for renewables projects. Based on the same law, the transmission system operator is obliged to give dispatching priority to generating installations using renewables grounded on transparent and non-discriminatory criteria. Producers with an installed capacity equal to or higher than 500 kW are responsible for 25% of their total imbalance costs.
Administrative procedures and guarantees of origin	✓	64%	The regulation on the creation of a one-stop shop was adopted by the Government in 2018. As per the regulation, harmonization should be done through the inter-institutional coordination commission of all authorities involved in renewables investments. By the decision of the Ministry, in May 2019, the commission is established and in June it held its first meeting. An electronic system for issuing, transfer and cancellation of guarantees of origin is not in place.
Renewable energy in transport	✗	0%	Provisions related to the sustainability of biofuels are still not transposed and the legal framework remains completely non-compliant with Directive 2009/28/EC.

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

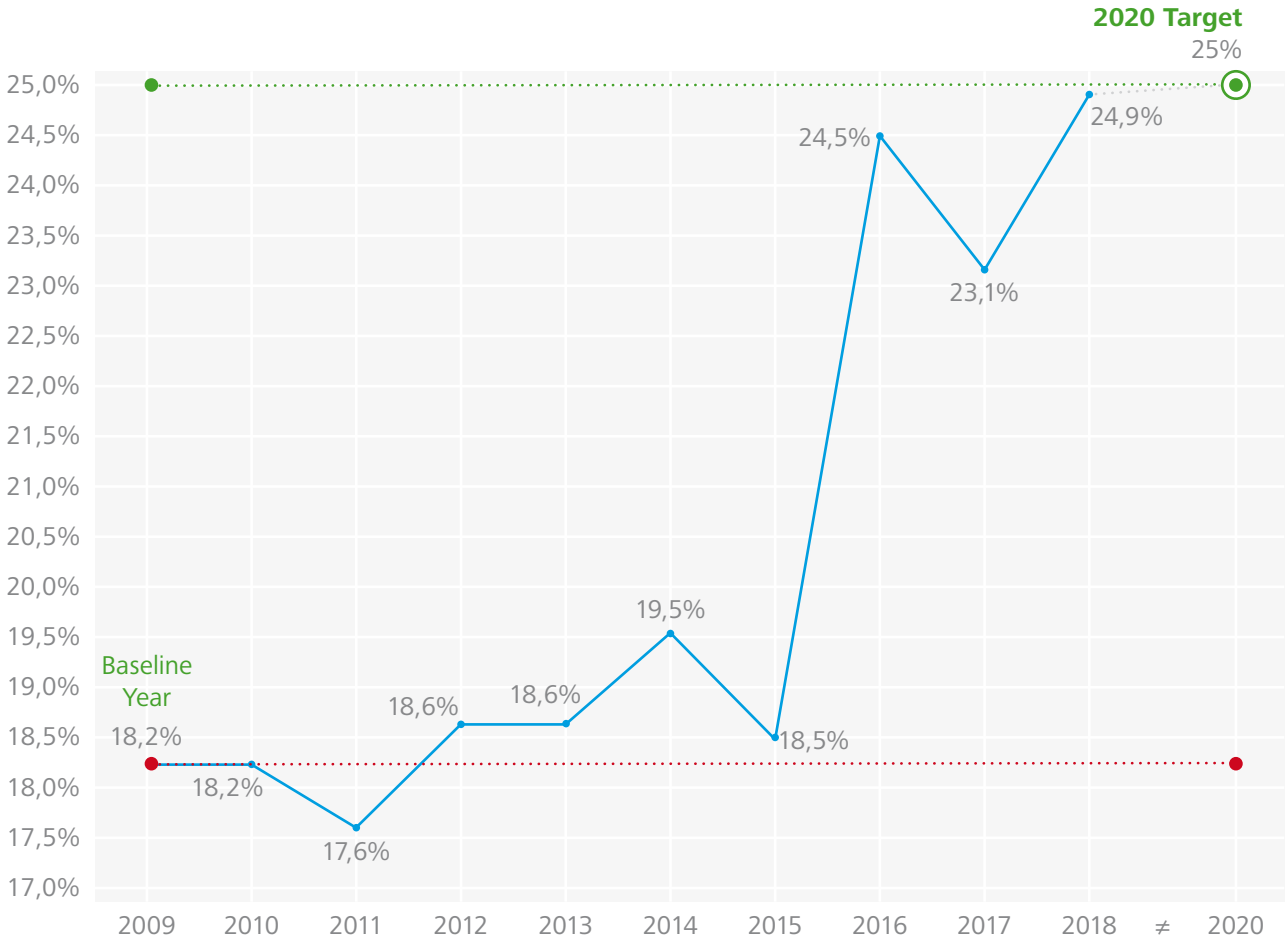
Through an administrative instruction from 2017, Kosovo* raised its ambition to reach a voluntary renewable energy target of 29,89% by awarding an additional 20 MW of solar PV capacity through the support scheme. In November 2019, the regulator adopted a decision to award this capacity through an administratively set feed-in tariff at a level of 85,5 EUR/MWh. Although the proposal to increase renewable energy ambition was welcomed in principle, awarding was done against the Secretariat's recommendation to conduct competitive bidding which would improve the transparency.

Back in 2010, the regulator as a designated body adopted a Rule on the system of certificates of origin for electricity produced from renewable energy sources. As a first step, the Rule needs to be amended to transpose Article 15 of the Renewables Directive and then an electronic system for issuing, transfer and cancellation of guarantees of origin compatible with the standardized European Energy Certificate System needs to be implemented.

Priorities for Kosovo* should be the introduction of a mar-

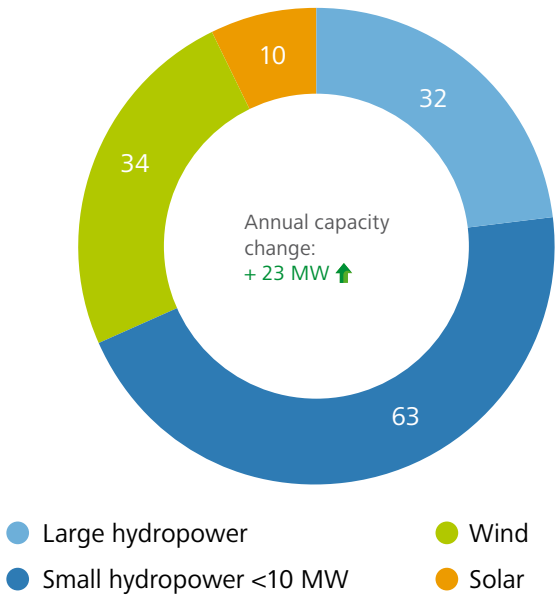
ket-based support scheme in line with the State Aid Guidelines and transposition of provisions related to the sustainability of biofuels. At the same time, an electronic system for guarantees of origin should be established and a legal framework for self-consumption improved.

Shares of Energy from Renewable Sources



Source: EUROSTAT

Total Capacities of Renewable Energy 2019 (MW)



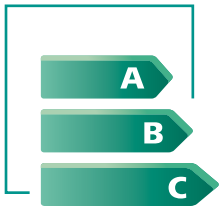
By the end of 2019, Kosovo* registered 32 MW of large hydropower, 63 MW of small hydropower, 34 MW of wind (Kitka wind farm) and only 10 of MW solar in spite of their potential to be deployed cost-effectively.

With the 24,9% share of energy from renewable sources in gross final energy consumption in 2018, Kosovo* is on the right path to reach its 25% target in 2020. However, this is mainly due to revision of biomass consumption data. Additional measures, in the first place the introduction of a market-based support scheme, are needed to increase the share of renewable energy in the electricity and transport sector, as well as transparency.

Total capacities of renewable energy (MW):

139

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 Assessement	Implementation Status	Descriptions
Energy efficiency targets and policy measures	✓	55%	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 National Energy Efficiency Action Plan (NEEAP) 2019 - 2021, defining the implementing policy measures, was positively assessed by the Secretariat in October 2019 but its adoption is pending. The fourth Annual Progress Report was not submitted.
Energy efficiency in buildings	✓	80%	During this reporting period, a draft plan on nearly zero-energy buildings and a draft building renovation strategy were submitted to the Secretariat, but their adoption (required by the Energy Efficiency Law) is still pending.
Energy efficiency financing	✓	73%	The Energy Efficiency Fund has secured financing until 2022, with EUR 1 mil. annually from the Government, EU grant of EUR 10 mil. and a Word Bank loan of EUR 5 mil. In July 2020, the Fund and the Energy Efficiency Agency signed an agreement to support a revolving financial mechanism for the renovation of public (and later residential) buildings. Rules on energy efficient public procurement, Energy Services Companies (ESCO) 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	~	49%	Kosovo* still fails to implement the delegated regulations adopted by the Ministerial Council in October 2014 and November 2018. The 2012 labelling regulation implemented only the Ministerial Council Decision from 2010.
Efficiency in heating and cooling	~	46%	Kosovo* has district heating systems in four municipalities, which predominately rely on coal (94%) and petroleum products (6%). There is a dual model of billing (metered and unmetered) and the second model prevails at present. The Gjakova municipality is constructing a biomass cogeneration plant, which will replace the existing petroleum heating plant. Kosovo* has not yet 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 was characterised by the drafting of a set of important strategic and legal documents (NEEAP, Building Renovation Strategy and National Plan for Nearly Zero Energy Buildings, by-laws on energy efficient public procurement, energy services and energy audits) and activities of the Energy Efficiency Fund to implement a new financing mechanism for public buildings. However, the adoption of the remaining secondary legislation required for implementation of the Energy Efficiency Law was delayed.

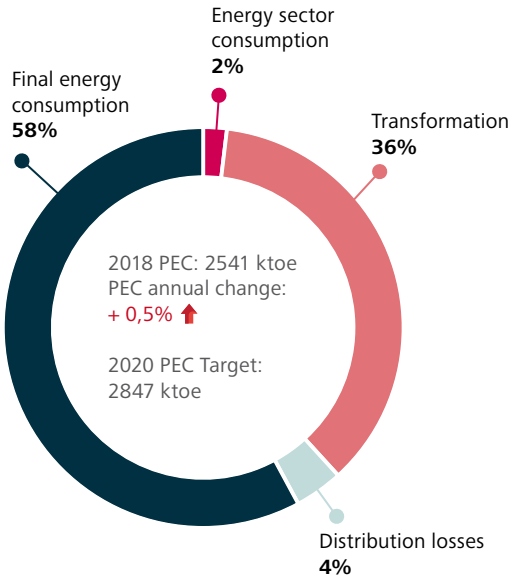
The main priority remains the adoption of the draft NEEAP and secondary legislation to implement the new Energy Efficiency Law. Notification of Article 7 implementation (energy efficiency obligation scheme) and the overall annual report on the prog-

ress in implementation of the Energy Efficiency Directive should be submitted without further delay. A Monitoring and Verification Platform (MVP) should be put into operation and used by the Energy Efficiency Agency for monitoring and verification of energy savings

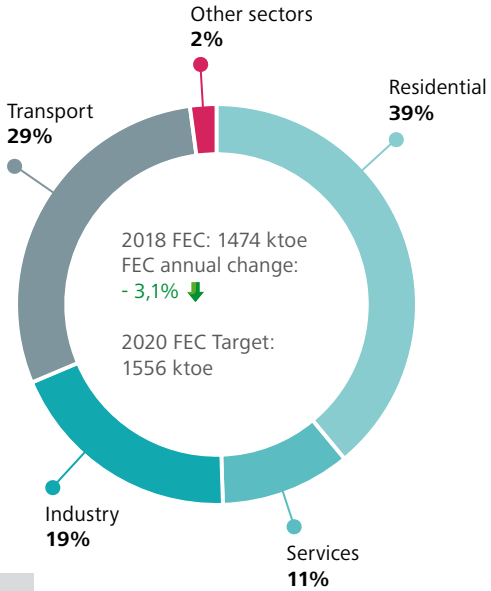
The transposition of the remaining labelling delegated regulations and the finalization of secondary legislation to introduce energy efficiency criteria in public procurement also remain priorities.

2018 Energy Efficiency Indicators and Trends

Primary Energy Consumption (PEC)



Final Energy Consumption (FEC)



Energy intensity,
2018 value and trends:
0,45 ktoe/mil EUR, - 3,1%

Source: EUROSTAT and World Bank 2020 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

Kosovo*
Environment

Environment Implementation

Environment Indicators	Transposition Assessement	Implementation Status	Descriptions
Environmental impact assessment (EIA) and strategic environmental assessment (SEA)		43%	The transposition of Directive 2014/52/EU is not yet finalised. Adoption of new legislation should be supplemented with administrative capacity building and financial support. Environmental assessments in the energy sector need further improvement by ensuring early and effective opportunities for public participation and systematic quality control of environmental reports.
Sulphur in fuels		93%	The legal framework in this area complies with the provisions of the Directive. 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		47%	New legislation on the limit values for emissions of air pollutants from stationary sources that should incorporate the provisions of the Large Combustion Plants and Industrial Emissions Directives is prepared but not adopted yet. Any final decision on existing or new large combustion plants should be postponed until the relevant legislation is adopted.
Nature protection		40%	Kosovo* published the national Red Book of Fauna and drafted new legislation on the designation of new protected areas. An Administrative Instruction on protected and strictly protected wild species was developed and is currently under adoption. Further designation of protected areas and successful implementation of effective conservation measures for rare and endangered species should be a priority.

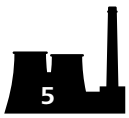
The legal framework for environmental assessments remains not fully compliant. Due to the Covid-19 situation, the necessary amendments to the Environmental Impact Assessment Law to comply with the provisions of Directive 2014/52/EU, in particular, provisions related to up-date list of Annex I and Annex II projects, quality control of EIA report, type of decisions and their content (new Article 8a), legally binding timeframes, penalties and conflict of interest, were postponed to 2021. With regard to the Strategic Environmental Assessment Directive, a revision of the existing legislation is underway.

Proper implementation of environmental assessments in relation to energy projects, quality control over environmental reports as well as securing early and effective opportunities for public participation remain a challenge. During the reporting period, the Secretariat received a complaint concerning hydropower developments on the Lumbardhi river. The Government should ensure that a strategic environmental assessment for the foreseen National Energy and Climate Plan is conducted as early as possible in the process of the preparation of the document.

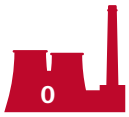
Existing legislation in Kosovo* on the sulphur content of liquid fuels, including the administrative instruction on the technical requirements for import, storage, wholesale and retail sale of petroleum fuels are in line with the provisions of the Directive. Provisions on marine fuels do not apply to this Contracting Party. Kosovo* is under dispute settlement procedures since 2018 for the incomplete transposition of the Large Combustion Plants and Industrial Emissions Directives, with the Ministerial Council confirming this breach in 2019. In order to rectify this infringement, the Kosovo* authorities developed amendments to the currently applicable legislation. Kosovo* complied with its emissions reporting obligations for the reporting year 2019. Emissions from large combustion plants show non-compliance with the ceilings for all three pollutants (sulphur dioxide, nitrogen oxides and dust).

Kosovo* is neither a signatory to the Ramsar Convention on Wetlands of International Importance, nor to the Bern Convention on European Wild Life and Natural Habitats. New secondary legislation on the designation of protected areas and natural reserves (strictly protected areas) is being prepared and expected to be adopted by the end of 2020. The national Red Book of Fauna was also published during this reporting period. The Red Book should contribute to planning and successful implementation of activities for the conservation of rare and endangered species and to the assessment of energy-related infrastructure projects that might have an impact on the identified species.

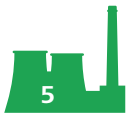
Installations under the Large Combustion Plants Directive



of plants falling under the LCPD

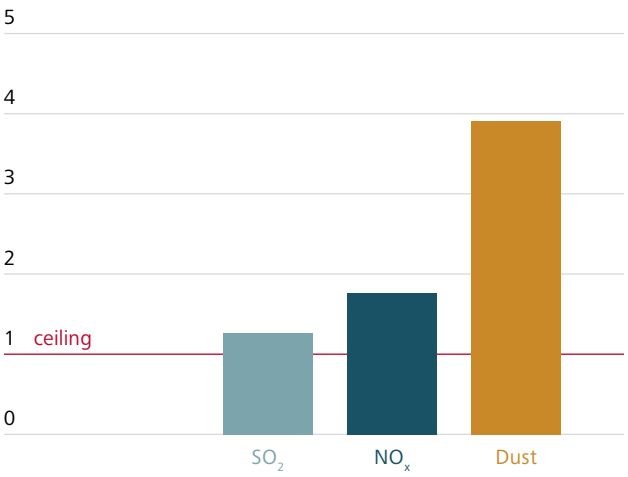


of which opted out plants



of which plants falling under the NERP

2019 emissions versus NERP ceilings



	SO_2	NO_x	Dust
2019 emissions by all plants under the LCPD	13,257	20,393	5,115
2019 emissions by plants under the NERP	13,257	20,393	5,115

Source: compiled by the Energy Community Secretariat

Kosovo*
Climate

Climate Indicators	Transposition Assessement	Implementation Status	Descriptions
National greenhouse gas emissions monitoring and reporting systems			Although compilation of a GHG inventory is progressing, legislation defining national systems for policies, measures and projections has not been adopted yet, therefore there is no full compliance with Regulation (EU) 525/2013. In 2021, the Law on Climate Change is supposed to be adopted.
National Energy and Climate Plans (NECPs)			Drafting has commenced, while target setting and the development of scenarios are still missing. A draft of the NECP has not been submitted to the Secretariat for review.

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 set for 2030 and no regular reporting is undertaken. However, Kosovo* developed a GHG inventory covering the periods 2008 - 2017 and is expected to publish the next inventory report for 2018 by the end of 2020. Currently, provisions on climate are only included in the Law on Air Protection from Pollution.

Efforts have been made however to align Kosovo*'s legislation and policy framework to the EU climate acquis. The 2019 - 2028 National Strategy and Action Plan on climate change have been approved by the Government and the draft Climate Change Concept Paper is expected to be approved by the end of 2020. If fully implemented, these can provide a sound basis for tackling climate change. Also the Administrative Instruction for Monitoring Greenhouse Gas Emissions defines the governance, inter-institutional arrangements and deadlines for providing data on greenhouse gas emissions. Although Kosovo* has dedicated climate legislation in place and compilation of GHG inventory is progressing, legislation defining national systems for policies, measures and projections has not been introduced. Also, there is little evidence of climate change being mainstreamed in government projects. The missing provisions are planned to be included in the draft Law for Climate Change, the adoption of which is scheduled for 2021.

Kosovo* has adopted several documents as the legal basis for the preparation and adoption of its National Energy and Climate Plan (NECP) including Decision Nr. 1878 for establishing the Working Group for Developing the National Plan for Energy and Climate, the Strategic Document Plan 2020 - 2022 and the Government Working Plan. However the Law on Climate Change and the Climate Change Concept Paper is yet to be adopted. Kosovo* has set up a national working group and six thematic working groups to draft the NECP. Drafting and analytical work leveraging on the LEAP tool have started with international support. Target setting is yet to be commenced, targets will probably be based on the Energy Strategy High Scenario 2017 - 2026 to be extrapolated up to 2030. The definition of the policy scenario is also still pending and requires further studies. Once targets and policy scenarios are approved, the NECP working group will finalize the draft. There is no timeframe for submitting the NECP to the Secretariat.

Kosovo*
Infrastructure

Infrastructure Implementation

Infrastructure Indicators	Transposition Assessement	Implementation Status	Descriptions
National competent authority	✓	70%	The national competent authority was established by a decision of the Minister of Economic Development in 2017. However, it has failed to report on the progress of the current PECI project to the Secretariat and the Electricity and Gas Groups, as required by Regulation (EU) 347/2017.
Manual of procedures	✓	100%	The Ministry of Economic Development published the manual of procedures, as defined by Regulation (EU) 347/2013.
National regulatory authority involvement	✓	100%	Kosovo*'s regulatory authority published the methodology and criteria required by the Regulation in 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. A national competent authority was also designated. The national competent authority should start reporting to the corresponding PECI Groups and the Energy Community Secretariat on the project developments immediately. This is particularly important since Kosovo* participates in two projects which are proposed for a PECI label in 2020 (ALKOGAP and North Macedonia – Albania interconnector).

Proposed 2020 PECI/PMI projects: **2**

Gas: **2**

PECI: **2**

Kosovo*
Statistics

Statistics Implementation

Statistics Indicators	Transposition Assessement	Implementation Status	Descriptions
Annual statistics	✓	100%	The annual questionnaires for 2018 were transmitted to EUROSTAT in accordance with the acquis. The questionnaire on the final energy consumption of households for 2018 was compiled and transmitted.
Monthly statistics	X	0%	There is no monthly data yet.
Price statistics	✓	100%	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 monthly statistics. It still remained unresolved at the end of this reporting period.

The Kosovo Agency for Statistics (KAS) is established within the Prime Minister's Office with the task to coordinate the statistical system of Kosovo*.

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 are prepared and transmitted on time. KAS also prepared and transmitted the SHARES questionnaire. The quality report was 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 2021 does not envisage any activities to implement obligations from Annex C and Annex D of Regulation (EC) 1099/2008.

Electricity prices per consumption band and breakdown 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 and the related General Policy Guideline.

Kosovo*
Cybersecurity

Cybersecurity Implementation

Cybersecurity indicators	Transposition Assessement	Implementation Status	Descriptions
Institutions and legislation			The strategic cybersecurity goals are defined and the main defence mechanisms are implemented. However, the current framework should be amended to address cybersecurity in the energy sector. Critical infrastructure and services in energy have not been designated. The computer emergency response team KOS-CERT is the cybersecurity service provider for energy.
Requirements for operators and energy regulatory authority			Risk assessment and security requirements are broadly defined, including operators' security plans and reporting obligations. However, energy-specific legislation and policies needed by operators to implement the cybersecurity provisions of the acquis are missing. Powers and tasks of the energy regulators should be developed and enforced.

The national computer emergency response team (KOS-CERT) along with five complementary CERTs constitute the cyber defence capacity of Kosovo* and cybersecurity policies are gradually being developed. The energy sector is not addressed to the level required by the acquis, measures for regional cooperation and energy-specific policies are missing.

The Electronic Communication Sector Policy - Digital Agenda for Kosovo* 2013 - 2020 called for risk awareness in information and network security, creation of a computer emergency response team (CERT) and meeting the cybersecurity requirements of the national critical information infrastructures. It demands to ensure the security and integrity of electronic communication networks and services and to increase public and business confidence in the cyberspace. The Cybersecurity Strategy of Kosovo* 2016 - 2019 called for the identification of critical infrastructure and services and includes references to energy. The follow-up 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 in cybersecurity. The legislation is largely harmonized with the EU Convention on Cybercrime and implemented through the Ministry of Interior. There is no compliant legislation on cybersecurity for the energy sector yet.

The Law on Critical Infrastructure of 2018 transposes key provisions of Directive 2008/114/EC and recognizes energy production, transmission, distribution and storage of electricity, oil and gas as domains of critical infrastructures. It also provides basic criteria for identification and procedure for designation. The implementation is delayed, however. Operators of critical infrastructure or services in energy are not designated yet. A draft law transposing EU Directive 2016/1148/EC (NIS Directive) is in preparation. The draft law addresses public energy utilities governed by the Ministry of Economy and Environment.

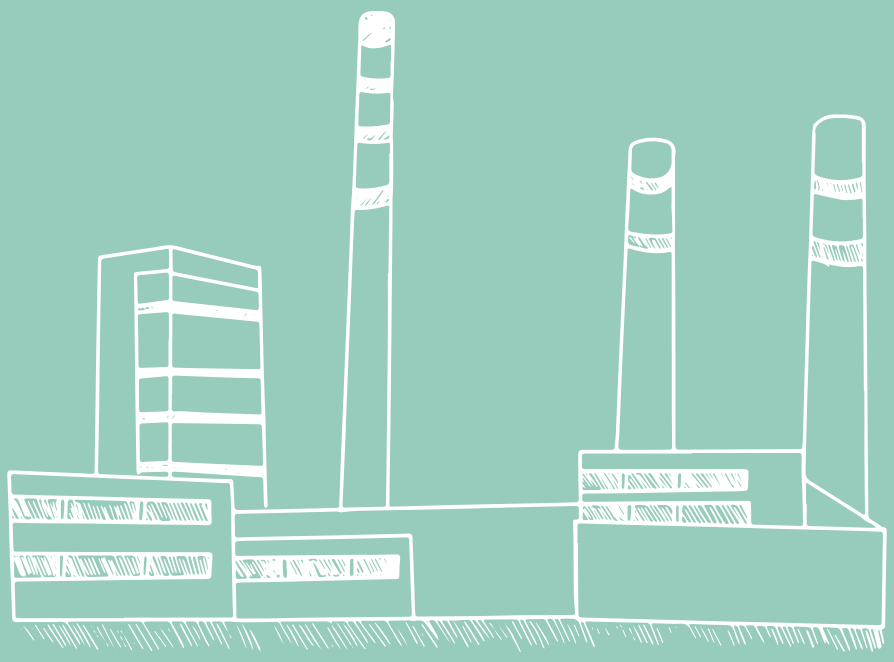
KOS-CERT is established and hosted by the Regulatory Authority for Electronic and Postal Communications (ARKEP), under the Law on Electronic Communications. It performs as an incident response coordinating unit, also providing communication, notification and information exchange between the affected parties and security service providers. The draft law will provide a legal basis for the creation of a CERT for Energy in Kosovo*.

The Law on Critical Infrastructure defines a broad set of terms of risk assessment, based on geographical extent and severity. No quantitative criteria or energy-specific references are set. The Law also includes obligations for the development of operator's security plans including identification of critical assets, resources, risk analysis and interdependencies. The general requirements, without energy-specific considerations, include establishment of incident prevention and risk mitigation systems. Operators of critical infrastructures and services are obliged by the Law to report their security concerns to the responsible CERT and the Ministry of Internal Affairs.

There are no energy-specific reporting obligations or security requirements applied in the currently available regulatory framework. The Energy Regulatory Office ERO is not empowered or responsible for any cybersecurity consideration.

09

Moldova



Moldova

Summary Implementation

Summary Indicators	Transposition Assessement	Implementation Status	Descriptions
Electricity		40%	Implementation in the electricity sector of Moldova is still at an early stage.
Gas		33%	Implementation in the gas sector of Moldova is still at an early stage.
Oil		20%	Implementation in the oil sector of Moldova is yet to begin.
Renewable Energy		58%	Implementation in the renewable energy sector of Moldova is moderately advanced.
Energy Efficiency		66%	Implementation in the energy efficiency sector of Moldova is well advanced.
Environment		67%	Implementation in the environment sector of Moldova is well advanced.
Climate		43%	Implementation in the climate sector of Moldova is moderately advanced.
Infrastructure		12%	Implementation in the infrastructure sector of Moldova is yet to begin.
Statistics		96%	Implementation in the statistics sector of Moldova is almost completed.
Cybersecurity		38%	Implementation in the cybersecurity sector of Moldova is still at an early stage.

Overall number of cases: 3

Procedure by Article 91

ECS-14/16 Energy efficiency

ECS-9/17 Electricity

ECS-7/18 Environment

Moldova

State of Energy Sector Reforms

While Moldova has transposed the Third Energy Package in both the electricity and gas sectors, the state of implementation is lagging behind in some crucial aspect. Due to the lack of interconnections and procurement procedures fulfilling only rudimentary transparency requirements, an electricity wholesale market based on fair competition is still nascent. The state-owned trader Energocom continues to play a central role in the current regime by winning all electricity procurements organized by regulated suppliers and system operators. The wholesale electricity market rules, developed with the support of the Secretariat, will enter into force only in the second half of 2021. A first attempt to unbundle and certify the electricity transmission system operator, Moldelectrica, failed due to ownership and control issues. The transposition of an independent system operator model in the Law on Electricity is ongoing. The functional unbundling of the distribution system operators is still to be finalised. Moldova has yet to transpose the REMIT Regulation.

In the gas sector, unbundling of the gas transmission system operator remains to be achieved. Though Moldovagaz started to implement the unbundling plan approved by the regulatory authority, which is based on the independent transmission operator model, this process has slowed down significantly in recent months. ANRE has established entry-exit points, still with the temporary transmission tariffs in the Moldovan gas transmission sector. A dispute between Moldovagaz and ANRE on the issue of technical losses and tariff deviations incurred by the gas distribution companies in the past was successfully resolved with the support of the Energy Community Secretariat's Dispute Resolution and Negotiation Centre. A draft law on creating and maintaining a minimum level of oil product stocks has still not been adopted.

In the area of climate and environment, Moldova has not yet started with auctions for renewable energy support, pending changes in primary and secondary legislation. The central buyer for electricity from renewable sources is the state-owned company Energocom, which is also the supplier of electricity for all the regulated electricity companies in Moldova. Moldova has still to implement the Energy Efficiency in Buildings Directive. Climate legislation is in the process of being prepared by the Moldovan authorities. Work on the National Energy and Climate Plan is still at a relatively early stage.

Moldova's electricity sector is characterized by dependence on one source, a gas-fired power plant in the Transistria region, while not being interconnected with its Western neighbour Romania. Development of the interconnection project is slow. Dependence in the gas sector, where Gazprom controls the national gas incumbent, is equally high. The Romanian system operator Transgaz is building a pipeline connecting Moldova's key consumption centres to the Romanian system, thus providing alternative infrastructure to the one from Ukraine and/or in reverse flow from Bulgaria. The country has a high potential for renewable energy projects.

Moldova
Electricity

Electricity Implementation

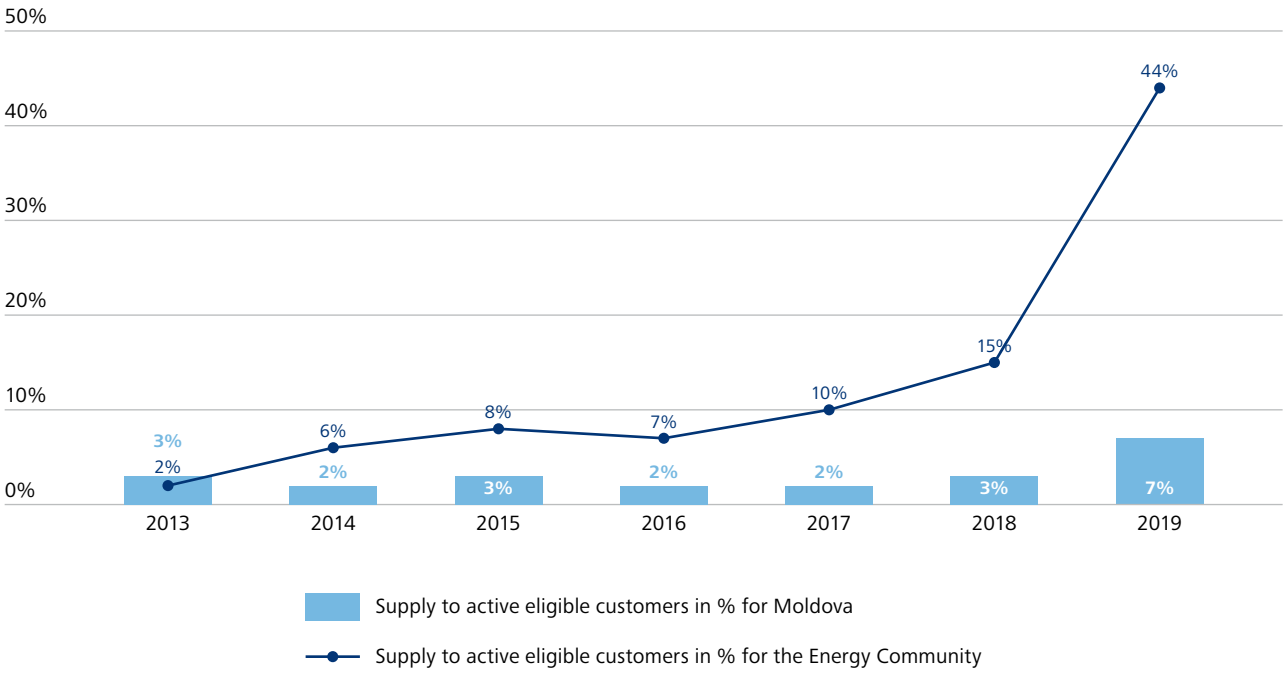
Electricity Indicators	Transposition Assessement	Implementation Status	Descriptions
Unbundling		55%	After the first failed attempt to certify the transmission system operator Moldelectrica in line with the ownership unbundling model, it was decided to use the independent system operator model instead. However, the national legal framework still needs to be amended for this purpose. Legal and functional unbundling of the distribution system operators is finalised.
Access to the system		48%	Tariffs are approved and published. The Connection Network Codes, transposed by a decision of the regulator, entered into force in January 2020. The Transparency Regulation is transposed by the wholesale electricity market rules, approved by the regulator in August 2020 and published in October 2020.
Wholesale market		35%	The wholesale electricity market rules were approved by ANRE. They will only enter into force on 2 October 2021, i.e. one year after their publication. A new procedure for procurement of electricity, also part of the wholesale market rules, will enter into force already on 1 January 2021. Transposition and implementation of REMIT is pending amendments to the Electricity Law.
Retail market		53%	Despite the fact that all customers are formally eligible, retail market competition is only slowly taking off and most of the customers continue to be supplied at regulated prices.
Regional integration		12%	The Moldovan and Ukrainian transmission system operators have made progress towards the allocation of cross-border capacities. However, the different levels of their market development make market integration difficult at this stage. The finalisation of the interconnection with Romania is expected only at the end of 2024.

There was modest progress in the electricity sector during this reporting period.

The first attempt to certify Moldelectrica failed due to lack of ownership over the assets and separation of control. A negative Opinion of the Secretariat on the preliminary certification of Moldelectrica was issued on 11 October 2019. None of the Third Energy Package unbundling models can be implemented under the current legislative framework in Moldova. The Moldovan authorities are in the process of transposing the independent system operator model in the Law on Electricity.

On 7 August 2020, the energy regulator, ANRE, approved the wholesale electricity market rules, developed with the support of the Secretariat. The rules will only enter into force one year after their publication, i.e. on 2 October 2021. The wholesale market rules transpose the Transparency Regulation. The rules also include a procedure for the procurement of electricity which will be operational as of January 2021. However, its implementation will be problematic in the absence of the transitional balancing rules which will enter into force only in October 2021. Currently, there is no mechanism for distributing the imbalances between the balancing responsible parties in Moldova.

Retail Market Opening



Source: Ministry of Economy and Infrastructure

The 2020 electricity procurement procedure was temporarily suspended for three months due to the Covid-19 crisis. The procedure re-commenced once the state of emergency ended. This year once again, Energocom won all the procurement procedures organised by the transmission and distribution system operators and the regulated suppliers, with electricity supplied by Moldavskaya GRES, the power plant located in the region of Transnistria. The procurement procedure is contested by Ukrainian company DTEK.

All final customers are eligible. New rules for switching the electricity supplier, aiming to simplify the procedure, were approved by ANRE. However, competition at the retail level is limited and mirrors the lack of competition in the wholesale market. The Electricity Law provides that regulated prices must be gradually eliminated; however, no concrete steps have been taken in this regard.

The electricity Network Code and a new regulation on access to the electricity transmission networks for cross-border exchanges and congestion management in the power system were adopted by ANRE in November 2019.

Cross-border capacity allocations were not yet introduced by the Moldovan transmission system operator in anticipation of joint auctions on the Ukrainian border. There is progress regarding inter-transmission system operator arrangements for the settlement of unintended deviations. The transmission system operators of Moldova and Ukraine agreed in principle on the terms of the agreement and the financial settlement of such deviations. Another obstacle to the development of competition in the Moldovan electricity market is the lack of interconnection with Romania. Asynchronous interconnection (using back-to-back stations) is expected to be finalised by the end of 2024.

Moldova
Gas

Gas Implementation

Gas Indicators	Transposition Assessement	Implementation Status	Descriptions
Unbundling		15%	Moldova's derogation for transmission system operator unbundling expired on 1 January 2020, but certification is still outstanding. None of the existing transmission system operators have been certified.
Access to the system		45%	Moldova's national regulatory authority, ANRE, adopted a list of entry/exit points and established a provisional tariff for natural gas transmission services. Gas Network Codes have been transposed. However, third party access in practice is incomplete, as reverse flow (backhaul) is absent. Capacity allocations are not performed in line with the Network Code on CAM.
Wholesale market		5%	Gas market rules have been adopted. Yet, Moldova's gas market is still illiquid, monopolised and without a virtual trading point. REMIT is not transposed.
Retail market		24%	The retail market is still heavily regulated. Supply under public service obligations and last resort is offered to all customers, without adequate eligibility criteria for such supply. ANRE's public service obligation decision envisages a seven year period for supply at regulated prices.
Interconnectivity		90%	Gas flows through Moldova have drastically changed in 2020. The transmission system operator Moldovatransgaz has concluded an interconnection agreement with Ukraine. Security of supply rules are well defined.

During this reporting period, Moldova experienced important changes in its regulatory framework and the pattern of gas flows. Although the country is still supplied through the traditional route from Ukraine and exclusively by Gazprom, it no longer transits vast gas quantities to downstream markets of the Balkans and Turkey, which resulted in a drop of transit quantities by 20 times. This has opened up opportunities for trading and physical flows from the south to the north towards Ukraine. This potential, however, still remains untapped due to the lack of unbundling of the incumbent company, Moldovagaz, with Gazprom as dominant shareholder, and an incomplete legal framework.

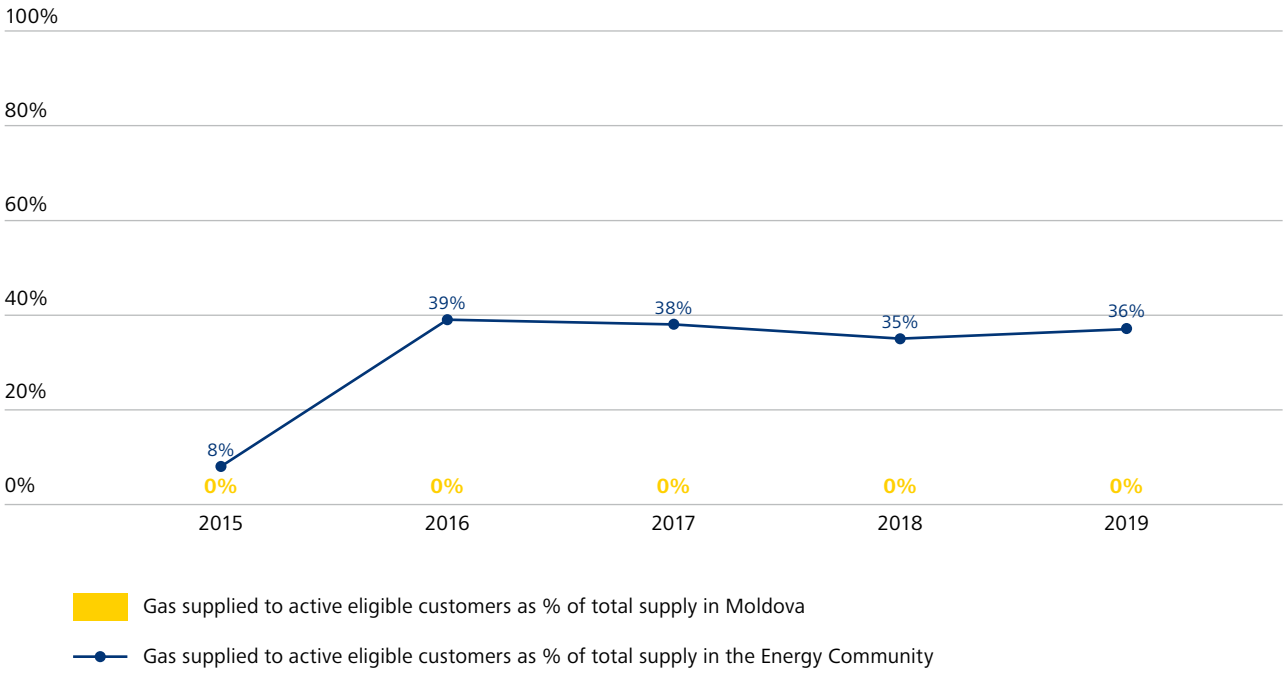
Currently, amendments to the Gas Law and other related legislative acts are being drafted to enable full reforms of the market and rectify shortcomings related to public supplies and reverse flow, as identified by the Secretariat in previous years.

In February 2020, an unbundling plan proposed by the gas incumbent Moldovagaz was adopted by the regulator ANRE. The plan envisaged application for certification by its daughter company Moldovatransgaz under the independent transmission operator model by October 2020. However, although the bulk of the work on preparatory documents has been done and consulted with the Secretariat, the plan's realisation has slowed down in the autumn of 2020, and ANRE granted an extension for four months.

Third party access to users which do not belong to Moldovagaz' shareholders is missing, only a draft transmission contract exists. Backhaul (contractual reverse flow) is still not offered by Moldovatransgaz.

The other infrastructure company, Vestmoldtransgaz, owned by the Romanian transmission system operator Transgaz, is not operational nor certified.

Retail Market Opening



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

After several years of assistance to ANRE by the Secretariat, all gas Network Codes have been adopted. This was an important achievement during this reporting period, but the implementation of the Codes in practice remains very limited. In December 2019, Moldovatransgaz concluded an interconnection agreement with Ukraine in line with the Network Code on Interoperability and Data Exchange Rules.

ANRE has adopted a list of entry/exit points, with provisional tariffs for natural gas transmission services in place. The full regulatory period is excepted to start this year. A major dispute between Moldovagaz and ANRE on the level of losses in the distribution grid was resolved successfully under the Secretariat's Dispute Resolution and Negotiation Centre.

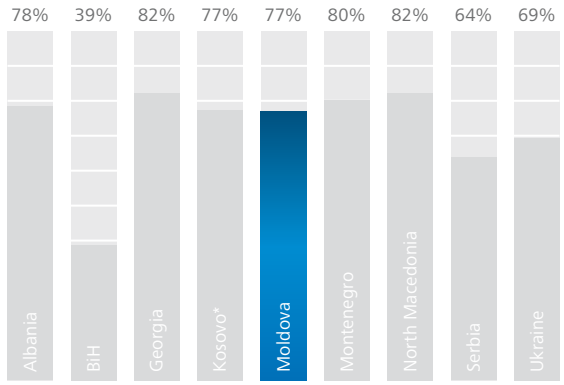
At the wholesale level, no changes are visible in Moldova's gas market. It remains illiquid and foreclosed. Although gas market rules were adopted in 2019, they have not been implemented. Moldovagaz is responsible for gas imports from Russia and exercises control over two gas transmission system operators, Moldovatransgaz and Tiraspoltransgaz. On the retail market, all final customers are supplied under regulated prices. Moldovgaz acts as a public supplier, appointed without a competitive procedure. Unlimited and untargeted public supplies are one of the main obstructions to market opening.

Moldova has adopted the full of set of security of supply rules, which even go beyond the existing Energy Community acquis.

The ongoing changes in the gas flows of Southeast Europe will open up opportunities for increased security of supply and competition in Moldova. Although the country has updated its secondary regulatory framework in gas, primary legislation needs to follow suit. The major challenges remain: finalizing the unbundling of its transmission operators despite the slow-down, and accelerating efforts to make its market more liquid. In this respect, Moldova may benefit from increased market liquidity in neighbouring countries, especially Ukraine.

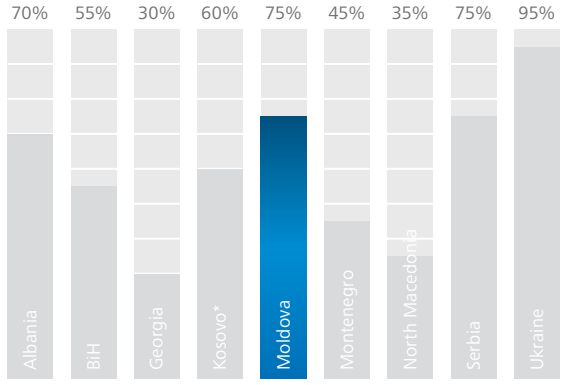
Moldova
National Authorities

Regulatory Authority



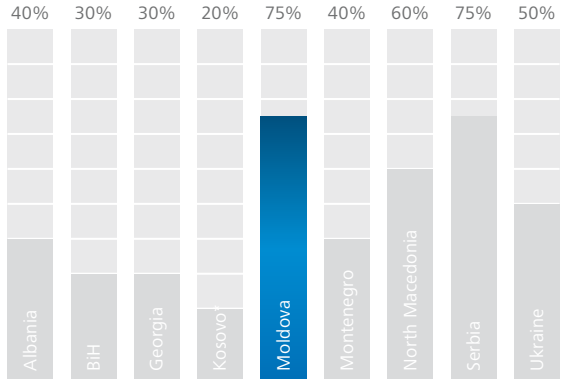
The National Agency for Energy Regulation (ANRE) was exposed to interventions which challenged its independence during this reporting period. An amendment of the Law on the Court of Auditors suggested competence of that body to assess ANRE's performance. On technical level, ANRE demonstrated expertise, even if taking a conservative approach in fully exploiting its legal powers. ANRE adopted the gas and electricity Network Codes. Adoption of the REMIT Regulation is pending as are regulatory criteria based on which derogations from the electricity Network Codes can be granted. ANRE showed commitment to settle a dispute on gas losses mediated by the Secretariat.

Competition Authority



In the reporting period, due to the lack of evidence, the Competition Council closed an investigation initiated in 2016 concerning the alleged abusive conduct of Moldovagaz, Gas Natural Fenosa Furnizare Energie (currently Premier Energy) and Furnizarea Energiei Electrice Nord, namely by imposing unfair prices and applying unequal conditions to customers. The Competition Council is still conducting sector inquiries into the wholesale and retail sale of petroleum products and liquefied gas, and the market for electricity production. With regard to the tariff setting for renewable energy by the national regulatory authority, the Competition Council has started to investigate a potential infringement of competition law.

State Aid Authority



In the area of State aid, in the reporting period, the Competition Council rendered a decision finding that support to Moldelectrica for the implementation of the Moldova-Romania electricity interconnection project does not constitute State aid due to the lack of effect on competition. The renewables support scheme is currently in the process of being amended and will have to be assessed by the Competition Council.

Moldova
Oil

Oil Implementation

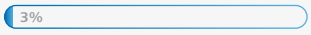
Oil Indicators	Transposition Assessement	Implementation Status	Descriptions
Stockholding obligation	~	0%	At present, Moldova has no emergency oil stocks. The country has drafted a Law on creating and maintaining a minimum level of oil product stocks.
Emergency procedures	~	0%	Moldova is currently lacking legislation concerning the release of emergency oil stocks.
Fuel specifications of petrol, diesel and gas oil for non-road mobile machinery (NRMM)	✓	80%	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	X	0%	In 2019, the Ministry established a working group to ensure the preparation and publication of national data on monitoring the quality of petrol and diesel in accordance with the legislation. The first such report is expected to be elaborated by the end of August 2021. 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 has been adapted to meet the new requirements of Directive (EU) 2018/1581 as regards the methods for calculating stockholding obligations. At the time of publication of this report, the Ministry of Economy and Infrastructure had planned to submit the draft Law for stakeholder consultation and then to submit it for adoption to the Government and Parliament by the first quarter of 2021.

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. Should gas oil used for non-road mobile machinery (NRMM) be present on the domestic market, an additional governmental decision(s), amending the Decision of 2002, should follow.

Moldova
Renewable Energy

Renewable Energy Implementation

Renewable Energy Indicators	Transposition Assessement	Implementation Status	Descriptions
National Renewable Energy Action Plan			Moldova submitted its NREAP and all three Progress Reports on implementation of the Renewables Directive to the Secretariat. The country exceeded its overall 2020 target of 17%, reaching 27,46% in 2018.
Quality of support schemes			The Renewables Law as of 2018 sets up the legal framework on support schemes for renewable energy projects. Administratively set feed-in tariffs (FiT) for small producers are implemented, while auctioning is still under discussion.
Grid integration			The Renewables Law prescribes non-discriminatory grid connection for renewable energy producers, priority dispatch and an obligation for the central electricity supplier (Energocom) to purchase the electricity and cover imbalances for eligible producers. In August 2020, the energy regulatory agency adopted electricity market rules, which implement these provisions.
Administrative procedures and guarantees of origin			There is no appointed single administrative body. However, the Energy Efficiency Agency acts as an informational one-stop shop, providing all assistance to potential investors in the fields of renewable energy and energy efficiency. An electronic system for issuing, transfer and cancellation of guarantees of origin is not in place.
Renewable energy in transport			Provisions related to the 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 is only 0,27% 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 last reporting period. The country overreached its 17% target for the share of renewable energy in gross final energy consumption by 2020 due to 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 the electricity and transport sectors.

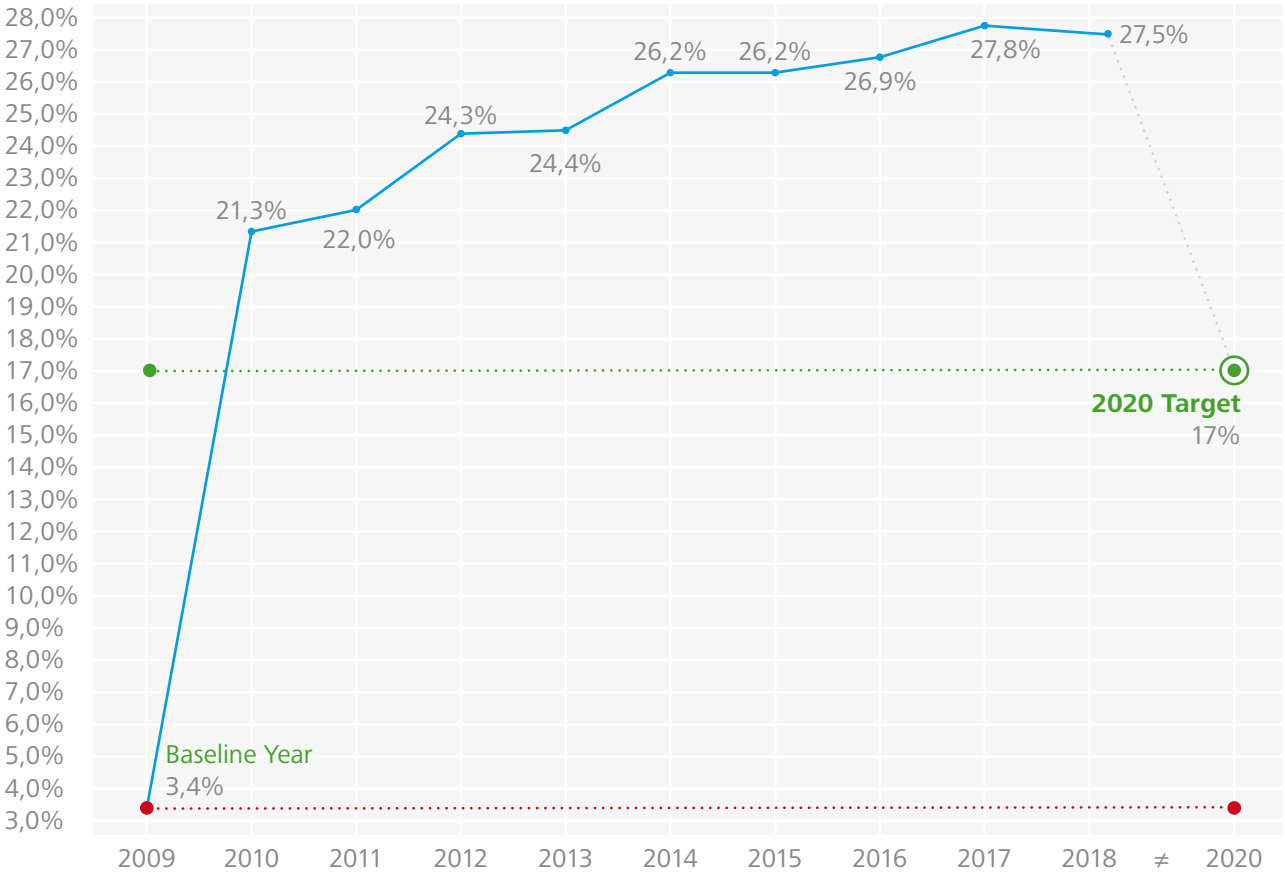
Moldova enabled a net-metering scheme for self-consumption through the Renewables Law resulting in 127 solar PV applications with 1,49 MW of installed power. At the moment, with the support of the EU4Energy Governance project and the Secretariat, the scheme is being revised to address provisions of the new Renewable Energy Directive 2018/2001/EU and attract even more users.

As a designated body, the energy regulatory authority adopted a secondary act on enabling guarantees of origin back in 2017. However, a system of issue, transfer and cancelation of guarantees of origin compatible with the standardized European Energy Certificate System has not been implemented.

Sustainability criteria for biofuels and bioliquids are under development and will include provisions on the establishment of a verification body.

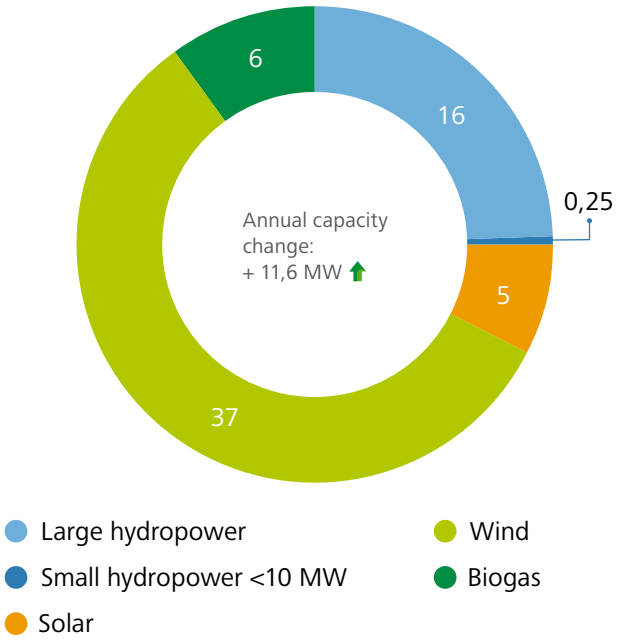
Moldova should prioritize the adoption of secondary legislation needed to enable a market-based support scheme. This should be done in a manner allowing for transparency and avoiding further foreclosure of the electricity market. The country should also focus on transposition of provisions related to the sustainability of biofuels and implement an electronic system for guarantees of origin while continuing with the further implementation of existing legislation and promoting the use of renewable energy.

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 2019 (MW)



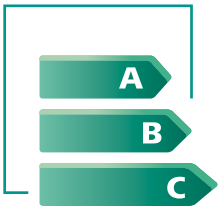
Source: National Agency for Energy Regulation of Republic of Moldova

In 2019, around 11 MW of new renewable energy capacities were added in the electricity sector. Currently, there is one hydropower plant (Costești, 16 MW), constructed in the late 1970s, 37 MW of wind and around 6 MW of biogas in operation. So far, only small projects, mostly rooftop solar, have been implemented, with accumulative capacity of around 5 MW.

Due to revision of biomass data, Moldova exceeded its overall 2020 target for renewable energy in gross final energy consumption already in 2010. And while use of bioenergy, as 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. At the same time, several solar water heaters were installed in public institutions providing a cost-effective and environmentally friendly solution for hot water demand.

Total capacities of renewable energy (MW):

65



Moldova
Energy Efficiency

Energy Efficiency Implementation

Energy Efficiency Indicators	Transposition Assessement	Implementation Status	Descriptions
Energy efficiency targets and policy measures	✓	75%	The 2020 target as well as the sector specific targets were set in the 2018 Energy Efficiency Law. The NEEAP 2019 - 2021 was adopted in December 2019. In summer 2020, Moldova submitted the fourth Annual Progress Report in line with the Energy Efficiency Directive. In the reporting period, several sub-laws were adopted such as the programme for the renovation of buildings owned and occupied by central government authorities for the period 2019 - 2020 and the new Regulation on energy audit and energy auditors.
Energy efficiency in buildings	✓	60%	The implementation of the Buildings Directive is still incomplete. Progress in 2020 included the preparation of an updated national methodology for minimum energy performance of buildings and related certificate calculation tool, including minimum energy performance requirements. The adoption of both by-laws is pending. The national action plan to increase the number of nearly zero-energy buildings is yet to be drafted and adopted.
Energy efficiency financing	✓	72%	In 2019, the Energy Efficiency Agency absorbed the energy efficiency fund following a governmental decree. The Agency launches regular calls for public building renovation projects, supported by grants from the Government and the EU. A public building renovation programme supported by the EU and IFIs is to start in 2021. Energy efficiency in hospitals will be also supported by IFIs.
Energy efficient products - labelling	✓	80%	By end of 2019, Moldova adopted all the regulations mandatory under Directive 2010/30/EU. Moldova did not transpose Regulation (EU) 2017/1369 yet, which is planned for 2021, and hence is not in full compliance with the acquis related to energy efficient products.
Efficiency in heating and cooling	~	44%	Moldova has two towns (Chisinau and Balti) which have district heating systems using combined heat and power technology based on natural gas. Biomass-fired heating systems were installed in 144 public institutions in rural communities. Moldova has not yet prepared the national assessment of its high efficiency cogeneration and efficient district heating potential as required by the Energy Efficiency Directive.

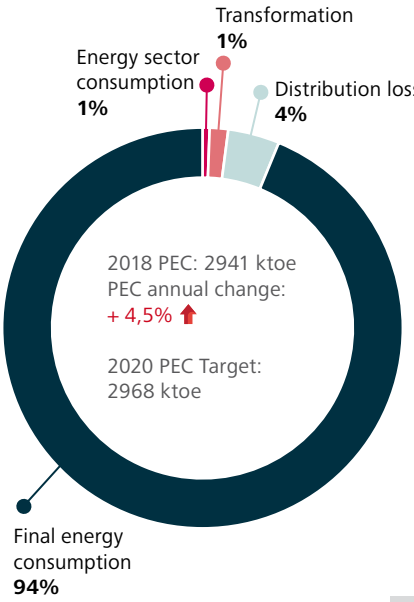
Despite the difficult circumstances caused by elections and the Covid-19 crisis, Moldova made good progress, including by drafting the missing regulations required to implement the Energy Performance of Buildings Directive, but did not to adopt these.

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, that are already

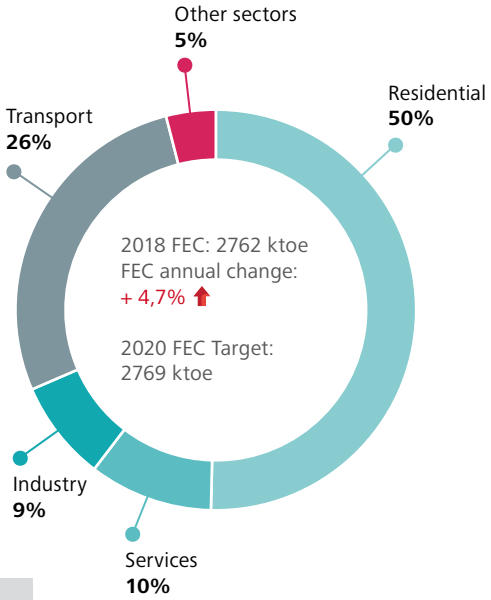
drafted. The second priority is to achieve full compliance of the Law on Energy Performance of Buildings with Directive 2010/31/EU by implementing the building certification system, including the calculation tool for building performance certificates, which are already drafted.

2018 Energy Efficiency Indicators and Trends

Primary Energy Consumption (PEC)



Final Energy Consumption (FEC)



Energy intensity,
2018 value and trends:
0,43 ktoe/mil EUR, + 0,9%

Source: EUROSTAT 2020 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
🟡	🟢	🟡	🟢	🟢	🟡	🟢	🟢	🟠	🟡	🟢	🟢

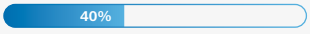
🟢 Adopted and implemented 🟡 Compliance or implementation issues detected 🟠 No progress with adoption/implementation

* 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 Assessement	Implementation Status	Descriptions
Environmental impact assessment (EIA) and strategic environmental assessment (SEA)			The amendments to Directive 2014/52/EU still need to be transposed. Improvements of the quality as well as the control of environmental reports are needed. Effective measures for the public concerned to participate in decision-making needs to be ensured both at project and plan/programme level.
Sulphur in fuels			The State Environmental Inspectorate is in charge of implementing the transposing legislation. No information is provided on sampling and analysis of fuels and the testing methods used.
Large combustions plants and industrial emissions			The Large Combustion Plants and Industrial Emissions Directives have not been transposed. Moldova does not apply a NERP nor an opt-out mechanism. Existing combustion plants meet the emission limit values of the Large Combustion Plants Directive.
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.

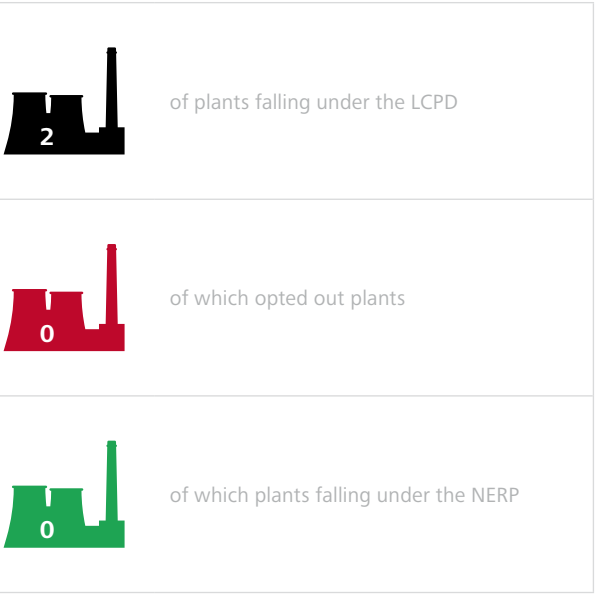
Work on the preparation of legislation to transpose the amendments of Directive 2014/52/EU have started. The competent authority for both types of environmental assessments is the Environmental Agency and the register of environmental impact assessments and strategic environmental assessments on its website is functional. Development consents and other administrative decisions related to the processes are systematically published. Efforts should be focused on further capacity building of the implementing authorities, with particular regard to the Environmental Agency, and improving the level of quality control of environmental reports. During the last reporting period, the approval of the environmental report of a Project of Energy Community Interest (Romania-Moldova 400 kV interconnection line) was done, while another (Vulcănești wind power plant) is in progress. With regard to strategic environmental assessment, a review of the transposing national legislation was carried out during the last reporting period. Based on its findings, amendments are being prepared.

As regards legislation on the sulphur content of liquid fuels, 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 the competent authority for overseeing implementation of the decision and – in cooperation with the Government and border police – performing checks to verify compliance of the fuels covered by its scope. While the standards for sampling and analysis stipulated in the decision are equivalent to those in the Directive, no information is provided on the frequency, methodology and the systematic nature of quality control of heavy fuel oil and gas oil. The provisions on marine fuels do not apply to this Contracting Party.

Moldova has still not transposed the requirements of the two Directives regulating the emissions of large combustion plants into national law. To address this failure, the Secretariat initiated infringement proceedings against Moldova in September 2018 and submitted a Reasoned Request to the Ministerial Council in September 2020. At the same time, based on the technical characteristics of Moldova's two 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. Moldova complied with its reporting obligations under the Large Combustion Plants Directive for the 2019 reporting year.

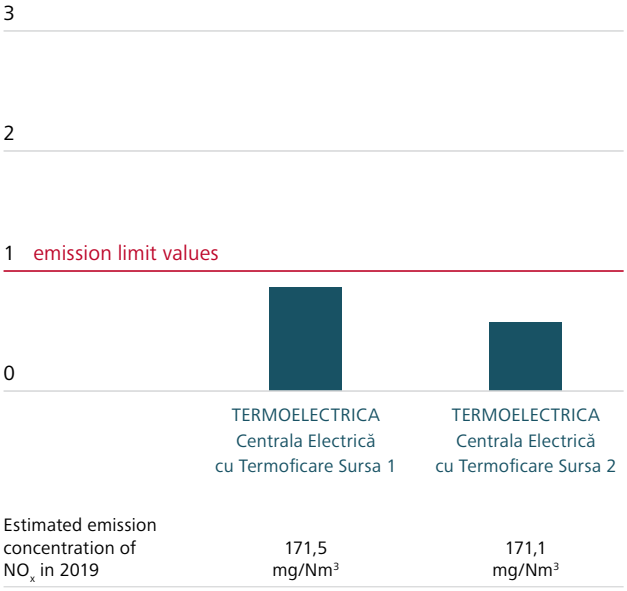
As regards the protection of wild birds, Moldova currently has three sites designated as Wetlands of International Importance (Ramsar sites). Furthermore, 61 sites are officially adopted as Emerald sites under the Bern Convention, with nine new sites being included in December 2019. Ensuring the proper functioning of the Emerald Network by introducing and implementing measures against prohibited means and methods of killing, capture and other forms of exploitation of protected species (by e.g. closed seasons or temporary or local prohibition of exploitation) would be beneficial for the future Natura 2000 classification process. The draft law amending and supplementing the Law on Wildlife, which is to transpose Article 4(2) of the Wild Birds Directive, is still not adopted.

Installations under the Large Combustion Plants Directive



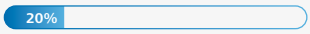
Source: compiled by the Energy Community Secretariat

2019 emissions of NO_x versus applicable emission limit values (ELV)



Source: calculated by the Energy Community Secretariat

Moldova
Climate

Climate Indicators	Transposition Assessement	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. The Low Emissions Development Strategy is planned to be updated based on the more ambitious targets established in the country's updated NDC.
National Energy and Climate Plans (NECPs)			Moldova still needs to develop a legal basis for NECP adoption, officially set up a national working group on NECP development and start drafting.

Moldova updated and submitted its Nationally Determined Contribution (NDC) under the Paris Agreement to the UNFCCC Secretariat as the fourth country in the world on 4 March 2020. With this second NDC, 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 from the international community.

The Regulation on the Organisation and Functioning of the National Monitoring and Reporting of Greenhouse Gas Emissions and Other Information relevant to Climate Change transposes Regulation (EU) 525/2013. The Environment Agency of Moldova was designated as the entity responsible for its implementation. The National System for Reporting on Policies, Measures and Projections is an integral part of it. This assignment also requires collecting, centralizing, validating and processing data and required information for the inventories and reports on atmospheric pollutants and GHG emissions; implementing the provisions of policy documents and international environmental treaties to which Moldova is a party in the field of protection of atmospheric air quality and ozone layer, GHG emissions reductions and adaptation to climate change; and the elaboration and presentation of information on their implementation. The Government plans to update its Low Emissions Development Strategy 2030 based on the more ambitious targets established in Moldova's updated NDC.

The development of the analytical basis for the NECP started with external modelling support, which delivered the first results in May 2020. Current work focuses on the alignment of results with previous modelling exercises undertaken for the preparation of the second Biannual Update Report. Consultants will support the upcoming drafting process.

Moldova
Infrastructure

Infrastructure Implementation

Infrastructure Indicators	Transposition Assessement	Implementation Status	Descriptions
National competent authority	~	30%	In order to transpose elements of Regulation (EU) 347/2013, a draft Law on amending the Law on Energy was prepared. The draft Law will be submitted for approval to the Government and Parliament by the end of 2020. According to the draft Law, the Ministry of Economy and Infrastructure is designated as the national competent authority.
Manual of procedures	~	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	X	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 Energy Law, which is scheduled for adoption by the end of 2020. The Ministry of Economy and Infrastructure will act as the national competent authority. Until the amending law is adopted, Moldova does not comply with the Energy Community infrastructure acquis.

The transposition of the Regulation will facilitate the realization of ongoing strategic infrastructure projects in gas and electricity. Particularly pressing is the facilitation of the infrastructure projects related to the integration of Moldova into the Continental European power system in order to upgrade the country's security of energy supply. Unfortunately, the sole Moldovan candidate project in the 2020 PECI/PMI selection process (Trans-Balkan Corridor Bidirectional Flow between Moldova and Ukraine) was not shortlisted to receive the PECI label.

Proposed 2020 PECI/PMI projects: **0**

Electricity: **0** | PECI: **0** | PMI: **0** | Gas: **0**

Moldova
Statistics

Statistics Implementation

Statistics Indicators	Transposition Assessement	Implementation Status	Descriptions
Annual statistics	✓	100%	The five annual questionnaires and the questionnaire on final energy consumption of households for 2018 were transmitted to EUROSTAT.
Monthly statistics	✓	80%	All monthly collections were compiled and disseminated and transmitted to EUROSTAT. Short-term monthly data are reported with delay.
Price statistics	✓	100%	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 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.

NBS transmits annual questionnaires to EUROSTAT on time and publishes them on its website. Annual questionnaires for 2018 are compiled and transmitted in full compliance with the acquis, as well as the preliminary data for 2019. Disaggregated data on energy consumption in households are compiled and transmitted to EUROSTAT within the set deadlines. NBS also prepares information for calculation of the renewables share by the institution in charge. The established quality system has allowed NBS to timely prepare and transmit the quality report on its annual statistics in accordance with the Regulation.

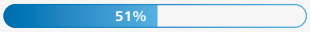
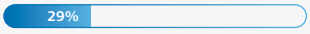
The reporting scheme for monthly data has been established and NBS publishes monthly datasets for coal, oil and petroleum products, natural gas and electricity and transmits them to EUROSTAT. Natural gas and monthly oil data are also reported to the JODI database. Short-term monthly data, including oil stocks, are also reported, albeit not within the deadlines yet.

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

The remaining tasks are to complete the short-term monthly statistics and transmit the required monthly collections to the EUROSTAT database.

Moldova
Cybersecurity

Cybersecurity Implementation

Cybersecurity indicators	Transposition Assessement	Implementation Status	Descriptions
Institutions and legislation			There is no compliant cybersecurity law covering the energy sector and a policy for designation of critical energy infrastructure is missing. The national computer emergency response team (CERT-GOV-MD) is responsible for energy.
Requirements for operators and energy regulatory authority			General frameworks for security requirements and risk management in the public sector, applicable to energy stakeholders, are in place but reporting is missing. Implementation of energy-specific rules, measures and cooperation mechanisms should follow. The energy regulator does not have competences for cybersecurity.

Moldova's general cybersecurity rules and policies are well developed and the country is gradually increasing its implementation capabilities. The state security authorities are leading in cyber protection. Energy-specific measures are in the planning phase and compliant cybersecurity legislation in the energy sector is yet to be developed.

The 2013 strategy "Digital Moldova 2020" aims to enhance cybersecurity of critical infrastructures and lists measures to identify and protect critical infrastructure including energy networks, harmonize legislation, promote information exchange and international cooperation and strengthen the computer emergency response team (CERT) capacity. The follow-up Cybersecurity Programme 2016 - 2020 goes further by introducing mandatory minimum cybersecurity standards, certification criteria, cybersecurity audit for public communication networks and other critical systems and introduction of penalties for non-compliance. The Information Security Strategy and action plan 2019 - 2024 provide a roadmap for the development of an integrated cybersecurity and defence platform but they do not contain energy-specific provisions.

EU legislation on cybersecurity is not transposed. The Law on Preventing and Combating Terrorism of 2017 specifies criteria for the identification of critical infrastructures that can be applied to oil and gas storage facilities and pipelines and transport and distribution of electricity, gas and oil. A mechanism for designation of the operators does not exist. CERT-GOV-MD is the national CERT protecting information and communication systems of the public administration and networks, including energy, from cyber threats, implementing risk mitigation measures and responding to security incidents.

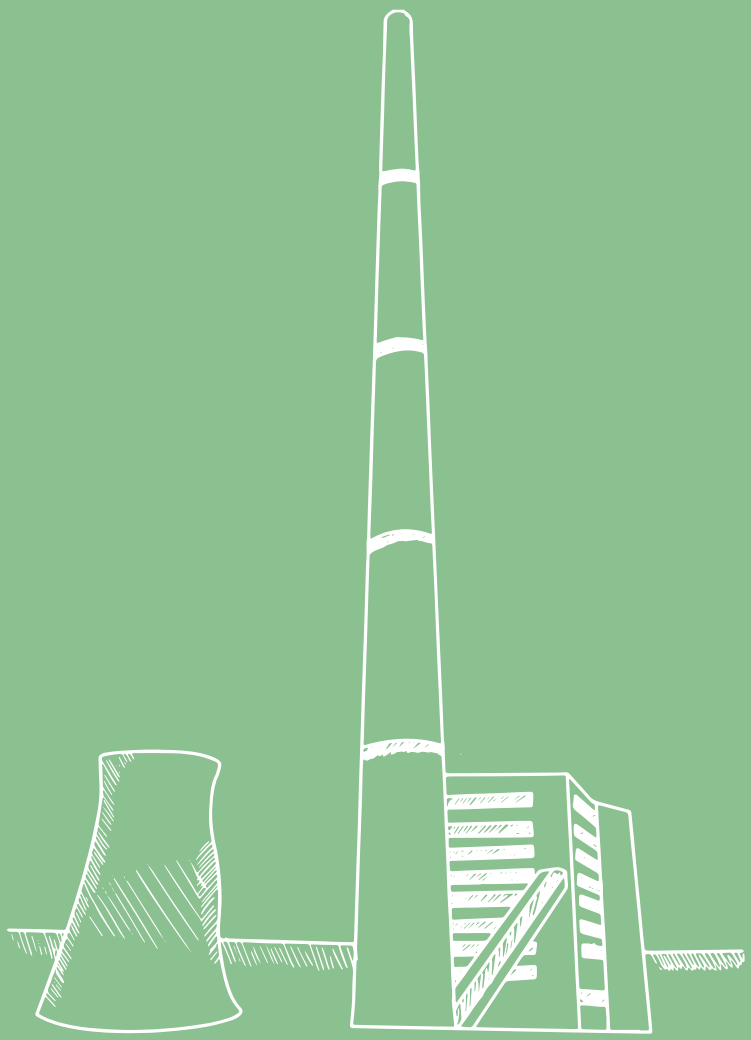
The Cybersecurity Guidelines for civil servants published in 2018 by CERT-GOV-MD provide a general framework for risk management and security measures and are applicable to the energy operators. No energy-specific risk assessment methodology and policy exist.

General cybersecurity requirements, applicable also to energy operators, are defined by the Governmental Decision on Mandatory Minimum Cybersecurity Requirements of 2017. The Decision designates the Ministry of Economy and Infrastructure as the responsible authority for implementation of cyber policy in all public sectors, including energy. It addresses security measures and internal cybersecurity systems, data protection, access to information and communication technology, obligations of the service providers and incident recovery aspects. Incident notifications are required but no enforcement measures are in place.

The role of the energy regulator ANRE is limited to approving the expenses required for ensuring anti-terrorism protection. The current legislation fails to grant the regulator competences over cybersecurity.

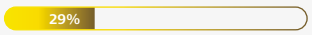
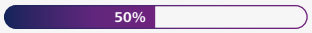
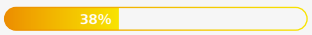
10

Montenegro



Montenegro

Summary Implementation

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

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

Montenegro

State of Energy Sector Reforms

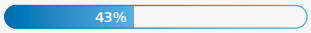
Montenegro has been a frontrunner in implementing energy sector reforms in the Energy Community for years. The country continues legal reforms by adopting amendments of the Energy Law which introduce a legal basis for adoption of the 2030 energy and climate targets and the national energy and climate plan, as well as a framework for small LNG infrastructure. In the electricity sector, the Law's amendments brought a legal basis for the organized day-ahead market and designation of the nominated market operator. Unbundling of the transmission system operator has been achieved. The same goes for the distribution system. An organized wholesale market does not function yet, and a strategic partnership for servicing an organized market remains to be finalized. Montenegro has yet to transpose the REMIT Regulation. The country did not make any progress in adopting the draft law on security of supply of oil products.

In terms of climate and environment, Montenegro is in the vanguard of the Energy Community. The recently adopted Law on Protection from the Negative Impacts of Climate Change and the regulation establishing an emission trading scheme from February 2020 constitute milestones not only for the country's but also for the Energy Community's path towards decarbonisation. Work on the National Energy and Climate Plan is still at a relatively early stage. Montenegro has already surpassed its 2020 renewable energy target by a wide margin. It successfully performed auctions for one wind and one solar power project without a premium (other than making available the land) but a possibility to sign a power-purchase agreement. The Pljevlja power plant is being opted out from compliance with the Large Combustion Plants Directive, and according to the Secretariat's estimations, will reach the end of its lifetime by the end of 2020. This will essentially decarbonize the country's electricity sector. Montenegro paid direct subsides worth some EUR 400.000 to support coal-fired power generation in 2019.

Montenegro's power sector is mainly based on hydropower and still relies on one lignite-fired power plant in Pljevelja. Trade on the new undersea electricity interconnection between Italy and Montenegro started recently. The country is not connected to natural gas systems but could provide facilities for some quantities of LNG to be further transported by railway. In recent years, Montenegro supported investments in wind and solar power plants.

Montenegro
Electricity

Electricity Implementation

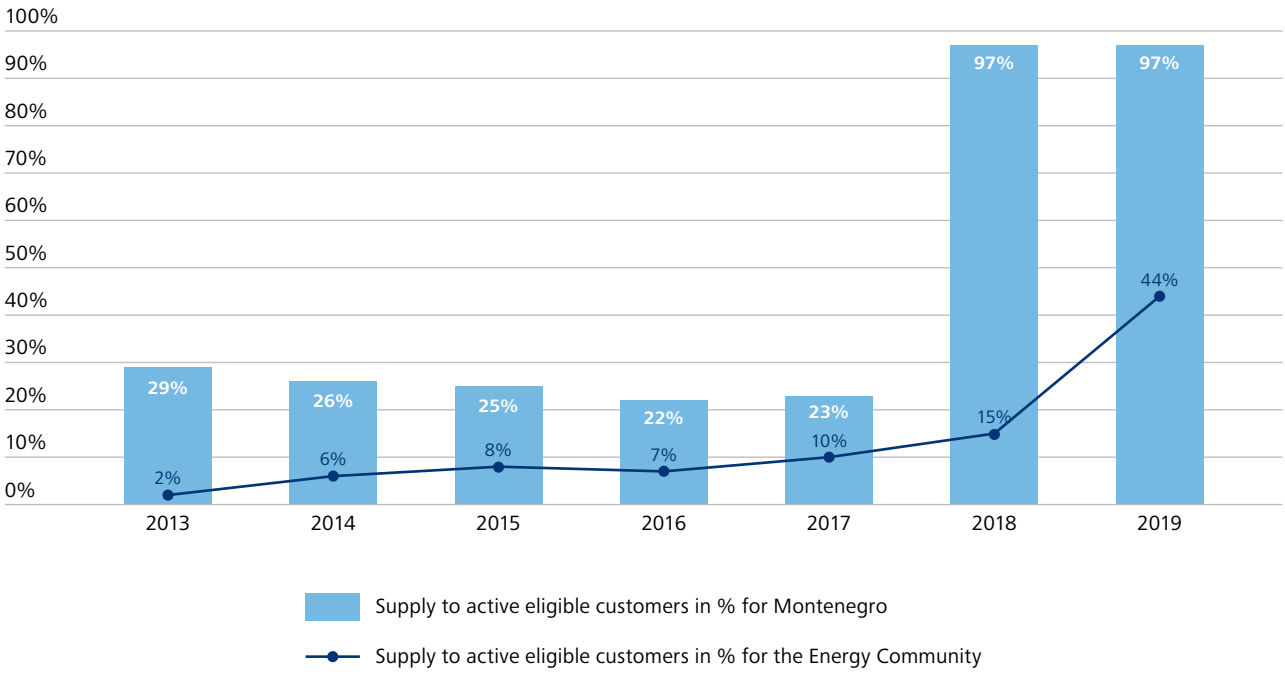
Electricity Indicators	Transposition Assessement	Implementation Status	Descriptions
Unbundling			Amendments to the Energy Law adopted in 2020 fulfil the last remaining condition for unbundling of the transmission system operator. The distribution network operator is unbundled in accordance with the acquis.
Access to the system			Transparent and non-discriminatory access to the system is ensured by published tariffs for connection and use of the Connection Network Codes are transposed, but not implemented yet. The Transparency Regulation is transposed and partially implemented.
Wholesale market			The wholesale market is open for competition, including the balancing market, except for the balancing reserve. Concentration is very high, despite the fact that a seat requirement for trade does not exist. A timeline for day-ahead market establishment and coupling is defined by the latest amendments of the Energy Law, but actual progress is slow. The REMIT Regulation is not transposed.
Retail market			Although the retail market is formally deregulated, only the incumbent is supplying end-customers and, as the supplier of last resort selected in a market-based procedure, performs the public service obligation to supply small customers and households.
Regional integration			The transmission system operator participates in regional balancing cooperation and coordinated capacity calculation, but key outputs are yet to be achieved. Similarly, the regional market coupling project is still being designed but not implemented. The amendments to the Energy Law set the basis for the full transposition of the CACM Regulation.

The commissioning of the undersea cable between Montenegro and Italy with 600 MW of capacity marked the reporting period in Montenegro. The transposition of Connection Network Codes and the designation of the supplier of last resort in a competitive procedure were the main steps towards further electricity sector liberalization. This development was facilitated by an amendment to the Energy Law adopted in July 2020, which removes the last obstacle for transmission system operator unbundling and sets the legal basis for functioning of organized day-ahead and intraday markets.

The transmission operator CGES, owned by the State and the Italian transmission system operator Terna, was conditionally certified. Amendments to the Law, adopted in July 2020, ensured a compliant separation of control in line with the regulator's and the Secretariat's conditions. Distribution is performed by CEDIS, a legally unbundled undertaking owned by the electric power distribution company EPCG. Functional unbundling was implemented in a compliant manner. Transmission and distribution tariffs were set pursuant to the methodologies for the regulatory period 2020 - 2022 in December 2019. The transmission tariff charged to generators connected to the transmission network continues to exceed the maximum value allowed by Regulation (EU) 838/2010.

The Government adopted two decrees ensuring the transposition of the Connection Network Codes as well as a decree on requirements for connection of electricity generators to the

Retail Market Opening



Source: Ministry of Economy

transmission and distribution networks. The implementing rules for network operators have not yet been amended accordingly. The Transparency Regulation is transposed and partially implemented. The existing system for data collection and publication is currently being improved.

The wholesale market is fully deregulated. Operations on the wholesale market are managed by the electricity market operator COTEE. Amendments of the Energy Law of July 2020 brought the necessary legal basis for the functioning of the power exchange and defined 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 is yet to establish a day-ahead market. The national balancing market functions. In addition to the incumbent generation company EPCG, which acts as a balancing service provider, a contract for providing balancing services was signed with an industrial customer. According to the current methodology, the balancing reserve price is to be set by the regulator until sufficient competition is in place. The price of balancing energy is not regulated, and a cross-border market-based exchange of balancing energy is still implemented only with the transmission system operators of Serbia and Bosnia and Herzegovina on a bilateral basis. The REMIT Regulation is envisaged to be adopted as a separate law by the end of 2020.

In the retail market, all customers are eligible to choose their supplier. The Energy Law allows recognition of retail supply licenses of undertakings established and licensed in another Contracting Party or an EU Member State. However, final customers are still supplied by the incumbent EPCG, the only active supplier. Since June 2019, EPCG offers to customers the choice of different tariff models, with the aim to encourage energy efficiency and reduce costs. Until 30 June 2020, 12% of end-customers, who signed supply contracts with EPCG, opted for a new supply package. The supply of last resort is defined as a public service obligation imposed on EPCG selected in a tender procedure. The price charged by the supplier of last resort to households and small customers is based on the market price subject to price increase restrictions set by the regulator. Vulnerable customers are also supplied by the supplier of last resort. A Government decree, effective from 2019 onwards, defines a vulnerable customer and sets up a protection mechanism, 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 and Bosnia and Herzegovina. Rules for allocation of interconnection capacity with the Serbian electricity system are approved by the regulator. Montenegro is participating in a market coupling project with Albania, Italy and Serbia (AIMS), which is still in an early phase.

Montenegro
Gas

Gas Implementation

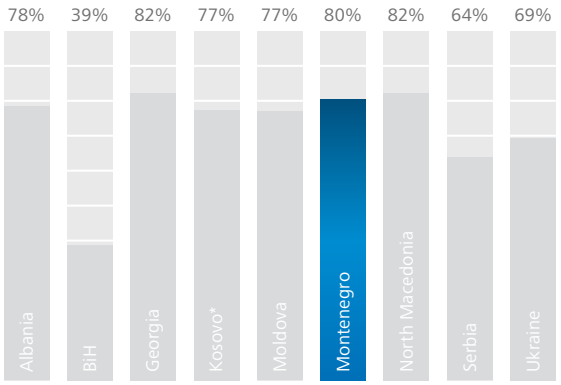
Gas Indicators	Transposition Assessement	Implementation Status	Descriptions
Unbundling		0%	Ownership unbundling is the only applicable model for the future transmission system operator.
Access to the system		0%	No secondary acts regulating third party access or methodologies or corresponding tariffs exist yet.
Wholesale market		0%	Montenegro does not have a gas market, nor market rules, though in theory it would be an open market.
Retail market		0%	No retail market exists in Montenegro.
Interconnectivity		0%	In addition to the Ionian Adriatic Pipeline, Montenegro is considering developing infrastructure to bring limited LNG supplies to the country and start developing its gas market.

Montenegro is one of the few European countries without access to gas. The country has transposed the majority of the Third Energy Package obligations in the gas sector via the 2015 Energy Law and the 2016 Law on Cross-Border Exchange of Electricity and Natural Gas. However, certain provisions are still missing or lack clarity. The new Energy Law creates a tailor made regulatory framework for a liquefied natural gas (LNG) terminal, which is not connected to any gas network. While the Ionian Adriatic Pipeline remains the first option for Montenegro to connect to European gas infrastructure, limited LNG supply would offer the possibility of energy diversification in the short term.

Montenegro was not inactive during the reporting period. The first ever secondary act – general conditions of gas supply - was adopted in January 2020. It is compliant with the Third Energy Package. A number of secondary regulatory acts are quite advanced (a methodology for the regulation of maximum income and prices for the LNG terminal) or under preparation (tariff methodologies for future natural gas network operators).

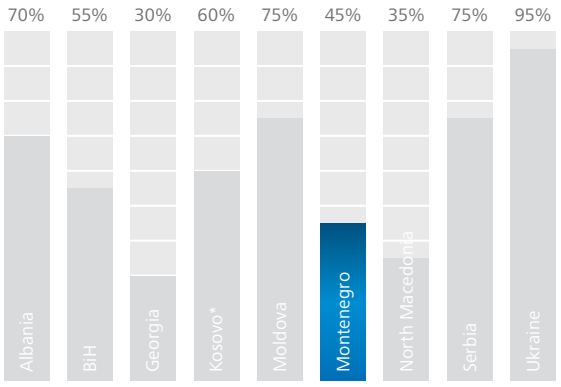
Montenegro
National Authorities

Regulatory Authority



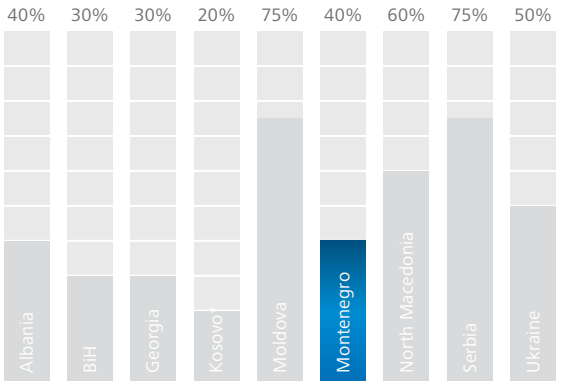
The Energy and Water Regulatory Authority of Montenegro (REGAGEN) performs as an independent regulator committed to pro-actively design the electricity market. This includes cooperation with Italian authorities on a common auction office for the electricity interconnector between Italy and Montenegro and a market coupling pilot project. Electricity Network Codes have been transposed into national legislation, however, the required regulatory criteria based on which derogations from Codes can be granted have not been adopted yet. The 2020 amendment of the Energy Law empowers the REGAGEN management to autonomously decide on the authority's internal organisation without the need for governmental approval.

Competition Authority



Since its establishment in 2013, the Agency for Competition Protection (ACP) has not applied competition law to the energy sectors, 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 expectations of the Energy Community Treaty. In the reporting period, amendments to the rules of procedure were adopted for the individual exemptions to restrictive agreements due to the Covid-19 pandemic.

State Aid Authority



After taking over the competence for State aid control in 2018, the ACP has so far not rendered any decisions in the energy sectors regarding State aid. The Agency for Competition Protection (ACP) adopted a temporary framework for State aid in the context of the Covid-19 pandemic and a notice on the notion of State aid.

Montenegro
Oil

Oil Implementation

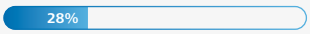
Oil Indicators	Transposition Assessement	Implementation Status	Descriptions
Stockholding obligation		0%	There is no emergency oil stockholding obligation. The draft Law on Security of Supply of Oil Products, which was finalised in 2016 but never adopted, meets all provisions of the Oil Stocks Directive. The draft Law continues to be under consideration by different ministries.
Emergency procedures		0%	There is no procedure in place to release some or all of the country's emergency oil stocks. However, 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)		100%	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		100%	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 punitive 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 in oil stockholding. 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 fully comply with the specifications set out in the Fuel Quality Directive. Montenegro is planning amendments to the Law on Air Protection to introduce more precise provisions on fines.

Montenegro
Renewable Energy

Renewable Energy Implementation

Renewable Energy Indicators	Transposition Assessement	Implementation Status	Descriptions
National Renewable Energy Action Plan			Montenegro exceeded its overall 2020 renewables target as well as sectorial targets for electricity and heating and cooling. However, the share of renewables in transport remains low. Montenegro submitted its third Progress Report on implementation of the Renewables Directive to the Secretariat with significant delay.
Quality of support schemes			Based on the Energy Law, administratively set feed-in tariffs are applicable for projects up to 1 MW, while support schemes for larger projects have to be awarded in a competitive process. Secondary legislation, which would provide clarity and predictability for the implementation of auctions, is lacking. So far, two locational auctions, i.e. tenders for the right to build on state-owned plots of land, were held.
Grid integration			According to the Energy Law, priority dispatching applies to electricity generated from renewables. All privileged producers, the ones under the support scheme, are exempted from balancing responsibility, which is not in line with the State Aid Guidelines. Rules and procedures for connection of renewable energy producers need to be improved.
Administrative procedures and guarantees of origin			While the Law on Administrative Procedures ensures transparency, objectivity and non-discrimination of the rules, procedures for permitting, construction and licensing are yet to be streamlined and simplified. A single administrative body is not established. An electronic mechanism for issuing, transfer and cancellation of guarantees of origin is under development.
Renewable energy in transport			Sustainability criteria for biofuels and bioliquids are transposed. A verification body is yet to be established although it is prescribed by the Energy Law and the Decree. The share of renewables in the transport sector was below 1% in 2018.

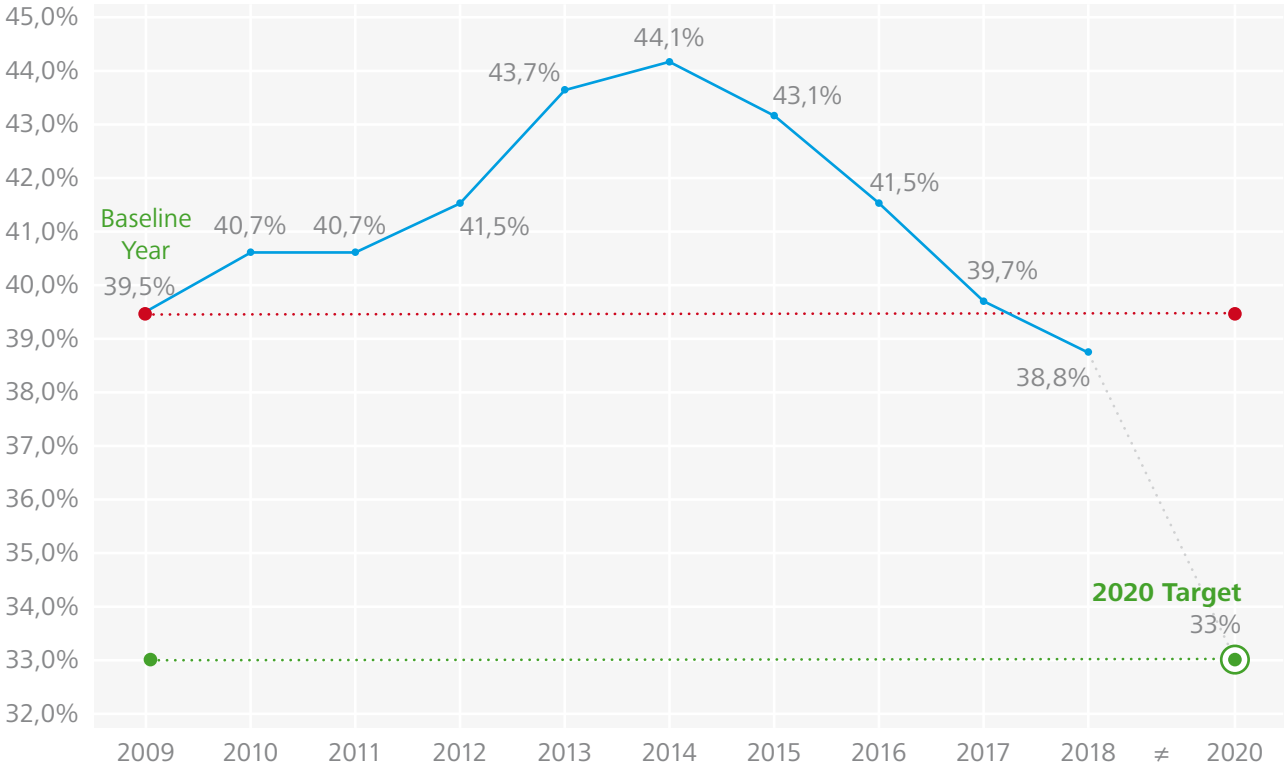
There were slight improvements in the transposition and implementation of the renewable energy acquis in the reporting period. In July 2020, Montenegro adopted amendments to the Energy Law to provide more clarity on the electronic register for guarantees of origin and on a self-consumption scheme, which is yet to be promoted in practice. A new wind farm was put into operation in 2019, while a new locational auction for 100 MW of wind was finalized in 2020.

According to the recently adopted amendments to the Energy Law, the Electricity Market Operator replaced the Energy Regulatory Agency as issuing body of guarantees of origin. As reported, an electronic system is under preparation. To assure compatibility with the standardized European Energy Certificate System, Montenegro applied for membership in the Association of Issuing Bodies (AIB), where it currently holds observer status.

Despite the progress made in conducting locational auctions based on the Law on State Property, Montenegro should focus on adopting a legal and regulatory framework for a market-based support scheme in line with the State Aid Guidelines. Although sustainability criteria for biofuels and biodiesel were

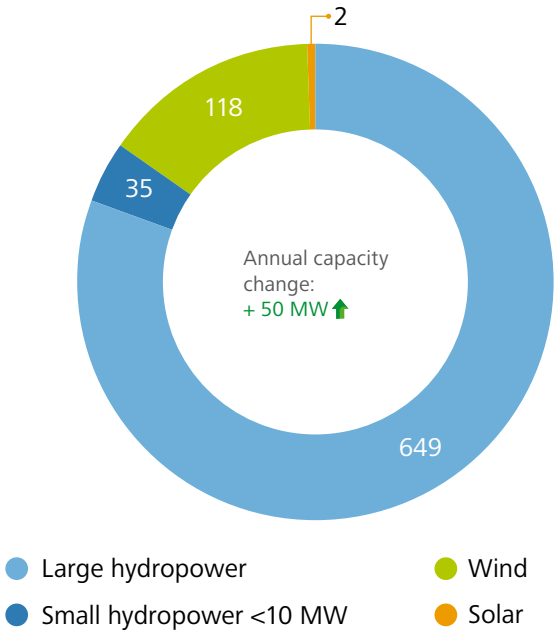
adopted in 2018, transposing the required legal provisions, implementation in practice should be prompted to achieve the renewables target in transport. Administrative procedures should be streamlined and simplified by establishment of a one-stop shop system.

Shares of Energy from Renewable Sources



Source: EUROSTAT

Total Capacities of Renewable Energy 2019 (MW)



Source: Ministry of Economy

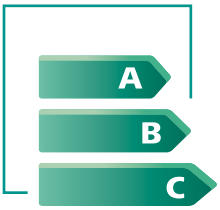
Montenegro reached its 33% target for the share of renewable energy in gross final energy consumption by 2020, mostly due to revision of biomass data. The slight decline in the share of renewable energy sources in gross final consumption in 2018 compared to 2017 is the result of a decrease in the share of renewables in the heating and cooling sector.

Montenegro's second wind park started producing electricity in 2018, while full capacity was reached in 2019 (Možura, 46 MW). Despite the great potential for the use of this technology, only 2 MW of solar PV were installed in 2019.

Montenegro conducted two locational auctions for renewable energy projects where investors were offering a land lease price to gain the right to build plants on state-owned land and sell electricity at the market. The first auction for 250 MW solar PV was conducted and contractual agreements were signed in 2018. The second auction for 100 MW of wind was conducted in 2019, while contractual agreements were signed in August 2020 with a slight delay due to the Covid-19 pandemic.

Total capacities of renewable energy (MW):

804



Montenegro
Energy Efficiency

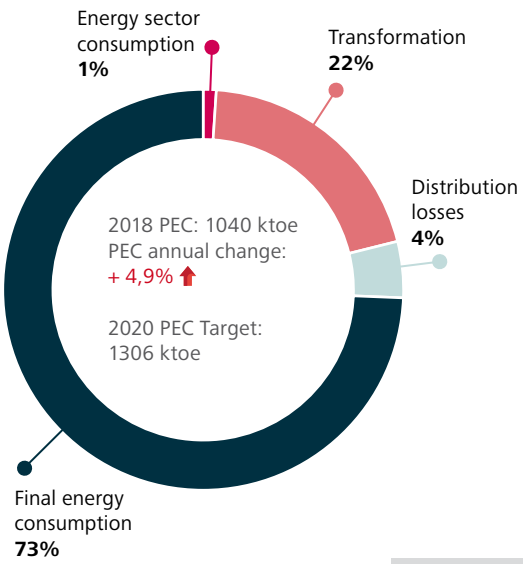
Energy Efficiency Implementation

Energy Efficiency Indicators	Transposition Assessement	Implementation Status	Descriptions
Energy efficiency targets and policy measures	✓	68%	The 2019 - 2021 NEEAP, which includes the overall 2020 target and a 1% annual target for central government buildings, was adopted in 2019. The NEEAP also includes energy efficiency obligation targets, but notification on implementation is pending. Expert trainings were organised between December 2019 and July 2020 to support energy management in the public sector as well as monitoring and verification of NEEAP measures.
Energy efficiency in buildings	✓	78%	A law transposing the Buildings Directive and implementing rulebooks were adopted in 2015. Work on the development of a cost-optimality software and calculations is ongoing. Montenegro continued implementing several successful building rehabilitation programmes, albeit a long-term strategy is still missing.
Energy efficiency financing	✓	80%	The Eco Fund is operational. As part of the Covid-19 recovery package, the Government planned to allocate EUR 2 mil. for energy efficiency subsidies to the private sector, which should generate EUR 10 mil. in investments. The enabling ESCO legal framework (the Law on Efficient Use of Energy) is enforced via the Public Private Partnership Law adopted in December 2019. The NEEAP envisages measures and financial mechanisms for ESCO projects.
Energy efficient products - labelling	✓	86%	A package of ten new energy labelling and eco-design rulebooks was adopted between December 2019 and June 2020 and complemented by engagement and capacity building of market surveillance bodies. To be fully compliant, Montenegro is still to adopt three regulations adopted by the Ministerial Council in November 2018.
Efficiency in heating and cooling	~	60%	Montenegro does not have district heating, and the majority of buildings use individual heating systems, supplied by either biomass or electricity. The 2030 Energy Strategy envisages the development of district heating systems on biomass. The Žabljak municipality was selected for a pilot biomass district heating project under EBRD's programme ReDEWeB. The assessment of high-efficiency cogeneration and efficient district heating and cooling potential will be updated, while the amendments to the Energy Law (adopted in July 2020) envisage the adoption of a new action plan to develop these technologies.

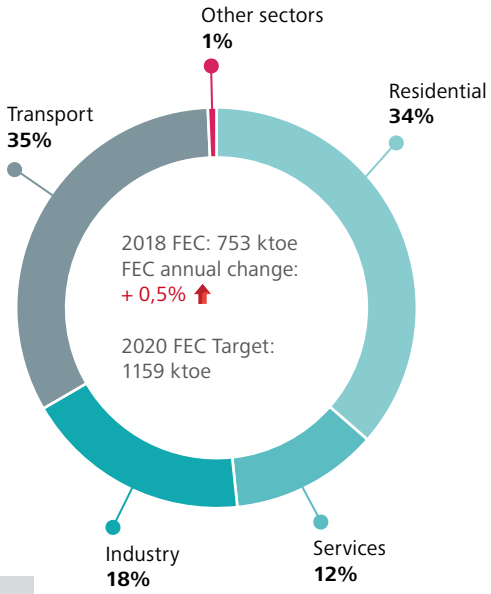
Montenegro has achieved a relatively high level of transposition of the energy efficiency acquis and timely adopted the National Energy Efficiency Action Plan (NEEAP) in June 2019. Progress in implementation has also been recorded in the reporting period (energy efficient product policy, financing, capacity building for energy management, work on updated regulation for buildings etc.).

2018 Energy Efficiency Indicators and Trends

Primary Energy Consumption (PEC)



Final Energy Consumption (FEC)



Energy intensity, 2018 value and trends: 0,28 ktoe/mil EUR, - 0,1%

Source: EUROSTAT 2020 data and Contracting Party's NEEAP

Montenegro should continue with the adoption of the remaining secondary legislation on energy labelling of energy-related products. Notification on implementation of Article 7 (energy efficiency obligation scheme) and an overall annual report on the progress in implementing the Energy Efficiency Directive should be submitted without further delay.

After creation of the Eco Fund, Montenegro has to increase state financing for energy efficiency measures, in cooperation with the Ministry of Economy and local administrations. Finally, Montenegro should continue activities towards putting in place a functional information system for energy efficiency indicators, energy management and monitoring of NEEAP implementation.

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 Assessement	Implementation Status	Descriptions
Environmental impact assessment (EIA) and strategic environmental assessment (SEA)	✓	83%	Existing legislation complies with both directives on environmental assessments. However, appropriate administrative capacity and adequate financial resources (especially on local level) remain to be allocated to ensure proper implementation. Early and effective public participation and consultation in decision-making processes must be secured. A consultation between the Government and the public concerned should take place for the environmental impact assessment of the HPP Komarnica project.
Sulphur in fuels	✓	100%	Implementation of the provisions of the Directive (including those on marine fuels) is ensured by applying 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 are foreseen to strengthen the enforcement procedures.
Large combustions plants and industrial emissions	✓	73%	The plan for the Pljevlja II lignite power plant was cancelled. For the existing thermal power plant Pljevlja I, a contract for reconstruction was signed. However, the plant, which is subject to the opt-out provision, is expected to exceed the 20.000 hour limit prior to the completion of the reconstruction, already by the end of 2020. The Secretariat is concerned that the provisions on opt-out may not be respected.
Nature protection	✓	67%	Improved administrative capacity and more financial support is needed in order to meet the obligations under the Wild Birds Directive and to secure proper implementation and enforcement by the competent authorities.

The legal preconditions for the proper implementation and enforcement of the Environmental Impact Assessment Directive, including the amendments introduced by Directive 2014/52/EU, are set. However, a capacity building plan for proper enforcement of the legislation is needed together with the allocation of additional financial resources. New concerns regarding the environmental impact assessment of the HPP Komarnica project were raised following the Parliament's adoption of the spatial plan for the project and the confirmation of the developer to build the 170 MW hydropower plant. Improved dialogue between civil society and the Government (especially at local level) is needed to foster early and effective public participation in decision-making processes, both at the level of projects and plans/programmes. The Government should secure that a strategic environmental report for the foreseen National Energy and Climate Plan is prepared as early as possible in the process.

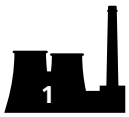
With regard to the Sulphur in Fuels Directive, the Annual Fuel Quality Monitoring Programme provides the framework for sampling and analysis of all fuels falling under the scope of the Directive. Following the introduction of the provisions on marine fuels into national legislation, amendments are planned to enhance more effective sanctions for breaches related to marine fuel used by vessels in Montenegrin waters and ports.

The Government officially cancelled the plan for the construction of the Pljevlja II lignite power plant. For the existing thermal power plant Pljevlja I (currently being opted out), a contract with the consortium Dec International-Bemax-BB Solar-Permonte was signed for the reconstruction of the first block. With the

reconstruction, it is expected that the lifetime of the plant will be extended for an additional 30 years. The deadline for reconstruction is in line with the plant's current permit and the final end date of the opt out, 31 December 2023. However, based on the current load factor (13.809 operational hours were already used from the total of 20.000 in 2018 and 2019), the plant is expected to exceed the 20.000 hour limit by the end of 2020. The Secretariat is concerned that Montenegro will not respect the opt-out provisions once the limit is reached and the plant will not cease its operations afterwards. The planned reconstruction and bringing the plant in line with the emission limit values for new plants under the Industrial Emissions Directive must be a priority. Montenegro complied with its reporting obligations under the Large Combustion Plants Directive for the reporting year 2019.

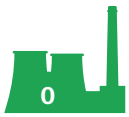
With regard to the protection of wild birds, Montenegro should improve the administrative capacity and allocate adequate financial support in order to assess the possible impacts early in the planning process and secure proper and effective protection, to be safeguarded by the competent authority. For the recently designated National park "Ulcinj Salina", a category II protected area, a temporary management body was set up, operative protective measures are however yet to be established. Work continued on the designation of other future Natura 2000 sites during the latest reporting period.

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

Total emissions from Large Combustion Plants in 2019

Total SO_2 emissions from LCPs in 2019
46.639,6

Total NO_x emissions from LCPs in 2019
4.394,2

Total dust emissions from LCPs in 2019
307,4

Source: compiled by the Energy Community Secretariat

Amount of operational hours used from opt-out period

TPP Plevlja 	Expected expiry of opt-out period:*	November 2020
	Remaining hours	6.191
	Operating hours consumed in 2018 and 2019	13.809

*Calculations for the expected expiry of the opt-out period are based on 2018 and 2019 average load factor.
Source: compiled by the Energy Community Secretariat

Montenegro
Climate

Climate Indicators	Transposition Assessement	Implementation Status	Descriptions
National greenhouse gas emissions monitoring and reporting systems	✓	77%	The Law on Protection against Negative Impacts of Climate Change represents the basis for the establishment of a National System for Monitoring, Reporting and Verification of Greenhouse Gases, which is yet to be set up. Furthermore, the Law regulates the operation of the Emissions Trading System and the enhancement of issues of the use of ozone-depleting substances and fluorinated gases.
National Energy and Climate Plans (NECPs)	~	47%	The drafting of the NECP and underlying analytical work have started, but no chapters have been completed and submitted for review so far.

According to Montenegro's Nationally Determined Contribution (NDC) under the Paris Agreement, it will reduce its emissions by 30% by 2030 compared to 1990. The first draft NDC review has been prepared, which includes additional financial, gender equality and adaptation components. The third National Communication on Climate Change under the UNFCCC was finalized during this reporting period. The Communication updated the greenhouse gas (GHG) emissions inventory for the 2016 - 2017 period, in accordance with the new 2006 IPPC methodology, with significantly improved data in the waste and forestry sectors. In October 2019, Montenegro began work on its third Biennial Update Report on Climate Change.

Montenegro has a National Strategy on Climate Change until 2030 in place. However, it has to intensify its work to ensure consistency with the EU 2030 climate and energy policy framework and ensure its integration into all relevant sectoral policies and strategies. In December 2019, Parliament adopted the Law on Protection against Negative Impacts of Climate Change. It 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. Moreover, the Law constitutes the basis for an emissions trading system. For now, the national GHG inventory systems is still not operational. The Low-Carbon Development Strategy required under the Law will present various GHG emission projections (without and with additional measures).

Montenegro - as the first Contracting Party - has introduced a cap and trade scheme for major CO_2 emitters in February 2020. The corresponding Decree specifies the operators participating in emissions trading (namely industrial and energy plants), determines the total amount of emission credits to be auctioned and sets a minimum price of EUR 24 per tonnes of CO_2. The funds raised from the scheme will be transferred into the Environmental Protection Fund and used for environmental protection measures, support for renewables and innovation.

The legal basis for the development and adoption of the National Energy and Climate Plan (NECP) was included in the Law on Energy in July 2020. The technical working group in charge has been established and met for the first time in June 2020. Preparation of the analytical basis of the NECP as well as drafting has started with international support, but no chapters have been completed so far. The first draft document is expected to be finished by the end of 2020 and sent to the Secretariat for review.

Montenegro
Infrastructure

Infrastructure Implementation

Infrastructure Indicators	Transposition Assessement	Implementation Status	Descriptions
National competent authority		20%	An analysis performed by the Ministry of Economy indicated that the Ministry should establish the national competent authority within the existing National Office for Energy Infrastructure. However, the national competent authority has not been designated to date.
Manual of procedures		0%	Currently, there is no manual of procedures for the permitting process of Projects of Energy Community Interest or Projects of Mutual Interest.
National regulatory authority involvement		100%	The regulator published its methodology and criteria used to evaluate investments in electricity and gas infrastructure projects and the higher risks incurred by them in December 2017.

The draft of the new Law on Cross-Border Energy Infrastructural Projects, which will transpose Regulation (EU) 347/2013, has been prepared. It is expected to be adopted in 2020.

The national competent authority should be designated and operational 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.

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 (IAP). Montenegro will benefit from improved security of supply and overall operation of the country's energy system. The Law will also have a positive impact on the regional market.

Proposed 2020 PECI/PMI projects: **2**

Electricity: **1** | PECI: **1** | PMI: **1** | Gas: **1**

Montenegro
Statistics

Statistics Implementation

Statistics Indicators	Transposition Assessement	Implementation Status	Descriptions
Annual statistics	✓	83%	The five annual questionnaires for 2018 were transmitted. The questionnaire on final energy consumption of households was not transmitted to EUROSTAT.
Monthly statistics	✓	10%	Monthly data on electricity and coal are collected, but not transmitted to EUROSTAT. Monthly oil data are not available.
Price statistics	✓	100%	Price statistics for electricity for 2018 were compiled and transmitted in accordance with the acquis.

The level of compliance with the statistics acquis in Montenegro remains moderate. No visible progress was made during the reporting period.

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 are not compiled and disseminated. Montenegro is the only Contracting Party not transmitting this questionnaire to EUROSTAT. The preliminary data for 2019 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.

Montenegro established a functional reporting system for monthly energy data within the Ministry of Economy. Monthly reports on electricity and solid fuels are compiled, but their transmission to EUROSTAT is seriously late, hence significantly affecting their relevance. Monthly oil data were not transmitted to EUROSTAT.

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.

In terms of annual energy statistics, Montenegro fails to comply with the acquis. Disaggregated data on energy consumption in households are completely missing, as well as a great deal of monthly data. Providing sufficient resources is among the core preconditions for MONSTAT to fulfil this task.

Montenegro
Cybersecurity

Cybersecurity Implementation

Cybersecurity indicators	Transposition Assessement	Implementation Status	Descriptions
Institutions and legislation			The Strategy defines general cybersecurity policies and measures. Critical information infrastructure of energy operators has been identified, but the information on designated operators is not available and an energy-specific policy framework is missing. A national computer incident response team (CIRT-ME) is established and the energy sector is included in its competences.
Requirements for operators and energy regulatory authority			The risk assessment criteria are insufficient and too general, specific security and reporting requirements for the energy operators need to be introduced. The energy regulatory authority does not have the role or power to monitor the implementation of cybersecurity measures.

Cybersecurity planning in Montenegro is well advanced and the environment is gradually being developed. There are still gaps in transposition of the cybersecurity acquis – including the designation of critical energy infrastructure and services, requirements for operators, cybersecurity risk assessment and regional cooperation.

The Strategy 2018 - 2021 identifies risks and responsible institutions mainly in the context of combating cybercrime. Main objectives include defining the institutional and organisational structure in cybersecurity, development of the national cyber defence potential and incident response capacity, protection of critical information infrastructure, public-private partnership and raising public awareness. It also provides a roadmap of implementation activities. Monitoring and annual reporting is provided by the Information Security Council. There are no energy-specific policies in the Strategy.

The Law on designation and protection of critical infrastructure adopted in 2019 transposes Directive 2008/114/EC in a general manner, defining the powers of the Ministry of Interior and leaving specific criteria for designation and measures for protection to the sectoral ministries. The Law requires the development of general security plans and imposes obligations for administrative reporting of critical assets, with no cybersecurity-specific criteria for essential services, requirements for operators, risk assessment or obligation for incident reporting.

The Methodology and Action Plan for selection of critical information infrastructure adopted in 2014, include the infrastructure 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 identified as essential services. Amendments to the Law on Information Security of 2016 oblige the Government to specify the critical infrastructures and the means of protection and of the Ministry of Public Administration to implement the measures. No specific policies applicable to energy are available. The Law on Information Security governed the establishment of the computer incident response team (CIRT-ME) in 2016.

The Decree on Information Security Measures of 2010 defines basic features of risk management and general data protection. General implementing measures for cybersecurity risk assessment are foreseen in the Strategy, with almost no consideration of energy-specific risks. The Law on Information Security provides a rather general structure for information security risk definition and management, but a risk assessment methodology applicable for energy is missing. The gap is bridged by the CIRT, which provides the cyber defence services in the energy sector. Likewise, the cybersecurity requirements and reporting obligations of the energy operators are defined in the Law on information security in a general manner. The Ministry declared ISO/IEC 27001 and 27002 standards as required in implementation of information security measures.

The energy regulatory authority REGAGEN does not have competences in the context of cybersecurity in the energy sector.

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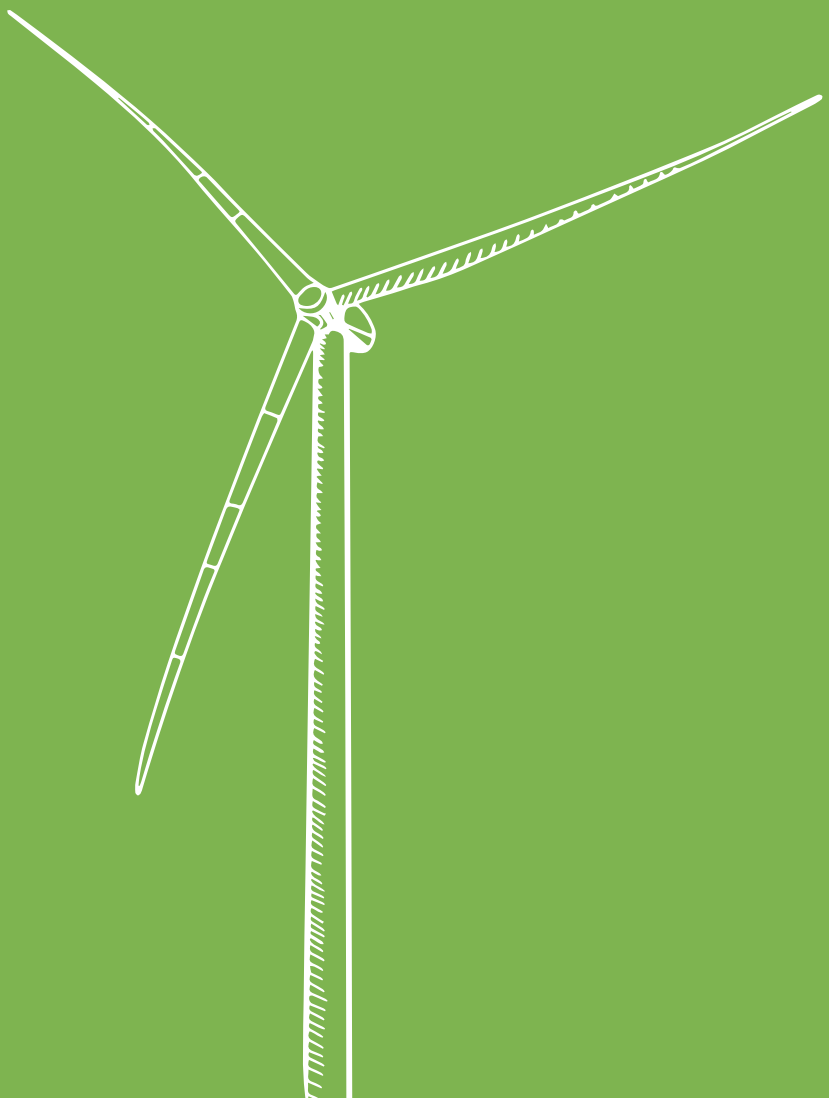
North Macedonia



North Macedonia

Summary Implementation

Summary Indicators	Transposition Assessement	Implementation Status	Descriptions
Electricity	✓	82%	Implementation in the electricity sector of North Macedonia is almost completed.
Gas	✓	37%	Implementation in the gas sector of North Macedonia is still at an early stage.
Oil	~	50%	Implementation in the oil sector of North Macedonia is moderately advanced.
Renewable Energy	~	65%	Implementation in the renewable energy sector of North Macedonia is well advanced.
Energy Efficiency	✓	58%	Implementation in the energy efficiency sector of North Macedonia is moderately advanced.
Environment	~	61%	Implementation in the environment sector of North Macedonia is well advanced.
Climate	~	56%	Implementation in the climate sector of North Macedonia is moderately advanced.
Infrastructure	~	12%	Implementation in the infrastructure sector of North Macedonia is yet to begin.
Statistics	✓	96%	Implementation in the statistics sector of North Macedonia is almost completed.
Cybersecurity	~	40%	Implementation in the cybersecurity sector of North Macedonia is still at an early stage.

North Macedonia

State of Energy Sector Reforms

North Macedonia has been catching up in ensuring effective implementation of the Third Energy Package at an impressive pace, starting with the adoption of the Energy Law in 2018. The reforms are underpinned by an ambitious Energy Development Strategy 2020 - 2040. The electricity market is open, the regulation of wholesale and retail prices has been terminated. The electricity transmission system operator has been unbundled and unconditionally certified by the regulatory authority and the Secretariat. Balancing rules imposing balancing responsibility on all market participants have been implemented as of January 2020. The electricity market operator MEMO has been established and designated as the Nominated Electricity Market Operator (NEMO), a prerequisite for day-ahead market establishment and market coupling with the Bulgarian IBEX. North Macedonia has yet to transpose the REMIT Regulation.

While the reforms in the electricity sector are well advanced, the reform of the gas sector continues to be held back by a long-lasting unresolved dispute related to the ownership in the transmission system operator GA-MA. A settlement was broken by the Secretariat's Dispute Resolution and Negotiation Centre. The dispute prevents unbundling and puts at risk the timely construction of the gas interconnector with Greece. The Law on Compulsory Oil Reserves, adopted in October 2014, is envisaged to enter into force by 1 January 2021.

In terms of climate and environment, North Macedonia is essentially set for a decarbonisation path. The recently adopted energy development strategy sets out three scenarios, of which the green scenario turns out not only to be the most cost-effective but also decarbonizes the electricity sector. North Macedonia is also the most advanced of all Contracting Parties in working on the National Energy and Climate Plan. The draft plan has been formally submitted to the Secretariat for review and recommendations. By adopting an Energy Efficiency Law in early 2020, North Macedonia aligned with the energy efficiency acquis.

The country already ran auctions for the construction of solar power plants on state-owned land, and signed agreements with eleven companies that met the criteria of the public call. In most cases investors did not demand a premium, but competed for gaining and paying for the right to invest. A second tender for solar PV on private land resulted in 24 signed agreements. Another tender was conducted for solar PV installations on a closed open pit mine.

For the emissions from large combustion plants, North Macedonia has adopted a National Emission Reduction Plan (instead of complying with the emission limit values on an individual basis). It is not implemented in practice (for sulphur dioxide and dust). The country paid direct subsides worth EUR 1,6 million to support coal-fired power generation in 2019.

North Macedonia's power generation mainly relies on lignite and hydropower and is dependent on electricity imports. The gas volumes consumed are rather insignificant and imported from Russia through an interconnector with Bulgaria. A second interconnector towards Greece is currently being planned. North Macedonia is the first country in the Western Balkans to build sizeable wind facility. The country currently tenders for a new pumped storage facility at Cebren.

North Macedonia
Electricity

Electricity Implementation

Electricity Indicators	Transposition Assessement	Implementation Status	Descriptions
Unbundling		100%	Transmission and distribution network operators are unbundled in accordance with the acquis.
Access to the system		90%	Access to the system is enabled via transparent and non-discriminatory rules and tariffs. Connection Network Codes are directly applicable, but still to be implemented. The Transparency Regulation is transposed and implemented to a large extent.
Wholesale market		63%	The (bilateral) wholesale market is open and competitive and a balancing market is operational. Market concentration is moderate. REMIT has not been transposed.
Retail market		95%	The retail market is open for competition and small customers and households are entitled to universal service at regulated prices. Supplier switching is facilitated by a web-based comparison tool.
Regional integration		64%	Interconnection capacities on the border with Greece are allocated through SEE CAO, others bilaterally. A project for market coupling with Bulgaria was resumed upon the appointment of MEMO as a nominated electricity market operator.

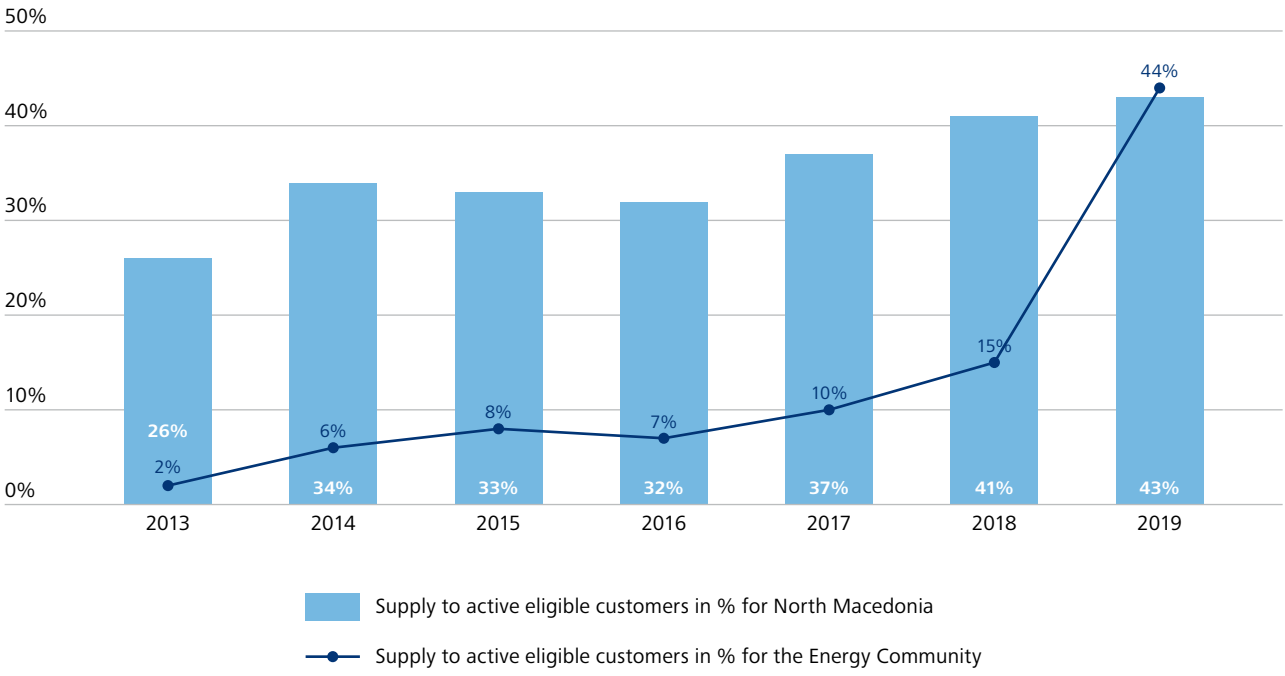
Implementation of the electricity acquis is steadily improving after the adoption of the Energy Law in 2018. The launch of the balancing market in 2020 and the recent designation of a nominated electricity market operator, as the first step to enabling the establishment of a day-ahead market and its coupling, were breakthroughs.

The state-owned transmission system operator MEPSO is ownership unbundled and certified in accordance with the Secretariat's Opinion. The distribution system operator Elektrodistribucija is legally unbundled from supply and generation within the EVN Group. Accounting, legal and functional unbundling and rebranding were fully implemented in the course of 2019. The closed distribution system operator within the state-owned generation company ESM serves less than 80 customers and is thus exempt from legal unbundling. Pursuant to the Energy Law, Connection Network Codes are directly applicable in accordance with North Macedonia's obligations under the Energy Community and membership in ENTSO-E. The implementing rules of network operators have not been amended accordingly.

The wholesale electricity market is open and prices between market players are freely negotiated or set bilaterally or through public tenders. In September 2020, the Government designated a subsidiary of MEPSO, the National Electricity Market Operator (MEMO), to act as the nominated operator of the organised electricity market. After years of delays, balancing rules were implemented as of 1 January 2020, based on a competitive procedure for procurement of balancing services. MEPSO procures both balancing reserve and balancing energy in competitive procedure. The REMIT Regulation was not transposed, which requires amending the Energy Law.

Retail prices are deregulated, except for the universal supplier for which the regulator ERC sets the price. The universal service provider was selected in a tender procedure conducted by the Government in accordance with the Energy Law in May 2019. EVN Home is established as a separate legal entity entrusted with obligations to provide electricity supply as a universal service supplier and supplier of last resort. The price for the supplier of last resort is based on the reference market price, currently

Retail Market Opening



Source: Ministry of Economy

HUPX's day-ahead price. ERC also set up a web platform with a comparison tool to facilitate price comparison for households and small customers. Electricity supply rules, promulgated by ERC, ensure a guaranteed level of customer rights and special protection measures for vulnerable consumers. In addition, ERC adopted Rules for Complaints and Dispute Resolution in April 2020.

MEPSO allocates interconnection capacities with Greece through the regional capacity allocation platform SEE CAO. Other interconnection capacities are allocated bilaterally. Within the SMM block, MEPSO participates with the transmission system operators of Serbia and Montenegro in activities aiming at regional balancing but so far little has been achieved.

The Energy Law allows recognition of supply licenses issued abroad on the reciprocity principle in coordination with the regulatory authority. So far, this provision has not been exercised in practice. The market coupling initiative with the Bulgarian power exchange IBEX, underpinned by a memorandum signed in 2018, received new impetus after the designation of MEMO as the national organized market operator. According to the plan, market coupling is expected to be launched in Q3 2021.

North Macedonia
Gas

Gas Implementation

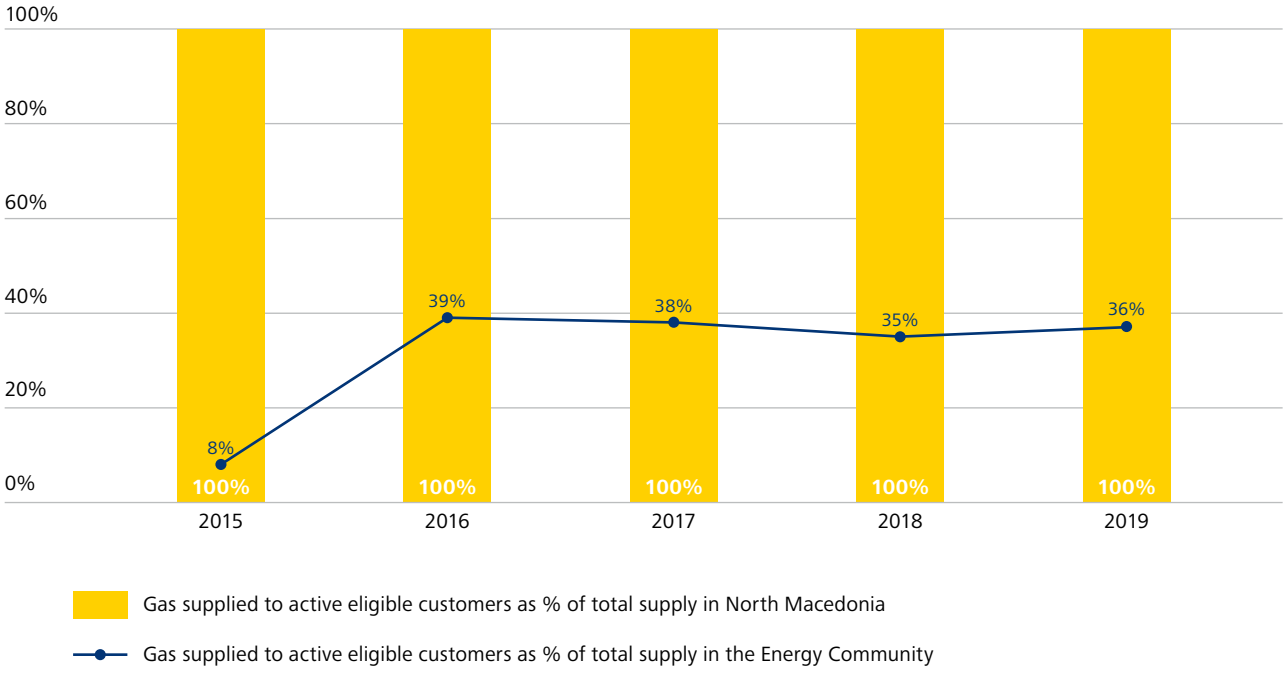
Gas Indicators	Transposition Assessement	Implementation Status	Descriptions
Unbundling		2%	The transmission system operator is not ownership unbundled as required by the Third Energy Package. Distribution companies have less than 100.000 customers and are thus exempted from the unbundling rules.
Access to the system		46%	An entry/exit transmission tariff methodology is in place, as well as provisions on capacity allocation. However, the allocation mechanisms have not been implemented in practice. The Energy Law allows for the applicability of mandatory EU Network Codes. However, this has still not been reflected in a revision of the national network code. The transmission system operator publishes only basic information, well below the scope required by Annex I of Regulation (EU) 715/2009.
Wholesale market		20%	Wholesale gas prices are fully deregulated, but not reported as required by REMIT. The market remains illiquid, without a virtual trading point. All contracts are concluded bilaterally, on a monthly and yearly basis.
Retail market		85%	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. The Government measures on vulnerable customers improved in the course of the latest reporting period.
Interconnectivity		42%	Security of supply provisions are in line with Directive 2004/67/EC and comply with some provisions of non-mandatory Regulation (EU) 994/2010. The obligation to submit the Security of Supply Statement to the Secretariat was fulfilled, even beyond the requirements of the acquis. With respect to cooperation mechanisms for interconnections, the existing technical agreement for the interconnector with Bulgaria and a template for future memoranda of understanding still have to be harmonised with the Network Code on Interoperability and Data Exchange.

Implementation of the gas acquis has unfortunately slowed down during this reporting period. The main pending issue continues to be setting up and certifying an unbundled transmission system operator, which will unlock progress on other pending issues, such as the proper implementation of the EU Network Codes, including on interconnectivity and cooperation with neighbouring transmission system operators.

A programme for the protection of vulnerable energy customers, adopted by the Government in January 2020, increased overall customer protection at the retail level.

The company Nacionalni Energetski Resursi continues to make progress in constructing new transmission infrastructure, including in coordination with the Greek transmission system

Retail Market Opening



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

operator. However, the effects of this development are still not reflected by higher transmission or consumption rates as the newly built pipelines have not been connected to the existing network.

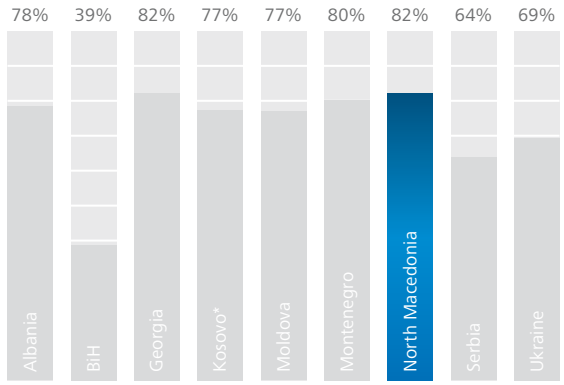
Despite the announced commitment to solve the long pending dispute between the State and the private supplier Makpetrol, another year has passed without implementing the settlement mediated by the Secretariat's Dispute Resolution and Negotiation Centre, a precondition for tackling the highest priority in the country's gas sector: unbundling the gas transmission system operator. Not having a properly unbundled transmission system operator, creates an obstacle for the new interconnector with Greece and negatively effects capacity allocation, balancing and interoperability in compliance with the gas Network Codes.

The wholesale market is deregulated. However, REMIT is neither transposed nor implemented. In the absence of a virtual trading point, gas trade is based solely on bilateral contracts. For supply there is only one source, Russia's Gazprom. However, there is no longer a monopoly when it comes to gas imports as a few companies, mainly big consumers, have started buying gas for their own needs from suppliers other than the incumbent Makpetrol.

As for many years, the first priority for North Macedonia remains implementing transmission system operator unbundling. This is the only way the country can enable further implementation of the acquis and much needed development of its gas infrastructure.

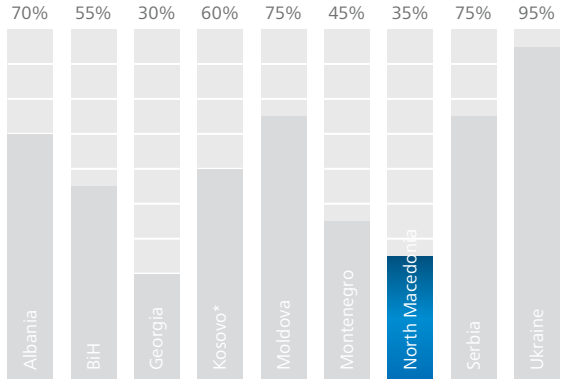
North Macedonia
National Authorities

Regulatory Authority



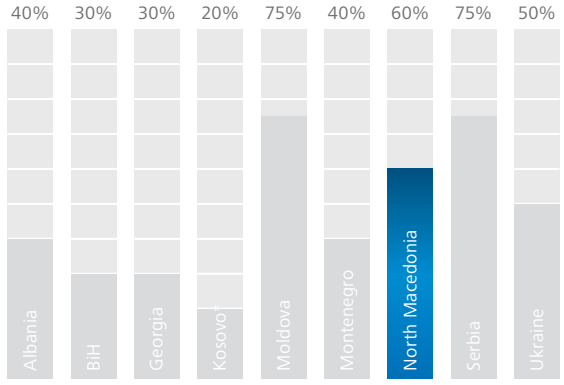
The Energy Regulatory Commission (ERC) continued to demonstrate a high commitment to energy reforms and regulatory independence. The regulator has been exposed to challenges of its independence in the setting of prices for the universal electricity supplier. The need for approval of ERC's annual employment plan and the requirement to follow cumbersome selection procedures remain detrimental to attracting human resources. Electricity and gas Network Codes are directly applicable based on national legislation, their integration into national grid codes is however missing. Regulatory criteria based on which derogations from the Network Code Regulations can be granted and the REMIT Regulation are not yet transposed due to lack of competences. ERC's chairman currently assumes the position of the 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 sectors.

State Aid Authority



In the reporting period, the Commission for Protection of Competition (CPC) adopted two decisions regarding State aid to electricity generation and the heat company TE-TO AD Skopje. The CPC approved secondary legislation on renewable energy support. By approving the support scheme under the condition of compliance with the State aid acquis, the CPC did not effectively enforce the State aid prohibition, but deferred the assessment of compliance of the support scheme to its possibility of ex-post monitoring and compliance assessment including the possibility of recovery to the State aid provider.

North Macedonia
Oil

Oil Implementation

Oil Indicators	Transposition Assessement	Implementation Status	Descriptions
Stockholding obligation		40%	The entry into force of the Law on Compulsory Oil Reserves is pending since 2015. In practice, oil stocks corresponded to 80 days of average daily consumption in September 2020, an increase from September 2019 when stocks stood at 74 days.
Emergency procedures		0%	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 prepared but is not yet approved by the Government.
Fuel specifications of petrol, diesel and gas oil for non-road mobile machinery (NRMM)		80%	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		80%	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 new Law on Compulsory Oil Reserves, adopted in October 2014, was supposed to be effective as of 1 January 2015. However, its application was postponed by Parliament several times. According to the latest amendment, the Law is envisaged to enter into force by 1 January 2021.

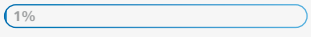
There was slight progress in oil stockpiling during the reporting period but not on the approval of secondary legislation, which is now expected by the end of 2020. The oil stocks corresponding to the average daily consumption increased by six days compared to the last reporting period.

North Macedonia's legal framework conforms to the Fuel Quality Directive to a large extent.

In accordance with the current Law on Energy, 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 Energy Law, which was adopted in 2018. The Rulebook's adoption is pending.

North Macedonia
Renewable Energy

Renewable Energy Implementation

Renewable Energy Indicators	Transposition Assessement	Implementation Status	Descriptions
National Renewable Energy Action Plan			North Macedonia submitted its NREAP, amendments as well as all three Progress Reports on implementation of the Renewable Energy Directive to the Secretariat. With 18,12% of renewable energy sources, North Macedonia is far from its indicative trajectory of 22,3% in 2018.
Quality of support schemes			According to the Energy Law, two types of support measures are applied: the administratively set feed-in tariff (FiT) and the feed-in premium (FiP) granted on a competitive basis. The first auctions under the FiP scheme were conducted in 2019, followed by signature of the first contracts in 2020. The market operator is obliged to take over electricity produced by the privileged producers under FiT support, whereas producers granted FiP sell their electricity in the market.
Grid integration			According to the Energy Law, the transmission and distribution system operators are obliged to ensure priority connection to the systems and priority in the dispatching of renewable energy, while the electricity market operator is obliged to compensate the costs for balancing and the necessary ancillary services.
Administrative procedures and guarantees of origin			Investor guides for various renewable energy technologies are published, while further simplification of administrative procedures is envisaged in the next amendments to the Energy Law. There is no designated administrative body. An electronic system for issuing, transfer and cancellation of guarantees of origin is not in place yet. A concept is under preparation.
Renewable energy in transport			Provisions related to the 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 remains negligible, reaching only 0,12% in 2018.

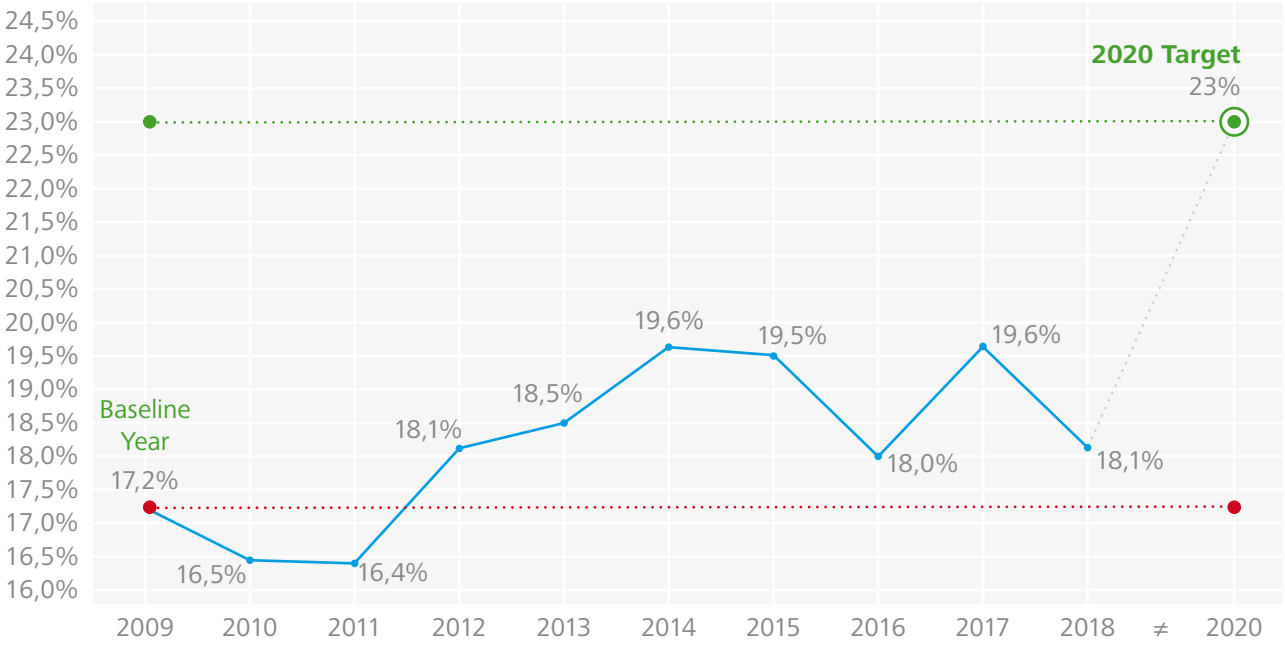
By signing agreements with producers awarded with a FiP via auctions, North Macedonia progressed in the implementation of the renewable energy acquis during the reporting period. Although the country overreached its sectorial target for the share of renewable energy in heating and cooling and almost reached its electricity target of 26,8%, 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.

The Energy Law adopted in 2018 implies that the energy agency is designated as the body responsible for the issue, transfer and cancellation of guarantees of origin. However, the energy agency has not adopted the required secondary act and it is yet to implement an electronic system compatible with the standardized European Energy Certificate System.

Self-consumption is enabled through the Rulebook on renewables adopted in 2019. Additional efforts are needed to achieve implementation in practice.

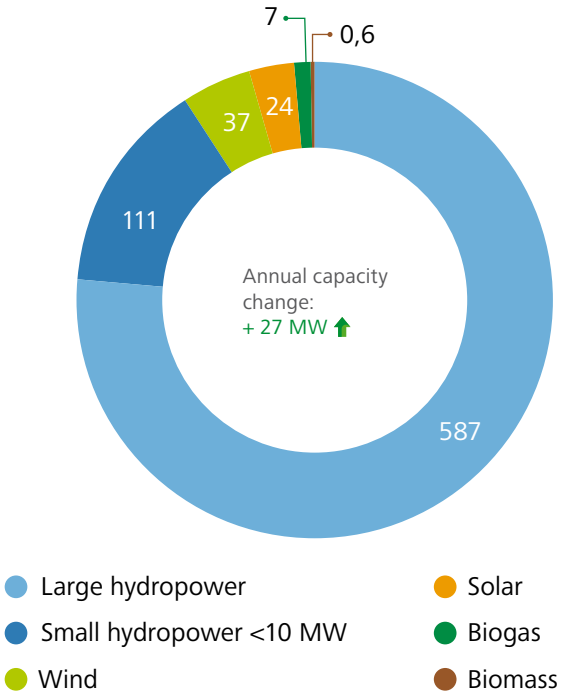
The priority for North Macedonia in the upcoming reporting period should be the transposition of provisions related to the sustainability of biofuels. The country should also implement an electronic system for guarantees of origin.

Shares of Energy from Renewable Sources



Source: EUROSTAT

Total Capacities of Renewable Energy 2019 (MW)



Source: Energy Regulatory Commission of the Republic of North Macedonia

The renewable energy portfolio of North Macedonia is mainly based on hydropower. In 2019, only 5,5 MW of solar PV were added, while the only wind farm remains Bogdanici (37 MW), which is in operation since 2014.

North Macedonia held two solar PV auctions (in 2019 and 2020) based on the bids for an additional fixed FiP on top of the price of each kWh sold on the wholesale electricity market. Auctions resulted in 11 agreements on the right to a FiP on state-owned land with a total installed capacity of 35 MW (average FiP 4 EUR/MWh) and 24 agreements for projects to be built on private land with total installed capacity of 21 MW (average FiP 11 EUR/MWh). Producers have three years to complete the projects to qualify for the premiums.

In February 2020, a public tender was launched for the construction of two photovoltaic units of up to 100 MW on top of a coal mine site in Oslomej, Kicevo without any support. This could be an example of how coal regions can be profitably transformed, by providing new employment opportunities for former coal workers and driving sustainable regional development. The result of the tender is still pending.

Total capacities of renewable energy (MW):

766

North Macedonia
Energy Efficiency

Energy Efficiency Implementation

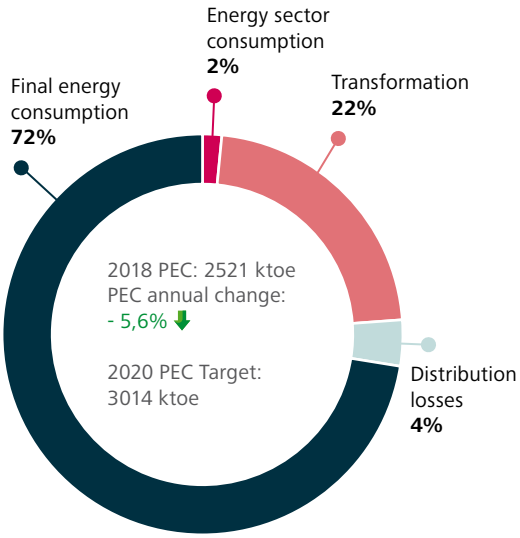
Energy Efficiency Indicators	Transposition Assessement	Implementation Status	Descriptions
Energy efficiency targets and policy measures			In February 2020, the Parliament adopted a comprehensive Law on Energy Efficiency, transposing, inter alia, the Energy Efficiency Directive and setting the specific targets required under Article 5 and 7 of the Directive. The 2020 target was set in the third Annual Progress Report. By-laws on the obligation scheme, buildings renovation strategy, energy audits and energy service contracts are being drafted.
Energy efficiency in buildings			The Energy Efficiency Law transposed the Energy Performance of Buildings Directive. Nevertheless, implementation is still lagging behind as key by-laws are either missing or are not updated. At the cut-off date of this report, North Macedonia was preparing rulebooks on energy performance of buildings, energy audit of buildings and an energy performance certificates verification system, in order to fully implement the Directive.
Energy efficiency financing			Before the Energy Efficiency Law was adopted, the energy services market was very incipient. In August 2020, the first five municipalities implemented energy savings performance contracts on street lighting. No energy efficiency fund exists yet, but it is planned with World Bank support.
Energy efficient products - labelling			Via the 2020 Energy Efficiency Law, the country transposed the 2018 Ministerial Council Decision on Regulation (EU) 2017/1369 on energy labelling repealing Directive 2010/30/EU and the Eco-Design Directive but not the five energy-related product regulations.
Efficiency in heating and cooling			The share of district heating in total heat supply in 2018 was 10% and entirely produced by gas, of which 56% in co-generation units. 32% of heating and cooling is 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 made significant progress with the adoption of the new Energy Efficiency Law that transposed the Energy Efficiency Directive, the Energy Performance of Buildings Directive and the Regulation on Labelling of Energy-related Products. This replaced the outdated 2015 legal provisions of the Energy Law that were not compliant with either the Energy Efficiency or the Energy Performance of Buildings Directives.

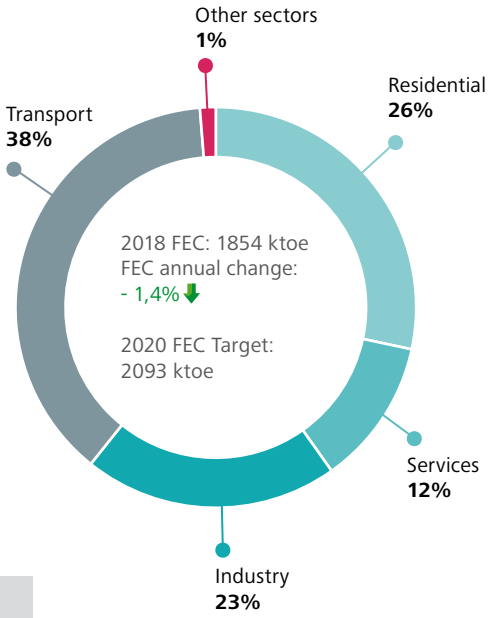
The lack of institutional capacity in the Ministry of Economy remains acute (not a single energy efficiency expert in the staff), but many donors are supporting the preparation of legal and regulatory acts. The preparation and implementation of the subsequent secondary legislation remains a big challenge despite the technical assistance available.

2018 Energy Efficiency Indicators and Trends

Primary Energy Consumption (PEC)



Final Energy Consumption (FEC)



Energy intensity,
2018 value and trends:
0,30 ktoe/mil EUR, - 9,0%

Source: EUROSTAT 2020 data and the 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 Assessement	Implementation Status	Descriptions
Environmental impact assessment (EIA) and strategic environmental assessment (SEA)			Legislation transposing the latest amendments (Directive 2014/52/EU) to the EIA Directive remains to be adopted. Administrative capacities should be improved in order to secure proper quality control of EIA reports and a systematic screening process for projects subject to Annex II of the Directive. Strategic environmental reports should be prepared as early as possible in the process of the preparation of the plan or programme (e.g. spatial planning plans). Securing early and effective opportunities for public participation remains a challenge.
Sulphur in fuels			The transposing 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			New legislation to ensure effective implementation of the NERP is foreseen but not adopted. For the largest combustion plant in the country (TPP Bitola), an integrated permit is in the final stage of adoption.
Nature protection			Two new protected areas (one national park category II and one protected landscape category V) are in the process of being designated. The designation file for international protection under the Ramsar Convention is prepared for one protected area (monument of nature category III). Effective measures to secure proper functioning and protection of the Emerald Network are still lacking.

The deadline for the transposition of amendments introduced by Directive 2014/52/EU to the provisions on environmental impact assessment was not met. Adoption of new or amending legislation should be supplemented with quality control of the environmental impact assessment studies. A systematic approach to the screening process of projects subject to Annex II of the EIA Directive (particularly for small hydropower projects) should be established and projects with a significant impact (taking into account their cumulative impact) should be properly assessed. Public participation opportunities for small hydropower projects must be improved.

With regard to strategic environmental assessment, the procedure was implemented for the National Energy Strategy, which applies until 2040. The SEA report was prepared at a very late stage of the process without proper public participation. More efforts should be devoted to the timely conduct of SEAs, ideally at the same time the preparation of the plan or programme starts. Opportunities for early and effective public participation have to be properly and systematically implemented.

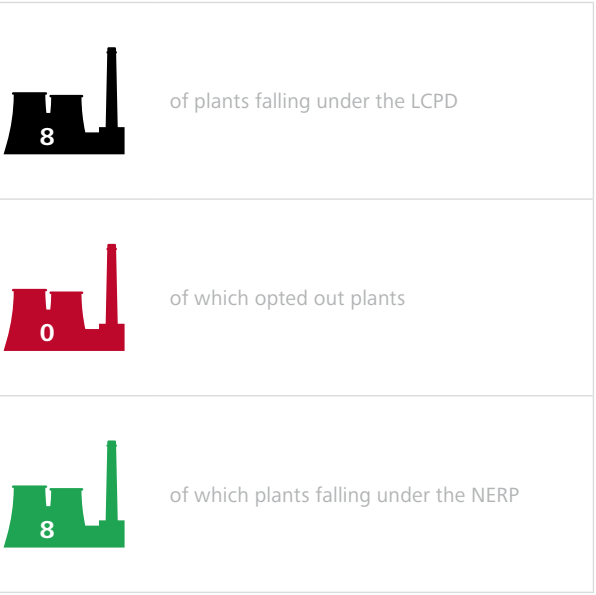
The Directive on the sulphur content of liquid fuels is transposed and properly implemented. The provisions on marine fuels do not apply.

Certain steps for implementing the National Emission Reduction Plan (NERP) have been taken, as the procedure for issuing the integrated permit for the thermal power plant Bitola is in its final stage. The adoption of legislation required for the effective implementation of the NERP is foreseen. The overdue integrated permit for the largest combustion plant in the country is drafted and in the final stage of adoption. North Macedonia complied with its emissions reporting obligations for the reporting year 2019. The current emissions from large combustion plants show

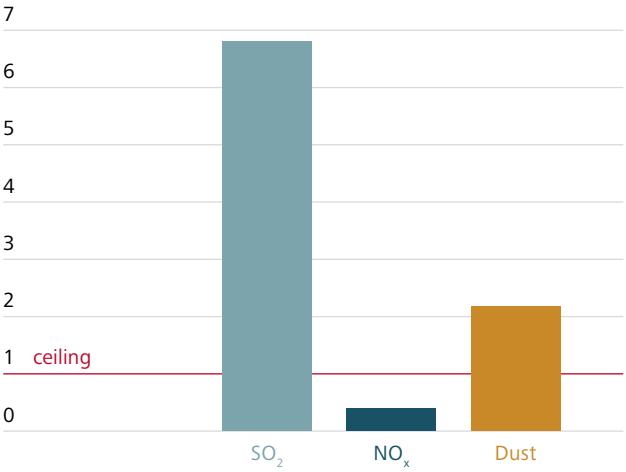
compliance with the ceiling for nitrogen oxides, while in the case of sulphur dioxide and dust there is significant non-compliance which needs to be addressed.

Two new protected areas are in the last stage of being designated as special protected areas – the National park "Shar planina" and Protected Landscape "Osogovo". The National park "Shar planina" will extend the nature protection of the Šar Mountains (already designated as a national park in Kosovo*) to Macedonian territory. A joint management action plan should be prepared by both Contracting Parties in order to secure proper and effective measures in line with the Wild Birds Directive. A designation file for the international protection of Lake Ohrid under the Ramsar Convention is also prepared. Ensuring proper protection of the Emerald Network and enforcement of the Law on nature protection is still a challenge. The Bern Convention of European Wildlife and Natural Habitats announced that due to the large number of complaints in North Macedonia, it will conduct an expert mission to the country in the upcoming year to assess the protection of the Emerald sites and potential conflicts with proposed and planned energy and other infrastructure projects.

Installations under the Large Combustion Plants Directive



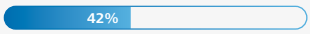
2019 emissions versus NERP ceilings



	SO_2	NO_x	Dust
2019 emissions by all plants under the LCPD	108,033	5,659	3,778
2019 emissions by plants under the NERP	108,033	5,659	3,778

Source: compiled by the Energy Community Secretariat

North Macedonia
Climate

Climate Indicators	Transposition Assessement	Implementation Status	Descriptions
National greenhouse gas emissions monitoring and reporting systems			Work on drafting a law on climate action has started during this reporting period. The law will set legal obligations for the preparation of a long-term strategy on climate action and the required institutionalisation of the national GHG emissions inventory system. Its adoption was envisaged for the end of 2020, but it is still pending.
National Energy and Climate Plans (NECPs)			North Macedonia was the first Contracting Party to submit its draft NECP with all the required chapters for review. After the formal review of the draft by the Secretariat, the final NECP is expected to be adopted in Q1 2021.

North Macedonia's National Determined Contribution (NDC) under the Paris Agreement envisages a 30% reduction of CO_2 emissions from fossil fuels by 2030 with existing policies and measures and up to a 36% reduction applying additional measures, both compared to the business-as-usual scenario. The fourth National Communication and third Biannual Update Report to the UNFCCC, covering emissions up to 2016, are under finalization. Based on the analysis from the update, the revision of the NDC has started.

North Macedonia's greenhouse gas (GHG) inventory requires institutionalisation, meaning that the competences and responsibilities of the relevant institutions need to be more clearly defined. A national inventory of anthropogenic GHG emissions by sources and sinks is mentioned in the 2005 Law on Environment. The adoption of a separate law on climate action is expected to fill the compliance gaps. Assigning the responsibility of GHG emissions data verification to the National Academy of Sciences and Arts (MANU) is a positive step.

Although there is no a specific reference to low-carbon strategies, the Law on Environment provides the legal basis for the preparation of the National Plan on Climate Change to be adopted by the Government. Work on a long-term strategy on climate action started in March 2019 and is envisaged to end in 2020. In view of the extensive use of fossil fuels and particularly the dominant share of domestic lignite for electricity production, there is significant potential in the country for policies and measures that lead to GHG emissions reduction.

There is currently no national legal basis for the National Energy and Climate Plan (NECP). However, this gap will be covered by an amendment to the Energy Law, which is currently in public consultation and expected to be adopted in 2020. Nonetheless, the national working groups have been established and were active throughout 2020. For the preparation of the analytical basis of the Macedonian NECP, the Government draws on the expertise of the MANU. For the reference and policy scenarios, MANU built on its previous modelling work for the Macedonian Energy Strategy 2040 and second Biannual Update Report. NECP scenarios were finalized in July 2020. Following close cooperation with the Secretariat throughout the process, North Macedonia was the first Contracting Party to submit its draft NECP to the Secretariat for review in July 2020. After the formal review of the draft, the final NECP will be adopted in Q1 2021.

North Macedonia
Infrastructure

Infrastructure Implementation

Infrastructure Indicators	Transposition Assessement	Implementation Status	Descriptions
National competent authority	~	30%	The Law on strategic investments, adopted on 16 January 2020, fails to fully transpose Regulation (EU) 347/2013. The Law defines the establishment of a Commission for strategic investments and an operational group, but it is not clear which, if any, of these bodies is the national competent authority. Both, the Commission and the operational group, have coordinating roles which are not defined by the Law.
Manual of procedures	~	0%	The manual of procedures has not been defined yet. It is not clear who and by whom the permit granting process would be facilitated, including preparing the manual of procedures, publishing it and updating it regularly.
National regulatory authority involvement	X	0%	The national regulatory authority did not publish the methodology and the relevant evaluation criteria for investments in electricity and gas infrastructure projects.

As North Macedonia did not transpose Regulation (EU) 347/2013 and failed to designate the national competent authority, it is still in breach of the infrastructure acquis.

To assist the country in the transposition of the Regulation, the Secretariat provided technical assistance to the Ministry of Economy in December 2017, and again during 2018. The Ministry should, based on the reports and recommendations, adopt a legal act transposing the Regulation.

Transposition would facilitate the realization of candidate PECI and PMI infrastructure projects, pending the 2020 selection process. Beside a PECI 2018 project (line 400 kV Bitola – Elbasan), North Macedonia develops important gas projects like interconnectors North Macedonia – Serbia, North Macedonia – Albania (suggested PECI 2020) and North Macedonia – Greece (suggested PMI 2020).

Proposed 2020 PECI/PMI projects: 3

Electricity: 0 | PECI: 0

PECI: 2 | PMI: 1 | Gas: 3

North Macedonia
Statistics

Statistics Implementation

Statistics Indicators	Transposition Assessement	Implementation Status	Descriptions
Annual statistics	✓	100%	The annual questionnaires for 2018 and the questionnaire on final energy consumption of households were transmitted to EUROSTAT.
Monthly statistics	✓	80%	All monthly data are transmitted in accordance with the acquis; only short-term monthly data are not provided on time.
Price statistics	✓	100%	Price statistics for electricity and natural gas for 2019 were compiled and transmitted in accordance with the acquis.

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

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 2018, as well as disaggregated data on residential consumption of energy for 2018. The annual questionnaires are communicated to EUROSTAT timely and in compliance with the acquis. Preliminary questionnaires for 2019 were prepared and transmitted on time. SSO also prepares and transmits to EUROSTAT the questionnaire on renewables shares. SSO has already established a quality system for producing quality 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, fully 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.

Prices of electricity charged to industrial end-users and households and prices of natural gas charged to industrial end-users are compiled and submitted to EUROSTAT, as well as the breakdown of prices per component, pursuant to the acquis.

North Macedonia has transposed and implemented the key requirements of the energy statistics acquis. Only the timeliness of monthly data has to be permanently improved.

North Macedonia
Cybersecurity

Cybersecurity Implementation

Cybersecurity indicators	Transposition Assessement	Implementation Status	Descriptions
Institutions and legislation			A cybersecurity strategy and action plan are in place but their implementation is delayed. The responsible computer incident response team (MKD-CIRT) is operational. The necessary legal framework is not in place, the draft law on cybersecurity is still to be adopted.
Requirements for operators and energy regulatory authority			There is no adopted regulation on risk assessment and requirements for critical infrastructure operators in energy. The draft act of the energy regulator ERC addressing cybersecurity-related obligations for public and private energy operators is yet to be adopted. The competences of ERC in cybersecurity should be legally strengthened.

North Macedonia's cybersecurity in the energy sector is based on the national Strategy for Cybersecurity 2018 - 2022, implemented by the national authority for information security - the Agency for Electronic Communications. Energy-specific policies are defined in the draft rules of the energy regulatory authority ERC and the energy operators. A compliant legal framework is missing.

The strategy developed by the Ministry of Information Society and Administration aims to provide a secure, confidential and resilient digital environment. The strategy is complemented by an action plan for implementation, which calls for transposition of Directive 2016/1148/EC (NIS Directive) and introduction of legal provisions on critical infrastructure in sectoral laws. In 2020, the energy regulatory authority ERC plans to adopt a specific cybersecurity strategy for 2023 for the electricity sector.

A law transposing the NIS Directive drafted in November 2019 awaits adoption. The preparation of general legislation on critical infrastructure has not started yet. A study foreseen in the action plan aiming to identify critical information infrastructure and important information systems was postponed.

The national computer incident response team MKD-CIRT is hosted by the Agency for Electronic Communications. It provides cybersecurity services, education and risk analysis for the public administration and the operators of critical infrastructure and large enterprises in all sectors of the economy, including energy. The establishment of a specific energy CIRT is foreseen in the draft law.

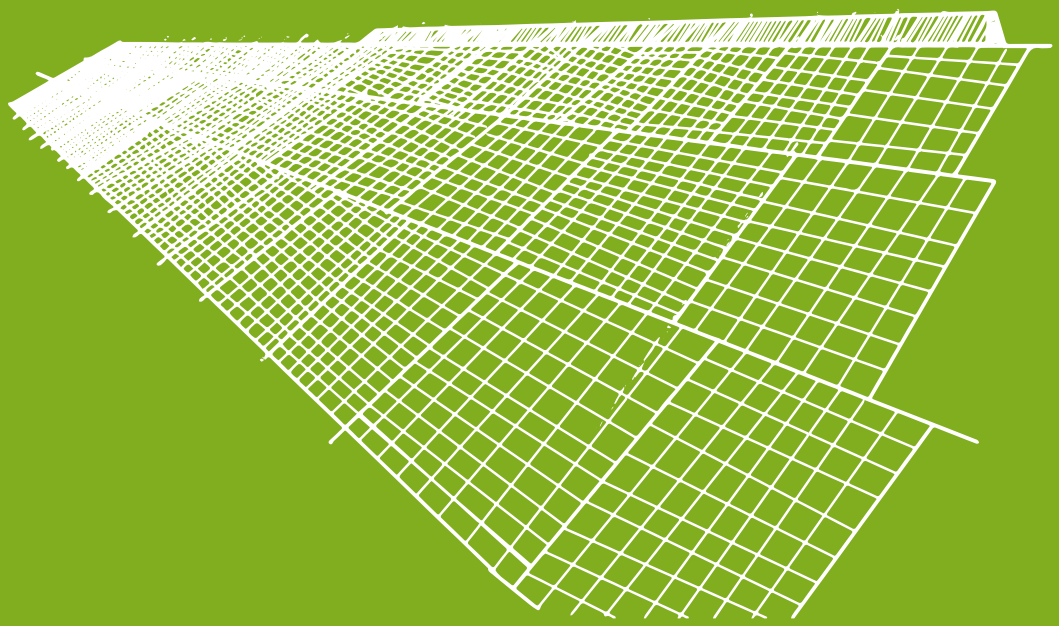
There is no legal basis or methodology for cybersecurity risk assessment or reporting obligations in energy. The national CIRT performs continuous assessment of the threats in general and communicates with stakeholders. The action plan calls for regular audits of risks in the information systems of critical infrastructures and preparedness of operators after 2020, but the methodology and the operational agent are not established yet. Minimum technical and organizational measures for information systems security in each sector, including energy, should be developed by 2021. The CIRT has established channels for voluntary cybersecurity notifications and incident reporting. A governmental decision of 2020 imposes mandatory participation in CIRT's activities on all public bodies and utilities.

There is no law enforcing cybersecurity requirements or reporting obligations for energy operators. A draft ERC strategy includes a list of general recommendations and requirements for all public and private energy operators. The list refers, inter alia, to the application of an ISO 27000 series of standards, cybersecurity governance, establishment of an information security officer, classification of risks and assets and application of energy-specific cybersecurity measures, as well as reporting obligations.

The Energy Law of 2018 defines the role of ERC in energy security, which is used as an implicit basis for engagement in cybersecurity. Full-scale enforcement and clearly defined cybersecurity powers of the energy regulator still need to be included in the Law.

12

Serbia



Serbia

Summary Implementation

Summary Indicators	Transposition Assessement	Implementation Status	Descriptions
Electricity	✓	65%	Implementation in the electricity sector of Serbia is well advanced.
Gas	✓	32%	Implementation in the gas sector of Serbia is still at an early stage.
Oil	✓	80%	Implementation in the oil sector of Serbia is well advanced.
Renewable Energy	~	58%	Implementation in the renewable energy sector of Serbia is moderately advanced.
Energy Efficiency	✓	66%	Implementation in the energy efficiency sector of Serbia is well advanced.
Environment	~	64%	Implementation in the environment sector of Serbia is well advanced.
Climate	~	24%	Implementation in the climate sector of Serbia is still at an early stage.
Infrastructure	~	37%	Implementation in the infrastructure sector of Serbia is still at an early stage.
Statistics	✓	92%	Implementation in the statistics sector of Serbia is almost completed.
Cybersecurity	~	62%	Implementation in the cybersecurity sector of Serbia is well advanced.

Overall number of cases: 4

ECS-13/17 Gas

ECS-1/20 Environment

Procedure by Article 91

Procedure by Article 92

ECS-09/13S Gas

ECS-10/17S Gas

Serbia

State of Energy Sector Reforms

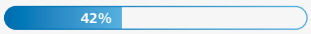
While Serbia has transposed the Third Energy Package in both the electricity and gas sectors, the state of implementation is lagging behind in several crucial aspects. As regards electricity wholesale market development, the country is in the lead among the Western Balkan Contracting Parties. Trading takes place on the bilateral and on the organised day-head market (operated by the power exchange SEEPEX). At the same time, regionally coordinated capacity allocation takes place on the interconnections with Bulgaria and Croatia only, while other interconnections are still bilaterally allocated. Moreover, competition in the balancing market still needs to be developed. Serbia also needs to complete the process of unbundling of electricity transmission and distribution system operators. Transposition of Connection Network Codes and REMIT is still pending. In the gas sector, Serbia is still far away from a true market. Neither of the two transmission system operators are unbundled and certified in line with the Third Energy Package, third-party access to the only entry point for gas is denied, and the degree of dominance of the domestic incumbent Srbijagas jointly with Gazprom over gas supplies is worrying. Serbia has yet to transpose the REMIT Regulation also for gas. Activities on the formation of emergency oil stocks continued.

In the area of climate and environment, Serbia has implemented support under a feed-in tariff regime and power-purchase agreements. The country recently agreed to develop a project on the development of market-based support schemes, which may be expected to be finalized in a year's time. National legislation on energy labelling, energy performance contracting and an energy service company (ESCO) project is in place, but secondary legislation on buildings acquis is still missing. The adoption and official notification of obligation schemes is still pending. Work on the National Energy and Climate Plan is yet to be commenced. For the emissions from large combustion plants, Serbia has adopted a National Emission Reduction Plan (instead of complying with the emission limit values on an individual basis following an infringement procedure). It is not implemented in practice (for sulphur dioxide and dust). Four large combustion plants are operating under the opt-out regime since 1 January 2018 and are supposed to end their operation during mid-2021 and early 2023. The country paid direct subsides worth some EUR 41 million to support coal-fired power generation in 2019.

Serbia's electricity production mostly relies on coal and, to a lesser extent, hydropower. The country is the first, and so far only, Contracting Party with an operational organized wholesale market. While Serbia produces oil and gas, the country remains highly dependent on imports, especially of gas and in particular from Russia. There is currently only one entry point for gas (from Hungary). The so-called TurkStream 2 project will also connect Serbia with Bulgaria, but breaches European rules. 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.

Serbia
Electricity

Electricity Implementation

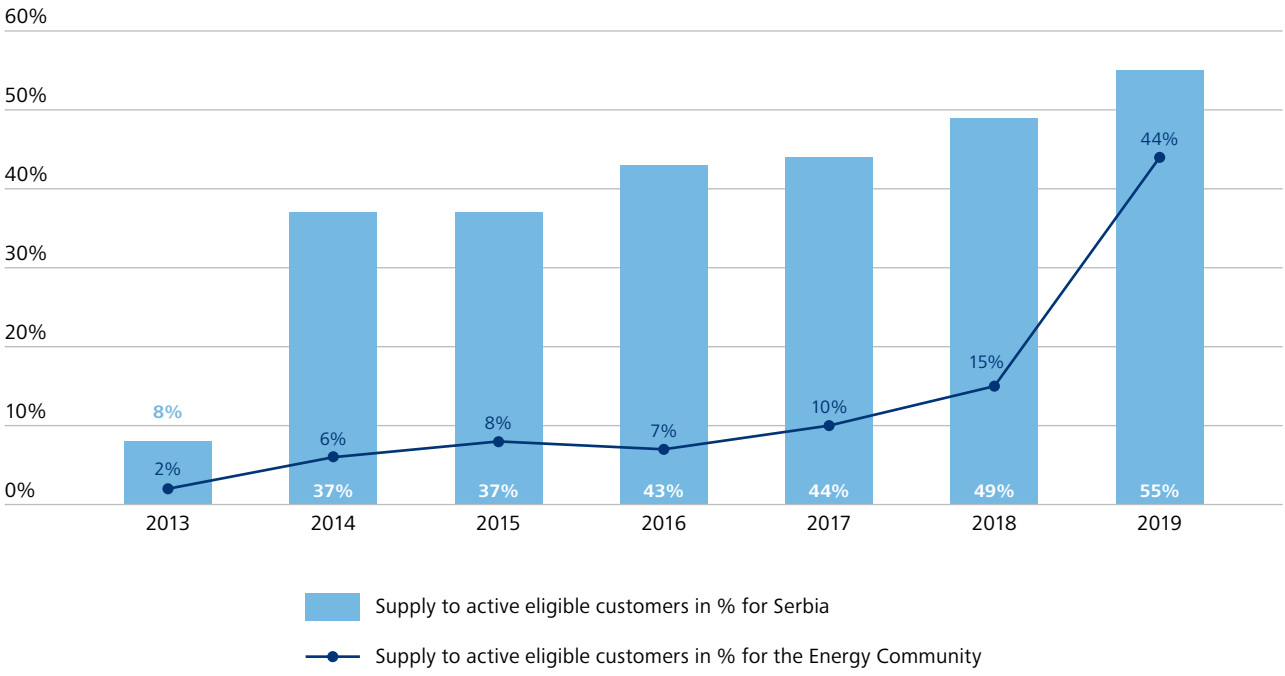
Electricity Indicators	Transposition Assessement	Implementation Status	Descriptions
Unbundling			The transmission system operator is not unbundled in compliance with the Electricity Directive. The distribution system operator is legally unbundled, but functional unbundling requires the Government's approval of the amendments to the funding act of the distribution system operator.
Access to the system			Third party access is ensured in a compliant manner. Transposition of Connection Network Codes and full implementation of the Transparency Regulation depend on amendments to the Energy Law.
Wholesale market			The wholesale market is formally deregulated. Competition on the day-ahead market is growing. The transmission system operator is procuring losses in the free market. The balancing energy market is operational, whereas prices of balancing reserves continue to be regulated. REMIT has not been transposed.
Retail market			The retail market is formally liberalised, but dominated by the incumbent supplier EPS, which is also the universal supplier of small customers and households. Prices of universal supply continue to be regulated at a level which does not incentivize the development of competition.
Regional integration			Regional cooperation is mainly limited to bilaterally coordinated capacity allocation and balancing exchanges. Capacities on interconnections with Bulgaria and Croatia are allocated through JAO, others only bilaterally. Market coupling initiatives are still in an early phase.

Electricity market reform in Serbia has entered a period of stagnation. There was no tangible progress towards completion of Third Energy Package implementation. The necessary amendments to the Energy Law to allow for transposition of the Connection Network Codes and REMIT were not adopted. As a result, the development of competition was very modest and the incumbent utility EPS maintained its dominance in the wholesale and retail market.

Ownership unbundling of the transmission system operator is still not completed in a compliant manner because the final decision-making for all energy activities, including transmission, still remains with the Government.

Independence of the legally unbundled distribution system operator, EPS Distribution, in terms of organisation and decision-making is also not yet ensured, as concluded in the company's 2017 compliance report. Rectifying the situation requires amendments to the statute of the distribution system operator. They are to be approved by the Government. Thus, the regulator has not issued a licence to the distribution system operator. The annual compliance report for 2019 was submitted to the regulator for approval.

Retail Market Opening



Source: Ministry of Mining and Energy

Transposition of the Network Codes and REMIT, which was due in 2018 and 2019 respectively, is still pending amendments to the Energy Law. The transmission system operator partially implemented the Connection Network Codes through changes of the grid code adopted in 2020. The transmission system operator is publishing data in line with the Rules on Publication of Key Market Data, which transposed Regulation (EU) 543/2013. However, the publication of generation data, which are considered as commercially sensitive information, requires amendments to the Energy Law and other relevant regulations.

The retail market remains highly concentrated and the dominance of the incumbent supplier has even increased in 2019. The regulated price of universal supply to small customers and households, which is significantly below the market price, is impeding the development of competition. Despite that for the third consecutive year the regulator recommends decreasing the gap between the regulated universal service price and market prices, no actions were taken.

The organised market, operated by the power exchange SEEPEX, continues to grow. However, coupling with neighbouring markets will be crucial for its further development. Market coupling projects with Montenegro, Albania and Italy (AIMS), and with Bulgaria and Croatia, are still in an early phase. The Energy Community Regulatory Board recommendation on the designation of a nominated electricity market operator in line with the CACM Regulation was not implemented.

Regionally coordinated allocation of interconnection capacities exists on the interconnectors with Bulgaria and Croatia only. They are performed through the Joint Auction Office (JAO) to which the transmission system operator became a shareholder. Joint auctions are performed on other interconnectors, also with Montenegro as of 2020. Cross-border balancing cooperation is still limited to bilateral exchanges with the transmission system operators of Bosnia and Herzegovina, Montenegro, Hungary and Romania. Regional coordination in terms of capacity calculation and allocation and day-ahead and balancing market integration should be stepped up in order to increase utilisation of cross-border capacities and competition in the electricity market. As a prerequisite, a legal framework for the implementation of Network Codes and guidelines should be established by amending the Energy Law.

Serbia
Gas

Gas Implementation

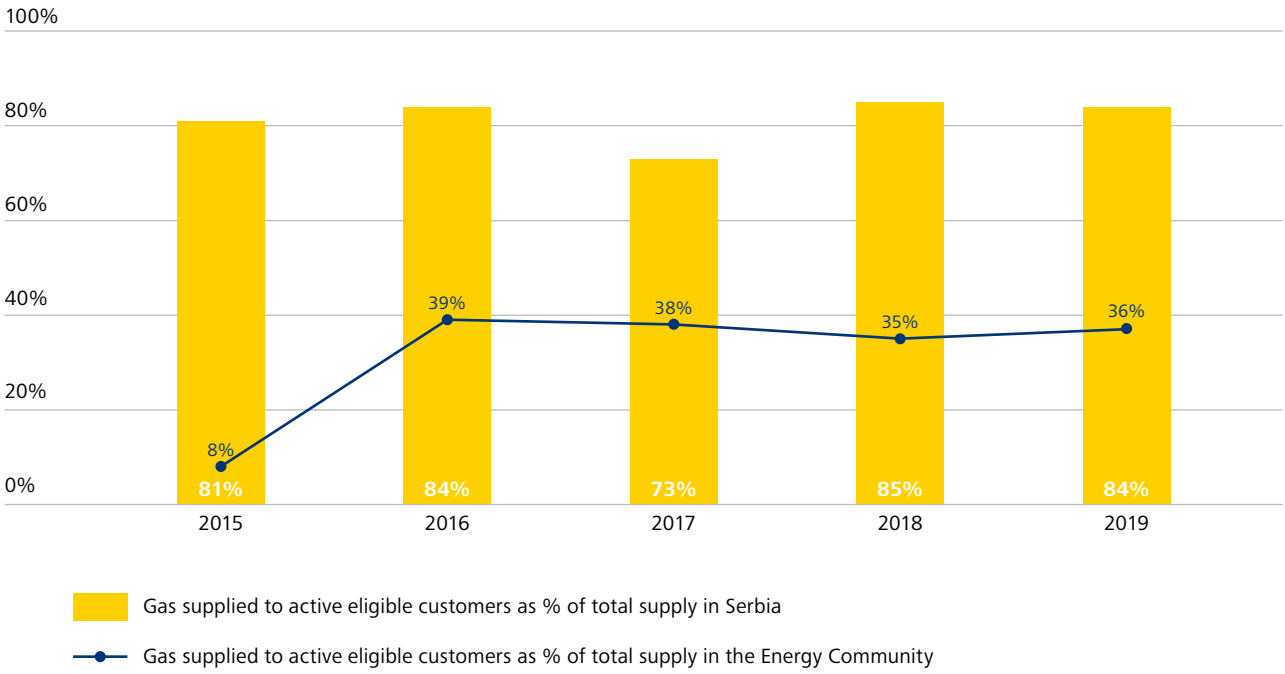
Gas Indicators	Transposition Assessement	Implementation Status	Descriptions
Unbundling	✓	5%	The daughter company of Srbijagas, Transportgas Srbija, is not yet unbundled and certified. Yugorosgaz Transport's certification was revoked and its unbundling is still pending. Gastrans, a project company for TurkStream II in Serbia, was exempted and certified by the regulator against the Secretariat's Opinion. None of the three transmission system operators have been unbundled in line with the Third Energy Package.
Access to the system	✓	26%	Energy Community gas Network Codes are not transposed. No transparent and non-discriminatory capacity allocation has been performed. Although an entry-exit transmission tariff methodology is in place, Srbijagas hoards its capacities at the only interconnection point (Horgos, Hungary). Gastrans was exempted from third party access without sufficient safeguards for competition.
Wholesale market	~	17%	A virtual trading point exists in theory but is not operational. The wholesale market is monopolized by Gazprom and Srbijagas. No liquidity measures were adopted.
Retail market	✓	51%	The vast majority of the market is supplied at non-regulated prices. All customers are eligible, yet the retail market is dominated by Srbijagas. Customer protection measures are implemented.
Interconnectivity	✓	100%	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.

Serbia's implementation record in this reporting period has not improved. Serbia transposed the majority of the Gas Directive and the Gas Regulation provisions in 2014 through an energy law. The implementation of the acquis, however, remains at low levels and is tainted with several breaches of the fundamental principles of the Third Energy Package, such as the lack of third party access. Moreover, the vertically integrated undertaking Srbijagas continues to be engaged in both supply and transmission activities and none of the three transmission operators have been unbundled in line with the Third Energy Package.

The majority of transmission system operation tasks were transferred from Srbijagas to its subsidiary Transportgas Srbija Ltd. in 2019. Nevertheless, its request for certification under the Third Energy Package was rightly rejected already twice by the national regulatory authority, AERS.

Unbundling of the transmission system operator Yugorosgaz Transport, a daughter company of Yugorosgaz whose shareholders are Gazprom and Srbijagas, has also not been achieved. The company continues to trade and supply gas in Serbia and imports gas. Although the certification of Yugorosgaz Transport was revoked in 2019, it continues to perform transmission system operation. AERS approved a ten-year network development plan (TYNDP) of Yugorosgaz Transport in August 2020.

Retail Market Opening



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

Gastrans, a project company owned by Gazprom and Srbijagas, was certified as an independent transmission operator in February 2020, under an exemption decision granted by AERS. This certification, however, did not take into account the Secretariat's Opinion issued in December 2019. Both the certification and the exemption decision are not compliant with the Gas Directive.

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.

Srbijagas adopted a grid code, which transposed the basic principles of capacity allocation, congestion management and balancing rules in 2013. However, the code's capacity allocation provisions are not applied at the only upstream interconnection point Horgos, which is reserved for itself, Gazprom Export and suppliers for Bosnia and Herzegovina. Srbijagas thus effectively prevents new entrants to the Serbian market. Gastrans' rules on the transmission network were adopted and approved by AERS in May 2020.

The gas Network Codes have not been transposed in Serbia. Thus, no capacity allocation is performed in line with the acquis. Regulated entry exit tariffs continue to apply. REMIT has not been transposed.

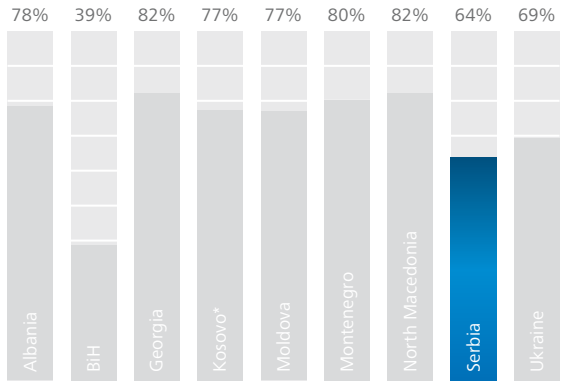
The wholesale market consists of bilateral contracts between traders and suppliers. No gas hub exists in Serbia. The majority of gas is sold to non-household customers under unregulated prices (84% of the market in 2019). In retail gas supply, Srbijagas is the dominant market player, accounting for some 81% of total natural gas sales in 2019.

Serbia has well established security of supply secondary legislation. The interconnection agreements with adjacent transmission system operators have been updated in line with the Network Code on Interoperability. The Agreements introduced an Operational Balancing Account (OBA) on the Hungarian-Serbian and the Serbian-Bosnian interconnection, upon the Secretariat's mediation.

In conclusion, the Serbian gas market, the second largest among Contracting Parties, remains entirely foreclosed based on breaches of European rules. Serbia must rectify its long-lasting breaches of the Energy Community gas acquis. Without an open gas market, Serbia will not be able to deliver decarbonisation of its energy cost-efficiently.

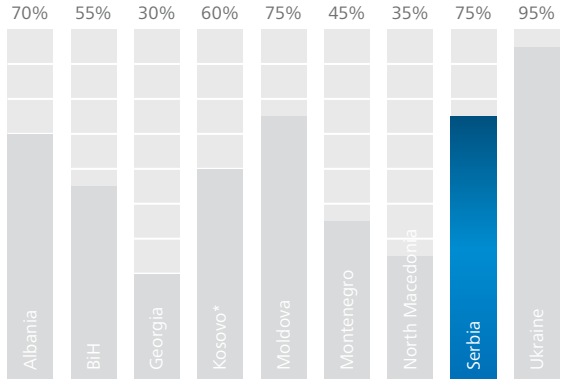
Serbia
National Authorities

Regulatory Authority



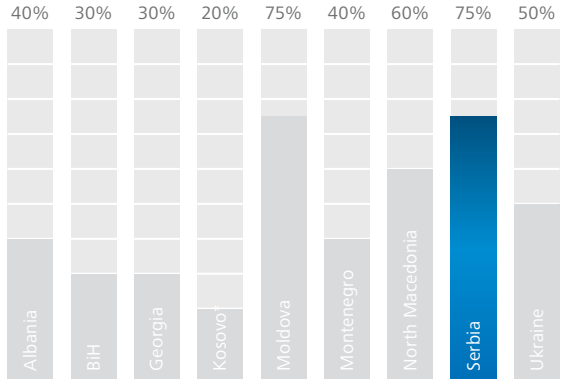
In the reporting period, long lasting shortcomings by the Energy Agency of the Republic of Serbia (AERS) related to the enforcement of unbundling and certification of network operators or third party gas access have not been overcome. The transposition of electricity and gas Network Codes including regulatory criteria for derogation from the electricity Network Codes, the REMIT Regulation as well as rules for designation of a Nominated Electricity Market Operator are still pending due to lack of competences. This inertia is of constant concern, and contrasts the high level of expert knowledge present in AERS.

Competition Authority



In the reporting period, the Commission for Protection of Competition (CPC) once again did not render any decisions regarding anti-competitive conduct in the energy sectors; in particular, there were no enforcement activities in the heavily concentrated electricity and gas sectors, except for the review of mergers. The CPC conducted a sector inquiry into the oil derivatives retail market in 2018 and undertook an assessment of the competitive conditions on this market in 2019. However, no anti-competitive conduct was identified.

State Aid Authority



A new Law on State Aid Control is applicable as of 1 January 2020. It 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 sectors in the reporting period. Specific temporary rules for assessing compliance of aid granted in the context of the Covid-19 pandemic were adopted. The Commission for State Aid Control reviewed and cleared the decree on incentive measures for electricity from renewable sources and high-efficiency electricity and heat production which needs to be brought in line with the compatibility criteria of the Guidelines on State aid for environmental protection and energy 2014 - 2020.

Serbia
Oil

Oil Implementation

Oil Indicators	Transposition Assessement	Implementation Status	Descriptions
Stockholding obligation	✓	40%	The emergency oil stocks obligation in Serbia, calculated based on inland consumption, covers an estimated number of 20 days. The Rulebook on Defining the Yearly Programme of Emergency Oil for 2020 was adopted during the reporting period. Public procurement for oil tickets was also accomplished.
Emergency procedures	✓	100%	The Emergency Response Plan was approved in 2019 and includes procedures and criteria for the identification of a supply disruption, the procedures for the normalization of supply to the Serbian market and appoints the authority and assigns the responsibility for eliminating supply disruptions. The programme includes actions in case of the adoption of international decisions to make the emergency stocks available to the market.
Fuel specifications of petrol, diesel and gas oil for non-road mobile machinery (NRMM)	✓	80%	The quality of liquid fuels of petroleum origin is regulated by Rulebooks on Technical and other Requirements for Liquid Fuels of Petroleum Origin. The environmental specifications for petrol and diesel are in conformity with European requirements. Gas oil used for NRMM is not compliant with the Fuel Quality Directive.
Monitoring compliance and reporting including the lay down the rules on penalties	✓	100%	As required by the Energy Law, a quality monitoring programme for petroleum products is in place. All penalty provisions are specified in the Law on Technical Requirements for Products and Conformity Assessments.

During the latest reporting period, activities on the formation of emergency oil stocks reserves continued. Two public procurements took place, one on the purchase of crude oil in the amount of 16 ktonnes and Euro Diesel in the amount of 6 ktonnes and one on the optional contract (ticket) for 50 ktonnes of petroleum product. The current estimated number of days of emergency reserves is 20 and calculated based on inland consumption.

Since the entry into effect of the Rulebook on Technical and other Requirements for Liquid Fuels of Petroleum Origin in 2012, significant progress in conformity of the quality of fuels with European requirements has been achieved. Trade of leaded petrol on the market is forbidden and diesel quality is very good. However, gas oil used for non-road mobile machinery (NRMM) is permitted to contain sulphur of maximum 1000 mg/kg. This is far from meeting the current EU standards, which allow the sale of gas oil only if the sulphur content does not exceed 10 mg/kg.

Serbia
Renewable Energy

Renewable Energy Implementation

Renewable Energy Indicators	Transposition Assessement	Implementation Status	Descriptions
National Renewable Energy Action Plan			Serbia submitted its NREAP as well as all three Progress Reports on implementation of the Renewables Directive to the Secretariat by the required deadlines. With 20,32% of renewables in its energy mix, Serbia is far from its indicative trajectory of 24,3% in 2018.
Quality of support schemes			At the moment, the only existing support mechanism for renewable energy consists of administratively set feed-in tariffs (FiT). With that mechanism, Serbia so far supported the construction of 511 MW of various renewable energy capacities, while an additional 300 MW is in the pipeline. A market-based support scheme is still not applied.
Grid integration			According to the Energy Law, priority dispatch of the electricity produced from renewable energy sources takes place. All producers under the FiT are exempted from balancing responsibility, which is not in line with the State Aid Guidelines. Rules and procedures for connection of renewable energy producers need to be improved. The legal and regulatory framework for self-consumption is missing.
Administrative procedures and guarantees of origin			Serbia had several simplification rounds for administrative procedures including a few updates of the investors' guide for renewable energy projects. However, licensing remains lengthy and a single administrative body is not established. Serbia designated a competent body, which established an electronic system for issuing, transfer and cancellation of guarantees of origin.
Renewable energy in transport			In December 2019, Serbia adopted the necessary secondary legislation on criteria for biofuels and bioliquids. The share of renewable energy sources in transport remains low (1,16% in 2018 while the target for 2020 is 10%).

With adoption of additional secondary legislation, Serbia advanced significantly in the transposition of the renewables acquis, while also increasing renewable energy capacities.

In December 2019, Serbia adopted three by-laws on biofuels, which defined the share of biofuels on the market, the sustainability criteria and other requirements. An assessment of its national biofuel production potential taking into account the sustainability criteria is currently performed, with a view to introducing a national verification scheme.

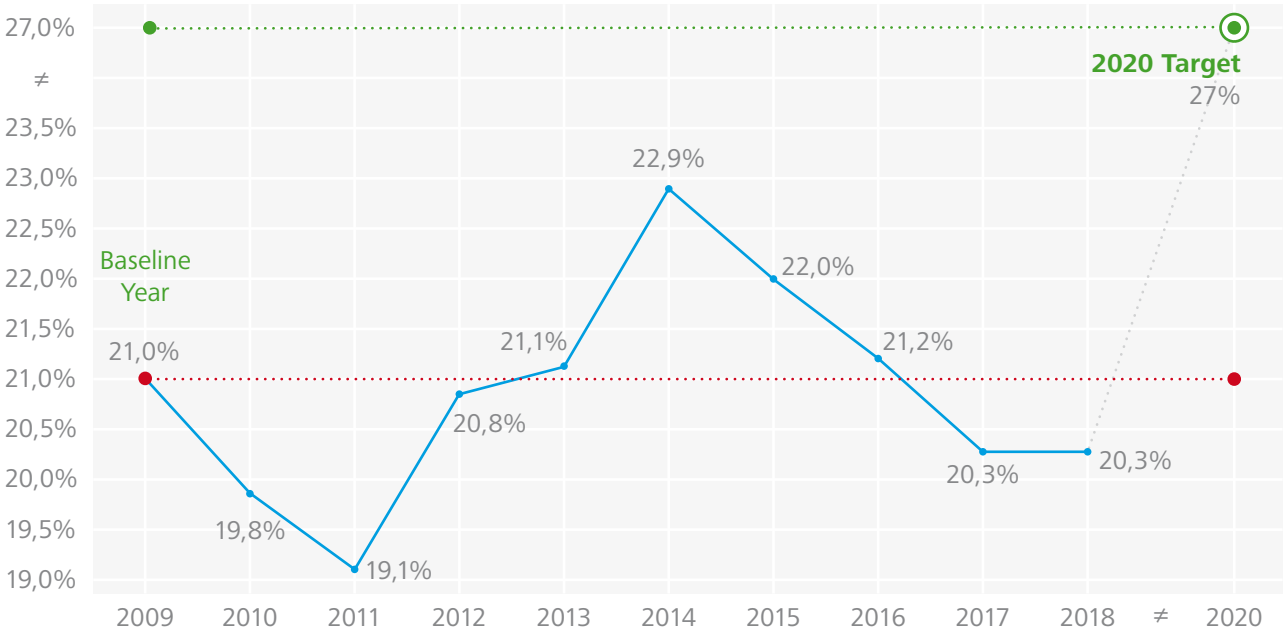
In March 2020, the Rulebook on the calculation of the share of renewable energy sources in gross final energy consumption was adopted.

In September 2019, the designated body Elektromreža Srbije (EMS) became a full member of the Association of Issuing Bodies (AIB). However, it has not yet been added to the hub to enable exchange of the guarantees of origin with other members of the AIB. In the period November 2019 - October 2020, Serbia issued 147.580 and canceled 147.660 guarantees of origin, publishing all transactions electronically on the dedicated webpage.

Serbia is yet to transition from administratively set feed-in tariffs, for which quotas have been fulfilled, to a market-based support scheme. A project on the possible models for new support schemes was recently initiated by the Ministry and is planned to be completed in 2021. Having in mind that Serbia is the only Contracting Party of the Energy Community with a functional day-ahead market, this could allow for an efficient implementation of a market-based support scheme and assure transparent pricing.

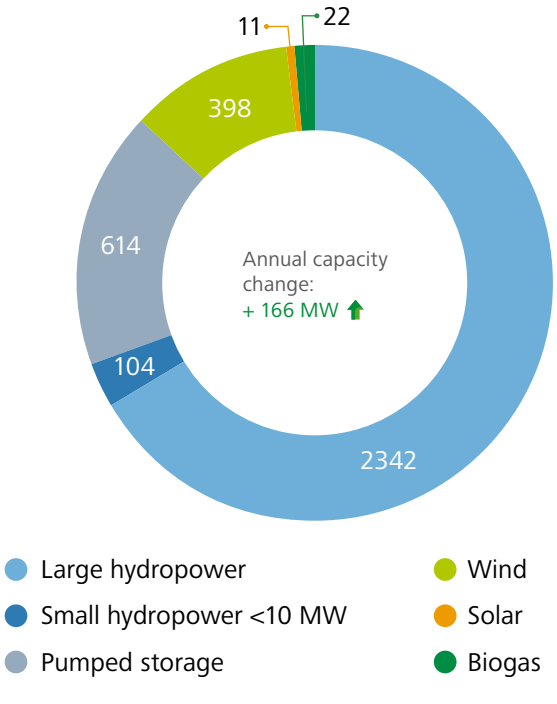
Adoption of the necessary legal and regulatory framework to implement renewables auctions in line with the State Aid Guidelines and the development of renewable self-consumption should be priorities for Serbia during the next reporting period. Moreover, administrative procedures for integration of renewables into the network should be streamlined and simplified by the establishment of a one-stop shop.

Shares of Energy from Renewable Sources



Source: EUROSTAT

Total Capacities of Renewable Energy 2019 (MW)



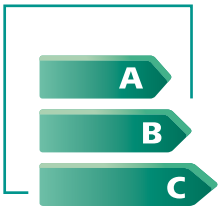
Source: Ministry of Mining and Energy

In September 2018, Serbia put in operation the biggest wind park in the region, Čibuk 1 (158 MW), reaching total capacities of this technology of almost 400 MW. The development of solar projects continues to stagnate due to the filling of modest quotas for supporting this technology.

Serbia remains far from reaching its target of 27% of renewable energy in gross final energy consumption in 2020, being not only well below the 2020 renewables target, but also below the share of renewable energy in gross final energy consumption in the baseline year 2009. Although the country is increasing its renewable energy capacities, this trend is countered by rising energy consumption. In terms of target achievement, Serbia is lagging behind in all the sectors: electricity, heating and cooling and transport.

Total capacities of renewable energy (MW):

3490



Serbia
Energy Efficiency

Energy Efficiency Implementation

Energy Efficiency Indicators	Transposition Assessement	Implementation Status	Descriptions
Energy efficiency targets and policy measures	✓	77%	Notification to the Secretariat on the implementation of Article 7 target for obligation schemes was fulfilled in January 2020. The new NEEAP is still under preparation. The reporting of the 2020 cap consumption target was included in the first Annual Progress Report under the Energy Efficiency Directive. The Article 5 renovation target was officially adopted in August 2018.
Energy efficiency in buildings	~	60%	While the drafting of the long-term building renovation strategy is ongoing, little progress has been achieved regarding the adoption of an updated regulation implementing Directive 2010/31/EU.
Energy efficiency financing	✓	82%	For 2020, EUR 4,25 mil. have been dedicated for energy efficiency projects to be financed by the state budgetary fund for energy efficiency. An enabling legal framework for energy performance contracting is in place and Energy Service Company (ESCO) projects in buildings, public lighting and district heating are being implemented.
Energy efficient products - labelling	✓	79%	The old Framework Directive 2010/30/EU and ten out of the eleven delegated acts are being implemented. Transposition of the new Framework Regulation 2017/1369 and adoption of four new delegated regulations from 2018 are pending.
Efficiency in heating and cooling	~	32%	With 58 operational systems, Serbia has the largest district heating system in the Western Balkans, but renewables make up only 1% of the input fuel. Modernization projects to increase the use of renewables are being implemented. Fifteen district heating companies introduced billing based on the consumption 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.

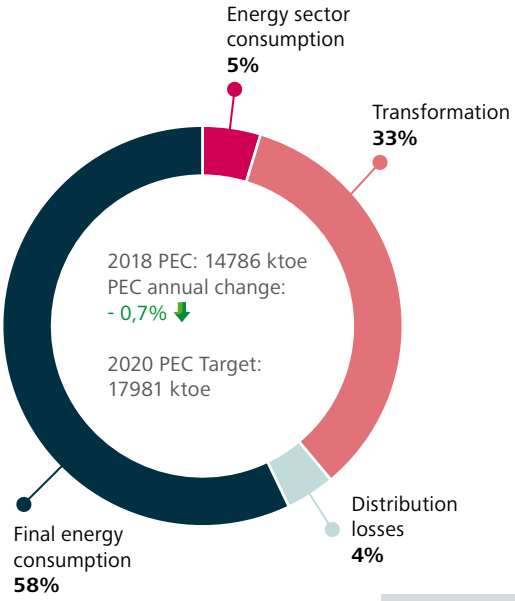
Serbia has achieved limited progress, focused mostly on drafting of national energy efficiency legislation, improvement in energy efficiency financing and reporting on implementation of the obligation scheme under Article 7 of the Energy Efficiency Directive. The fourth Annual Progress Report required by the Directive was submitted in September 2020.

The priority for Serbia in the forthcoming period remains the full transposition of the Energy Efficiency Directive through revision of the existing Law on Efficient Use of Energy and adoption of the draft National Energy Efficiency Plan.

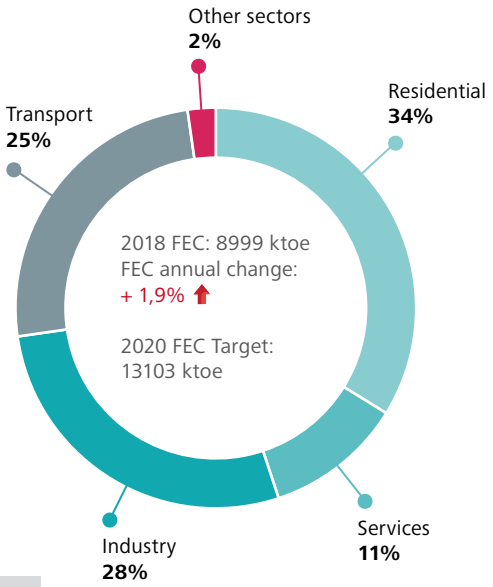
The second priority should be the adoption of the updated regulation for implementation of the Energy Performance of Buildings Directive and the remaining delegated regulation for energy labelling of energy-related products, in accordance with the Ministerial Council Decisions of November 2018.

2018 Energy Efficiency Indicators and Trends

Primary Energy Consumption (PEC)



Final Energy Consumption (FEC)



Energy intensity,
2018 value and trends:
0,43 ktoe/mil EUR, - 5,53%

Source: EUROSTAT 2020 data and the 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 Assessement	Implementation Status	Descriptions
Environmental impact assessment (EIA) and strategic environmental assessment (SEA)			Amendments necessary to fully transpose the amendments introduced by Directive 2014/52/EU and the Strategic Environmental Assessment Directive are pending. Review of other relevant legislation is necessary in order to comply with the Environmental Impact Assessment (EIA) Directive. Administrative capacities should be improved to secure proper quality control of environmental reports and systematic screening of projects subject to Annex II of the EIA Directive. Ensuring effective public participation remains a challenge.
Sulphur in fuels			An unexpected revision of the transposing rulebook once again postponed the implementation date of the 1,00% requirement for heavy fuel oil to 1 January 2021, thereby extending the serious and persistent breach established by Ministerial Council Decision 2018/14/MC-EnC.
Large combustions plants and industrial emissions			The National Emission Reduction Plan is officially adopted, however, concerns regarding the monitoring of its implementation and securing enforcement of the plan remain. Serious steps, including a proper financial framework, need to be taken in order to secure aligning the emissions from large combustion plants with the ceiling for sulphur dioxide.
Nature protection			Protected areas are lacking effective protective measures and administrative capacity that can properly assess the impacts of energy projects on site. A dialogue should be established and managed when conflicts between planned hydropower projects and nature protection emerge.

Amendments to the existing legal framework to achieve full transposition of Directive 2014/52/EU and the Strategic Environmental Assessment (SEA) Directive have not been prepared yet, although planned by the Government since 2017. The Secretariat is in the process of assessing two complaints concerning the lack of transposition, proper implementation and systematic enforcement of the Environmental Impact Assessment (EIA) Directive. In the review process, other relevant legislation (e.g. the Law on Planning and Building) also needs to be assessed due to possible collision with the provisions of the EIA Directive. Concerning small hydropower development, the considerations published in the Policy Guidelines on the development of small hydropower projects should serve as support. With regard to the Strategic Environmental Assessment Directive, Serbia has to secure that a SEA for the delayed National Energy and Climate Plan is conducted in a compliant manner.

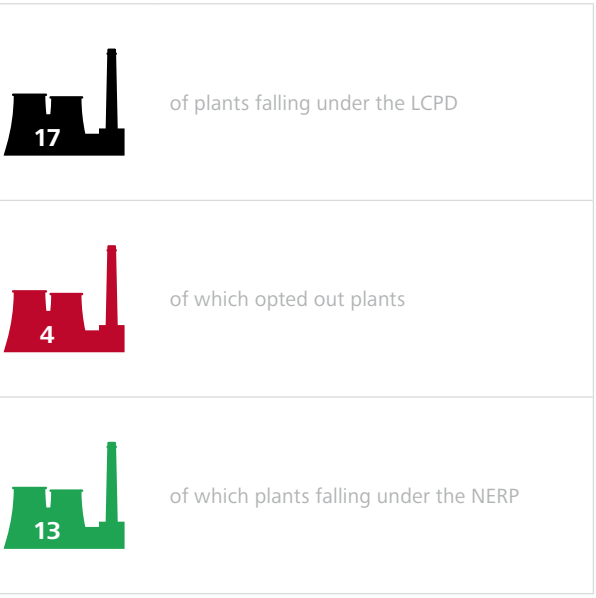
In relation to the already long overdue obligation of 1,00% sulphur content of heavy fuel oil, Serbia revised the Rulebook on technical and other requirements for liquid fuels, thereby postponing the deadline again until 1 January 2021. According to the revised rulebook, the sulphur content of heavy fuel oil may be a maximum of 3,00% until the completion of the desulphurization process in the refinery is completed. The Secretariat was not informed about and did not receive any explanation regarding the postponement, which is clearly in breach of Ministerial Council Decision 2018/14/MC-EnC and of serious concern.

On 30 January 2020, the Government of Serbia adopted the National Emission Reduction Plan (NERP). It is however not clear which administrative body will monitor the implementation and secure the enforcement of the plan. Serbia complied with its reporting obligations under the Large Combustion Plants Directive for the reporting year 2019. Four large combustion plants are operating under the opt-out regime in Serbia. Based on their current load factor, three out of the four opted-out plants are

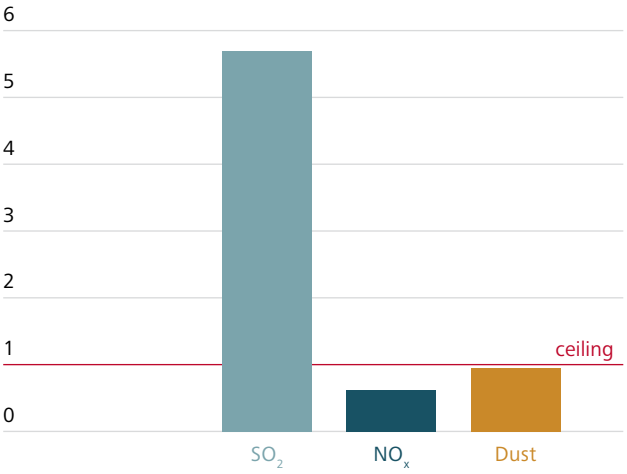
expected to reach the limit earlier than the end of 2023, the final date of operation for opted-out plants. In the case of plants under the NERP, the ceilings for sulphur dioxide are not complied with. Serbia also provided emission scenarios taking into account ongoing investments, which however do not show a clear trend towards compliance in the coming years. This makes the need to secure sufficient financing for proper implementation of the NERP even more pressing.

Management plans and management entities with sufficient capacity to secure enforcement of effective measures against the use of prohibited means and methods of killing, capture and other forms of exploitation of protected species are still lacking. Serious efforts should be made for proper protection and management of the nature park "Stara Planina", a biodiversity hotspot which is also a category I protected area. Administrative capacities must be improved and adequate financial support must be allocated (on national and local level) in order to properly assess the impact of planned hydropower projects early in the decision-making process. Dialogue with the local communities and the civil society sector has to be ensured whenever conflict between planned energy projects (with particular regard to foreseen hydropower projects) and nature protection goals emerges.

Installations under the Large Combustion Plants Directive



2019 emissions versus NERP ceilings



	SO_2	NO_x	Dust
2019 emissions by all plants under the LCPD	328,924	37,331	9,341
2019 emissions by plants under the NERP	310,412	34,233	6,047

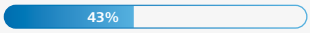
Source: compiled by the Energy Community Secretariat

Amount of operational hours used from opt-out period

Termoelektrana Kolubara A3 (boilers 3, 4, 5)	Expected expiry of opt-out period	August 2021
	Remaining hours	8.964
	Operating hours consumed in 2018 and 2019	11.036
Termoelektrana Morava	Expected expiry of opt-out period:*	June 2022
	Remaining hours	11.026
	Operating hours consumed in 2018 and 2019	8.974
Termoelektrana Kolubara A3 (boiler 1)	Expected expiry of opt-out period	August 2022
	Remaining hours	11.416
	Operating hours consumed in 2018 and 2019	8.584
Termoelektrana Kolubara A5	Expected expiry of opt-out period	December 2023
	Remaining hours	14.812
	Operating hours consumed in 2018 and 2019	5.188

*Calculations for the expected expiry of the opt-out period are based on 2018 and 2019 average load factor.
Source: compiled by the Energy Community Secretariat

Serbia
Climate

Climate Indicators	Transposition Assessement	Implementation Status	Descriptions
National greenhouse gas emissions monitoring and reporting systems			The draft Climate Change Law is foreseen to be adopted by the end of 2020, it is in line with the Monitoring Mechanism Regulation, as it contains specific provisions on setting up a greenhouse gas (GHG) emission inventory, low carbon development strategies as well as policies, measures and GHG projections.
National Energy and Climate Plans (NECPs)			Serbia has not set up a national working group to prepare the NECPs. Drafting and analytical work on the NECPs is yet to be launched. Serbia will prepare the analytical basis and the NECP through the IPA "Further Development of Energy Planning Capacity Project (follow-up to IPA 2013)" to be started in the forthcoming period.

Serbia is currently preparing an update of its Nationally Determined Contribution (NDC) under the Paris Agreement, the second Biennial Update Report and the third National Communication. In its first NDC, the country made a pledge to reduce greenhouse gas (GHG) emissions by 9,8% by 2030 compared to 1990 levels.

The adoption of the Law on Climate Change, envisaged for 2019, was postponed until the forthcoming period. The Law will cover provisions on establishing an MRV framework, a GHG emission inventory system, mainstreaming of climate policies, i.e. low carbon development strategies into the relevant institutional and legal framework, as well as procedural arrangements relevant for setting up a national system for policies, measures and projections. For the time being, the legal basis for work on climate issues and the creation of national GHG inventories remains the Law on Air Quality. The competent authority for data collection in Serbia is the Environmental Protection Agency. Although the institutional and procedural arrangements and administrative capacities of the relevant institutions were strengthened in recent years, there are currently no legal instruments to force operators refusing to share information on GHG emissions for the compilation of national inventories.

The draft Low Carbon Development Strategy with Action Plan (LCDSAP) passed public consultations (January 2020) and is undergoing inter-ministerial consultations before being submitted for adoption. The draft LCDSAP covers the period up to 2030 and a perspective until 2050. It aims to support Serbia in fulfilling its obligations under the Paris Agreement as well as to present options for alignment of the country's GHG emissions pathway to the EU's in an affordable and socially fair way.

The Government has prepared an analysis for the potential revision of the draft Law on Climate Change in accordance with Regulation (EU) 2018/1999 as well as a proposal for the division of institutional competences. A working group was established by which the revision of the NDC is carried out in line with the LCDSAP. While the preparation of the National Energy and Climate Plan (NECP) has not yet commenced, the process can build on the policy planning and analytical work undertaken under the LCDSAP and NDC update. Since Serbia has not officially set up a national working group to prepare the NECPs yet, the process should be launched and streamlined without any further delay.

Serbia
Infrastructure

Infrastructure Implementation

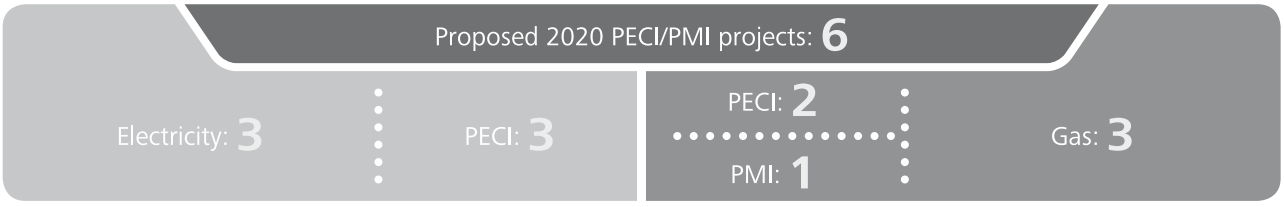
Infrastructure Indicators	Transposition Assessement	Implementation Status	Descriptions
National competent authority	✓	70%	The legislative framework defines the national competent authority as an inter-ministerial working group on strategic energy projects. This working group has not reported any progress on PECI/PMI projects to the Secretariat to date.
Manual of procedures	~	0%	Currently, there is no manual of procedures published by the national competent authority for the permitting process of Projects of Energy Community Interest or Projects of Mutual Interest.
National regulatory authority involvement	~	30%	The national regulatory authority drafted, but not yet adopted and published the methodology and criteria to be used to evaluate investment in electricity and gas projects and the higher risks incurred by them.

In February 2019, the Government of Serbia adopted the Decision on the establishment of a working group for strategic energy projects consisting of representatives of six Ministries (in charge of energy; planning and construction of buildings; agriculture; environmental protection; finance; and economy), the Energy Agency and project promoters. The national competent authority should start reporting on the projects to the PECI Groups and the Secretariat, as part of its obligations.

A unified procedure for the permit granting process already exists and is applied for all infrastructure projects by the Ministry of Construction, Transport and Infrastructure. There are defined deadlines to obtain all relevant documents from the other permit granting entities. The unified procedure is fully web based. However, it cannot be considered as the manual of procedures as defined by Regulation (EU) 347/2013 because it does not follow the structure defined in the Annex VI of the Regulation.

The national regulatory authority must adopt and publish the methodology and criteria to be used to evaluate investment in electricity and gas projects and the higher risks incurred by them without delay.

Full adoption of the Regulation may facilitate faster realisation of the electricity and gas infrastructure projects in Serbia like the Transbalkan corridor (PECI 2016, 2018, suggested 2020), gas interconnectors Bulgaria – Serbia and Serbia – North Macedonia (suggested PECI 2020), as well as the Serbia – Croatia gas interconnector; Phase I (suggested PMI 2020).



Serbia
Statistics

Statistics Implementation

Statistics Indicators	Transposition Assessement	Implementation Status	Descriptions
Annual statistics	✓	100%	The five annual questionnaires and the questionnaire on final energy consumption of households for 2018 were transmitted to EUROSTAT.
Monthly statistics	✓	60%	Monthly oil data and short-term monthly data are not transmitted to EUROSTAT.
Price statistics	✓	100%	Price statistics for electricity and natural gas for 2018 were compiled and transmitted in accordance with the acquis.

Serbia maintained a high level of compliance with the exception of monthly oil statistics, which remain critical.

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 2018 are compiled in the five questionnaires, transmitted on time and published by EUROSTAT. Disaggregated data on energy consumption of households are compiled and transmitted to EUROSTAT in due time. Preliminary data for 2019 are also compiled and transmitted to EUROSTAT. The questionnaire on the renewables share for 2018 was also 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. Monthly oil data are still not transmitted in line with the acquis. Short-term monthly collections on natural gas, oil and electricity are yet to be provided.

Half-yearly 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 short term monthly data, primarily on oil.

Serbia
Cybersecurity

Cybersecurity Implementation

Cybersecurity indicators	Transposition Assessement	Implementation Status	Descriptions
Institutions and legislation			The existing cybersecurity framework covers the energy sector, and the mechanism for designating critical infrastructures is established. Energy-specific rules and cross-border cooperation should be further developed. The Strategy for development of information security should be updated.
Requirements for operators and energy regulatory authority			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.

Cybersecurity in energy is effectively implemented through the concept of information and communication (ICT) systems of special importance. Rules, security measures and reporting obligations of operators are adopted and applied to energy. Energy-specific rules and cooperation mechanisms should still be further developed.

The Strategy for Development of Information Security for the period 2017 - 2020 sets the principles and defines objectives in security of the ICT systems of special importance and the citizens, fight against cybercrime, protection of information, and implementation of Directive 2016/1148/EC (NIS Directive) as the basis for international cooperation. The competent authority for its implementation is the Ministry of Trade, Tourism and Telecommunications. There are no energy-specific policies identified in the Strategy.

The Law on Information Security of 2016 sets the legal and institutional framework for cybersecurity and identifies the energy sector as an area with ICT systems of special importance. It obligates the operators to adopt rules on ICT system security with dedicated protection measures against security risks, supervision, and responsible liaison officer. The Law promotes cooperation of public and private sector, academic community and civil society through establishment of a body for coordination of information security.

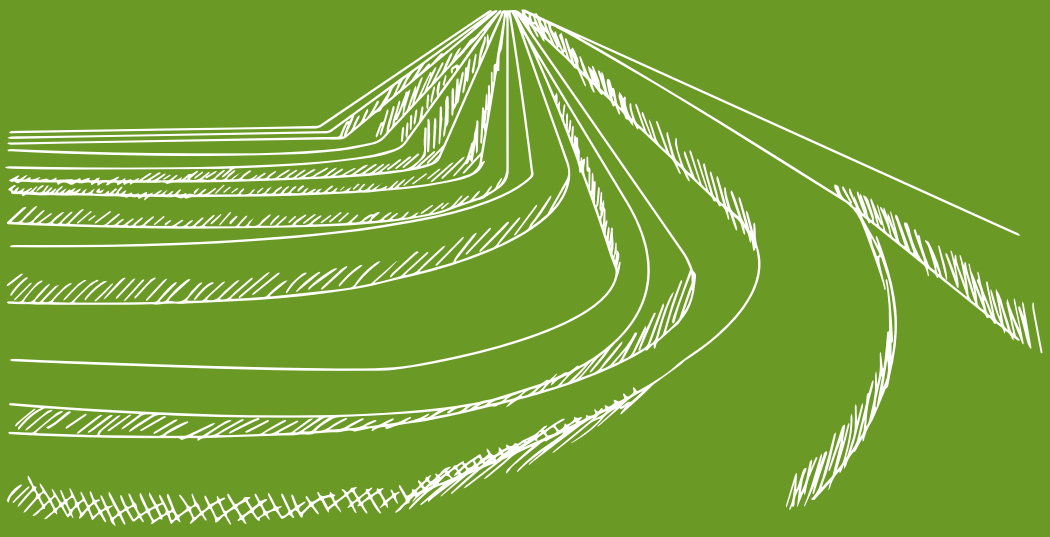
The Government Regulation of 2019 laying down a List of Activities in the fields in which activities of general interest are carried out and in which ICT systems of special importance are operated, includes energy activities. The Ministry of Trade, Tourism and Telecommunications (Ministry) keeps a registry of operators of ICT systems of special importance with registered operators in the energy sector and their liaison officers. The Ministry of Mining and Energy does not have any cybersecurity competences.

The national computer emergency response team (SRB-CERT), responsible for the energy sector, operates within the Regulatory Agency for Electronic Communications and Postal Services and the Ministry. It performs continuous risk assessment, shares security risk and incidents information and performs prevention and protection tasks.

Risk assessment is defined in the Law on Information Security and in the Regulation on More Detailed Contents of Enhancement on Security of ICT of Special Significance. Both acts apply to the energy sector, but lack a cross-border component. Security requirements for operators of ICT are provided in the same Law and enhanced by the Regulation 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 its protection level and qualification and responsibility of personnel. Reporting obligations are detailed in the Regulation on Incident Notification Procedure in ICT of Special Significance, which defines the criteria, content and reporting details for different types of incidents. There is a potential of further enhancement of the cybersecurity environment for the energy sector by developing specific rules and mechanisms for direct cooperation between the energy operators.

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

Ukraine



Ukraine

Summary Implementation

Summary Indicators	Transposition Assessement	Implementation Status	Descriptions
Electricity	✓	49%	Implementation in the electricity sector of Ukraine is moderately advanced.
Gas	✓	84%	~~Implementation in the electricity sector of Ukraine is almost completed.~~
Oil	~	35%	Implementation in the oil sector of Ukraine is still at an early stage.
Renewable Energy	~	52%	Implementation in the renewable energy sector of Ukraine is moderately advanced.
Energy Efficiency	✓	67%	Implementation in the energy efficiency sector of Ukraine is well advanced.
Environment	~	64%	Implementation in the environment sector of Ukraine is well advanced.
Climate	~	51%	Implementation in the climate sector of Ukraine is moderately advanced.
Infrastructure	✗	8%	Implementation in the infrastructure sector of Ukraine is yet to begin.
Statistics	~	81%	Implementation in the statistics sector of Ukraine is almost completed.
Cybersecurity	~	35%	Implementation in the cybersecurity sector of Ukraine is still at an early stage.

Overall number of cases: **4**

ECS-6/17 Electricity
ECS-8/14 State aid
ECS-4/18 Infrastructure

Procedure by Article **91**

Procedure by Article **92**

ECS-1/18S Energy efficiency

Ukraine
State of Energy Sector Reforms

In the electricity sector, the opening of the wholesale market was completed with the introduction of the ancillary services market in 2020 complementing the earlier launch of bilateral, day-ahead, intraday and balancing markets. However, the market still remains largely distorted by a range of regulatory measures, including price caps and public service obligations, which channel nuclear and hydropower electricity from state-owned generators to the universal service suppliers at prices that are detrimental to competition and safe operation of power plants alike. Households are still supplied at prices below cost level, which impedes retail market competition. The certification of the transmission system operator Ukrenergo, one of the last ones not yet unbundled in the Energy Community, already failed once and now requires legislative changes transposing the independent system operator model. Unbundling and certification are no mere formalisms – membership in ENTSO-E, in the pan-European ITC mechanism and further market integration depend on it.

In the gas sector, the adoption of the Gas Market Law and certification of the transmission system operator have been a major breakthrough in the history of Ukrainian energy sector reform, with a pan-European dimension. Yet the market is still dominated by the incumbent Naftogaz and regional utilities on the retail level. Moreover, the lack of financial stability of district heating remains a major challenge to the gas market. The amended Public Service Obligations Act abolished regulation of supply prices to households and left the gas supply under this scheme only to district heating. Naftogaz's right to stop the supply to district heating companies in case of debts triggered unauthorized offtakes and costs incurred by the transmission system operator (for balancing gas) as district heating companies will not be disconnected even if not paying. Progress has been made in the creation of a liquid gas exchange. A draft law on minimum stocks of crude oil and petroleum products is currently undergoing approval by the competent authorities.

In terms of environment and climate, Ukraine's biggest challenge remains the reduction of emissions from its outdated coal plants within the thresholds and timelines set by the Large Combustion Plants Directive. Ukraine has adopted a National Emission Reduction Plan (instead of complying with the emission limit values on an individual basis). It also opted out a total of 80 combustion plants. A modest carbon price is applied, and an emission trading scheme is under preparation. The country paid direct subsides worth some EUR 476 million to support coal-fired power generation in 2019. Energy efficiency suffers from the lack of a legal basis.

Renewable energy production has boomed recently, mainly because of a generous feed-in tariff system which expired at the end of 2019. The boom critically affects the liquidity of the state-owned offtaker (the Guaranteed Buyer). The mediation process between the renewable energy investors and the Ministry in charge of energy under the auspices of the Secretariat resulted in a memorandum and a law restructuring the existing power purchase agreements. Auctions still remain to be launched. Work on the National Energy and Climate Plan is likely to be postponed.

Ukraine is the largest Contracting Party of the Energy Community. Despite producing significant volumes of natural gas, the country is dependent on gas (and oil) imports and remains a major transit route for Russian gas exports towards Europe. The electricity mix comprises coal, natural gas, nuclear and large hydropower. The so-called Burshtyn island, a zone not connected to the main part of the Ukrainian electricity network, trades 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. The renewable energy sector has been rising fast in the last years due to increasing investment.

Ukraine
Electricity

Electricity Implementation

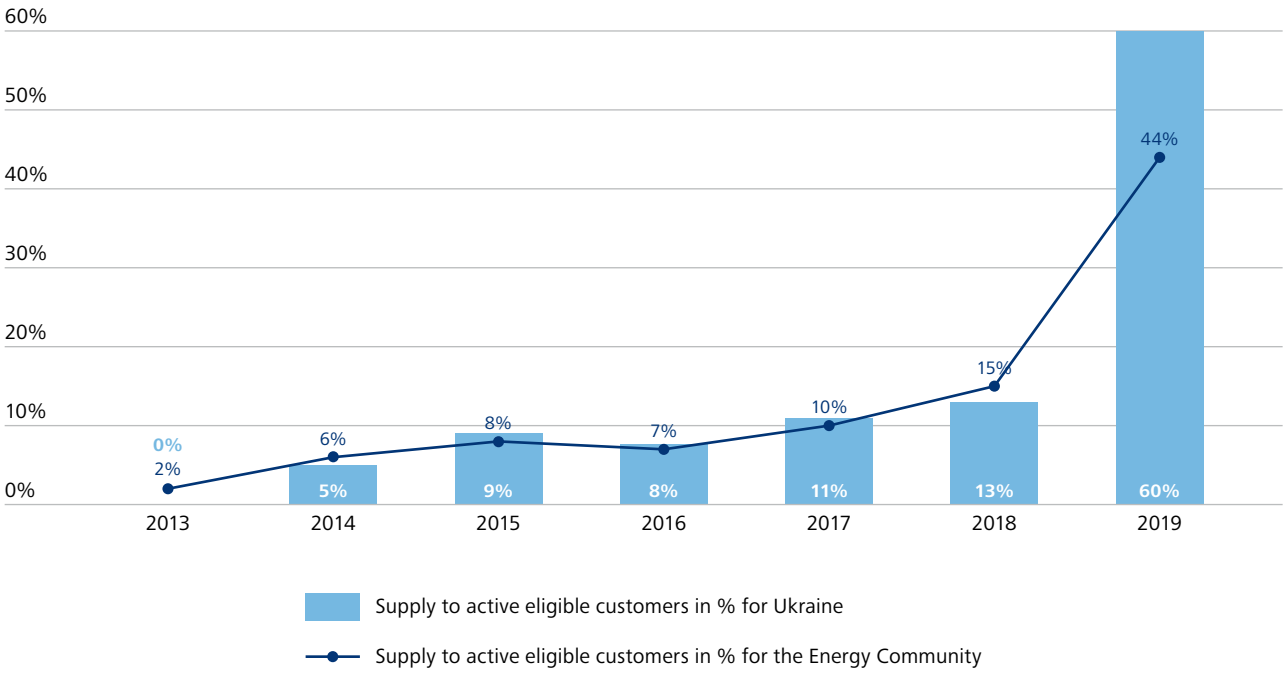
Electricity Indicators	Transposition Assessement	Implementation Status	Descriptions
Unbundling	✓	50%	The transmission system operator is not yet unbundled and certified, which requires changes to the Electricity Law. Distribution system operators are legally unbundled.
Access to the system	✓	58%	Network tariffs are public and applied also to generators. Access to cross-border capacities is allowed only to market participants registered in Ukraine. Implementation of the Transparency Regulation has started. The Connection Network Codes are transposed.
Wholesale market	~	63%	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 (Ukrenergo) and distribution system operators on the market. REMIT has not been transposed.
Retail market	✓	58%	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 (different tariffs for consumed volumes below and above 100kWh) which do not cover their costs. They are also obliged to offer electricity to other categories of customers with capacity up to 150 kW until 31 December 2020 at the day-head market price.
Regional integration	~	18%	Coordinated auctions for cross-border capacity allocation do not exist under the market rules and require changes to the Electricity Law. Arrangements for the settlement of unintended deviations were agreed between the transmission operators of Ukraine and Moldova.

The introduction of the ancillary services market in 2020 complements the earlier launched bilateral, day-ahead, intraday and balancing markets, which replaced the non-compliant single buyer model. However, there was no progress towards phasing out of excessive public service obligations. Together with price regulation, they continue keeping the market largely foreclosed in practice.

The regulator, NEURC, issued a preliminary decision certifying the transmission system operator, Ukrenergo, in October 2019 under the ownership model, despite that the separation of control is insufficient. In February 2020, the Secretariat issued a negative Opinion. The final decision by the regulator is still pending. In any event, amendments to primary legislation are needed to meet the requirements of ownership unbundling or the independent system operator model.

Legal unbundling of the distribution system operators from supply activities is in effect as of 1 January 2019. Compliance of the distribution system operators with the legal and functional unbundling requirements is still to be assessed by the Secretariat, upon which the open infringement case may be closed. The Law requires distribution system operators to be unbundled from production, supply and transmission also in terms of ownership.

Retail Market Opening



Source: Ministry of Energy and Coal Industry

Regulation (EU) 543/2013 was transposed by NEURC's resolution of June 2018. Ukrenergo has started publishing a limited number of data on the ENTSO-E Transparency Platform. Amendments to primary legislation required for the transposition of the REMIT Regulation were drafted but their adoption is pending.

Ukraine's retail electricity market is formally open since 1 January 2019. According to the Law, NEURC was required to phase out cross-subsidization between different categories of consumers before wholesale market opening on 1 July 2019. However, the prices for households remain the same (since 2017) and do not cover the costs of supply. The difference is covered by the guaranteed buyer (state-owned trader) through the public service obligation, and the state-owned generators Energoatom and Ukrhydroenergo are obliged to sell electricity at a low price determined by the non-compliant public service obligation act adopted by the Government. This impedes the development of competition and may affect safe operation of power plants, especially nuclear plants.

The latest amendments to the Electricity Market Law extended the scope of the customers entitled to universal service supplies at tariffs applied to households to apartment buildings, different types of cooperatives, legal persons - owners of properties used for compact settlement of internally displaced persons and religious organizations. The universal service supply and the supply of last resort are regulated by NEURC methodologies. The imbalance costs of the universal service supplier are not covered.

Until 1 January 2021, the incumbent regional suppliers will continue to be appointed to perform the functions of universal service suppliers. According to the provisions of the Electricity Market Law, the Government was to organise a tender procedure for universal supply before 1 July 2020 but with the amendments to the Law of 21 July 2020, the deadline was postponed until 1 July 2021.

The provisions of the Third Energy Package on vulnerable customer protection were transposed by the Electricity Market Law. The governmental act defining the vulnerability criteria is still missing.

According to the Electricity Market Law, Ukrenergo should have implemented coordinated auctions for cross-border capacity allocation not later than for the 2019 annual auctions. The rules for cross-border capacity allocation, adopted by NEURC in April 2020, fail to ensure coordinated auctions. The agreement in principle between the transmission operators of Ukraine and Moldova on the terms of financial settlement of unintended deviations is a positive development.

Ukraine
Gas

Gas Implementation

Gas Indicators	Transposition Assessement	Implementation Status	Descriptions
Unbundling	✓	90%	The transmission system operator is unbundled and certified in line with the Third Energy Package. The storage system operator and the distribution system operators are unbundled in legal, information and accounting terms.
Access to the system	✓	97%	Third party access to transmission, storage and distribution systems is in place, with some space for improvement in terms of tariff cost reflectivity. The gas Network Codes have been implemented to a great extent. The transmission operator started to offer capacity at international platforms. Congestion management and transparency, as required by Regulation (EC) 715/2009, are still not fully implemented.
Wholesale market	~	40%	The deregulated segment of the wholesale gas market increased significantly from 40% to 80% by releasing household customers from the Public Service Obligation regime. A virtual trading point is in operation, and trade takes place on the existing exchange with limited functionalities. The non-implementation of REMIT, due by 29 May 2020, decreases the overall implementation status.
Retail market	✓	81%	All customers are formally eligible. Household prices are deregulated since 1 August 2020 and only gas for district heating companies has remained under the scope of the Public Service Obligation Decree. Secondary acts, aimed to enable supplier switching, have been upgraded.
Interconnectivity	✓	98%	The transmission system is well interconnected with vast capacity on all country 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, which is not mandatory yet.

During the last reporting period, Ukraine made significant progress in several areas of the gas market: unbundling of the transmission system operator, deregulation of prices and implementation of the gas Network Codes.

Unbundling of the transmission system operator resulted in the successful certification of the operator under the independent system operator model in December 2019. This was in line with the Secretariat's Opinion and just in time for the entry into force of the new transit contract with Gazprom. This also enabled the new transmission system operator, GTSO, to sign new interconnection agreements with all neighbouring transmission system operators, thus increasing interoperability and enabling the smooth flow of gas along all routes. The interconnection agreements for the interconnection points at the Russian – Ukrainian border were signed as well as with the Slovakian transmission system operator for the interconnection point Velke Kapushany/ Uzhorod, which seemed impossible for five years.

Retail Market Opening

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

The newly unbundled transmission system operator progressed well in the implementation of the Capacity Allocation Mechanism Network Code, offering capacity at two regional capacity platforms, RBP and GSA, and establishing a virtual interconnection point at the borders with Hungary and Poland.

The import flow to Ukraine, which comes solely through its western borders, increased by 30% in comparison to the previous year, while 40% of imports came as virtual reverse flow or backhaul. By offering the short haul service as well as a favourable tax regime and storage tariffs, Ukraine managed to increase the use of its vast underground storage capacities by European traders.

Ukraine has continued to work towards a fully functional daily balancing system and gas exchange. Two memoranda of understanding, at political and technical levels, were signed by the Secretariat with the Ukrainian Energy Exchange, EBRD, the new transmission system operator GTSO, the energy regulator and the Ministry of Energy to establish the gas exchange in line with European energy market standards. The work on establishing the exchange will have to continue further, including legislative changes to enable the transmission system operator to purchase balancing services in a dynamic way.

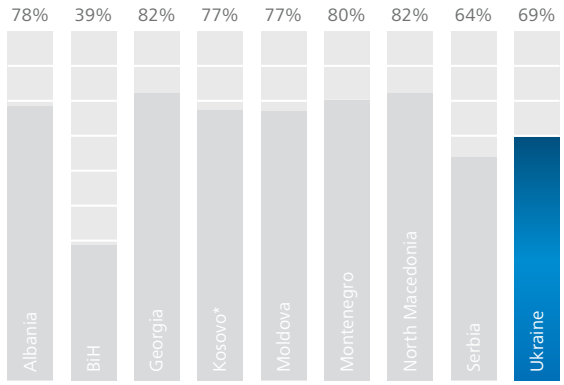
The balancing regime is in line with the Balancing Network Code, including interim measures at the time of publication of this report. Neutrality charges have been widely discussed during the past year, but their full introduction has been postponed for an additional year. The main obstacles to defining the charges are accumulated debts for imbalances and the lack of proper reference prices. A functional gas exchange will ultimately enable the implementation of the Balancing Network Code. Payment discipline for imbalances, together with a solution for accumulated debts, should be fostered. Interventions to the approved distribution tariffs did not contribute to solving the issue of unauthorised offtakes and should be avoided in the future, respecting the cost-reflectivity principle.

The gas supply price for households was deregulated as of 1 August 2020. A customer safety net – including amendments adopted by the regulator to the existing supply switching rules and the supplier of last resort chosen via a tender procedure – was put in place in parallel. Effectiveness and robustness of the household retail market opening are yet to be proved in the upcoming winter season.

Only gas for district heating companies, i.e. 25% of annual consumption, remains regulated under the Public Service Obligation Decree. These gas quantities remain under regulated prices and are not offered on the gas market. The release of that production and comprehensive reform of the district heating sector are challenges for the upcoming period.

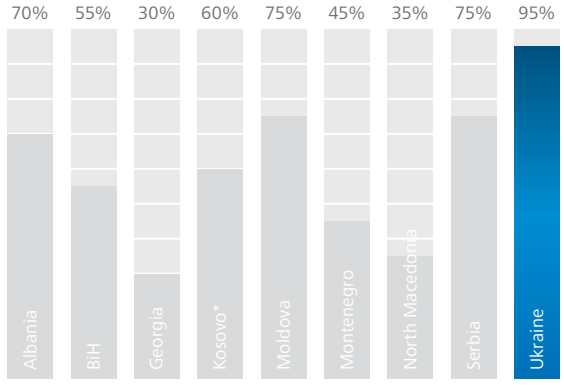
Ukraine
National Authorities

Regulatory Authority



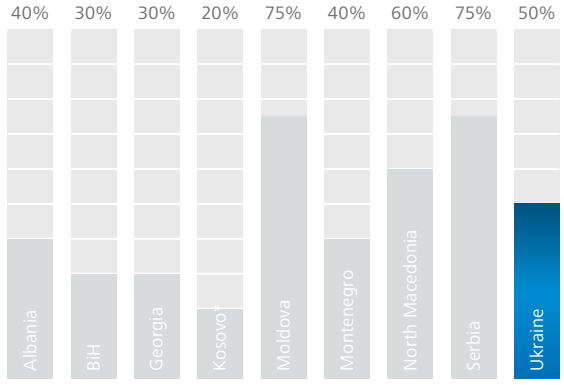
The current situation whereby the National Energy and Utilities Regulatory Commission of Ukraine (NEURC) operates as a 'central executive body' established by the Council of Ministers, a temporary solution meant to address the constitutional court's ruling that the regulator's independent status is unconstitutional, is a clear breach of the acquis. The necessary constitutional amendments need to be adopted as soon as possible and the regulator's independence restored. The recent dissolution of the regulator's strategy department is also of concern. In spite of these challenges, the Commission has continued to use its technical expertise to pursue steady market reforms. Moreover, the abolishment of the requirement to publish NEURC's decisions in the Official Gazette as a pre-condition for their entry into force is a positive development.

Competition Authority



The Antimonopoly Committee of Ukraine (AMCU) is one of the most active and rigorous enforcers of competition law in the Energy Community. It mainly focuses on investigating abuses of dominance, such as exclusionary conducts, which foreclose the market and harm consumers, but also investigates anti-competitive agreements and concerted actions in the electricity and gas sectors. The AMCU actively cooperates with the Secretariat regarding the investigation of alleged abuses of dominance.

State Aid Authority



Although the Antimonopoly Committee of Ukraine has started to review and monitor potential State aid measures, in particular in the coal and electricity sectors, 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 subject to a pending case.

Ukraine
Oil

Oil Implementation

Oil Indicators	Transposition Assessement	Implementation Status	Descriptions
Stockholding obligation		0%	There is no emergency oil stocks policy in place. The draft Law on minimum stocks of crude oil and petroleum products is pending approval by the executive authorities involved.
Emergency procedures		0%	A draft legal act on an Oil and Petroleum Products Market Crisis Plan is prepared but not adopted. Therefore 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)		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 NRMM is not specified in the Regulation.
Monitoring compliance and reporting including the lay down the rules on penalties		60%	There is no annual monitoring programme for petroleum products in place even though it is foreseen by the Regulation. The level of penalties for non-compliance of fuel quality is regulated by the Law on the State Market Supervision and Control of Non-food Products.

Ukraine has currently no legal framework for emergency oil stocks. The draft Law on minimum stocks of crude oil and petroleum products is being reviewed by the competent authorities. A final decision on a specific model for emergency oil stockholding is yet to be made. The development of secondary legal acts under the EU4Energy Governance project will be finalized by the end of October 2020.

A Technical Regulation from 2013 establishes requirements for motor petrol, diesel, marine and boiler fuels put into circulation and sold on the territory of Ukraine. Gas oil used in non-road mobile machinery (NRMM) is not specified. This should be rectified by amendments to the 2013 Resolution. Sulphur content of gas oil used in NRMM should be up to 10 mg/kg only.

Ukraine
Renewable Energy

Renewable Energy Implementation

Renewable Energy Indicators	Transposition Assessement	Implementation Status	Descriptions
National Renewable Energy Action Plan	✓	58%	Ukraine submitted its NREAP as well as all three Progress Reports on the implementation of the Renewable Energy Directive to the Secretariat. In 2018, Ukraine reached a 7,01% share of energy from renewables, still below the trajectory of 9,1%.
Quality of support schemes	✓	45%	Administratively set feed-in tariffs (FiTs) are granted since 2009. Following a settlement of a dispute mediated by the Secretariat's Dispute Resolution and Negotiation Centre, a Law on Restructuring Feed-in Tariffs was passed in July 2020. Its implementation is pending. Auctions are yet to be implemented although envisaged by legislative amendments adopted in December 2019.
Grid integration	~	74%	Guaranteed access and gradual balance responsibility for large renewables producers in compliance with the acquis was introduced in the new Electricity Market Law, and revised by the Law on Restructuring Feed-in Tariffs in July 2020. Offtake of electricity under the FiT regime is an obligation for the state-owned Guaranteed Buyer, which suffers from liquidity problems.
Administrative procedures and guarantees of origin	~	65%	The existing national measures only partially comply with Directive 2009/28/EC as not all administrative procedures are transparent, streamlined and expedited at the appropriate administrative level. There is no single administrative body.
Renewable energy in transport	X	6%	In April 2020, the draft Law on amendments to legislative acts on the mandatory use of liquid biofuels (biocomponents) in transport was registered in the Parliament, however, it did not pass first reading. The current share of renewables in transport is 2,2%.

In the reporting period, a dispute between investors and the State almost triggered a wave of arbitrations against the country. The dispute was resolved by a memorandum and the law on restructuring of feed-in tariffs (FiT), which applies not to all investments though. Implementation remains a challenge and is made more difficult by an inappropriate electricity market design.

All three sectorial targets (electricity, heating and cooling, transport) and the overall 2020 target, are far from being reached. Following the adoption of the Law on Ensuring Competitive Conditions for Electricity Production from Alternative Energy Sources in April 2019, Ukraine adopted an order on auctions for the distribution of support quotas and standard electricity purchase agreements between the Guaranteed Buyer and the entity company eligible to take part in the auctions. The scheme foresees that auction volumes will be determined based on the defined quotas for wind, solar PV and other renewables. However, no volumes have been set so far.

Due to a liquidity crisis caused by a significant increase of renewables investment under the 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. In July 2020, the Verkhovna Rada adopted a corresponding law on the restructuring of FiTs.

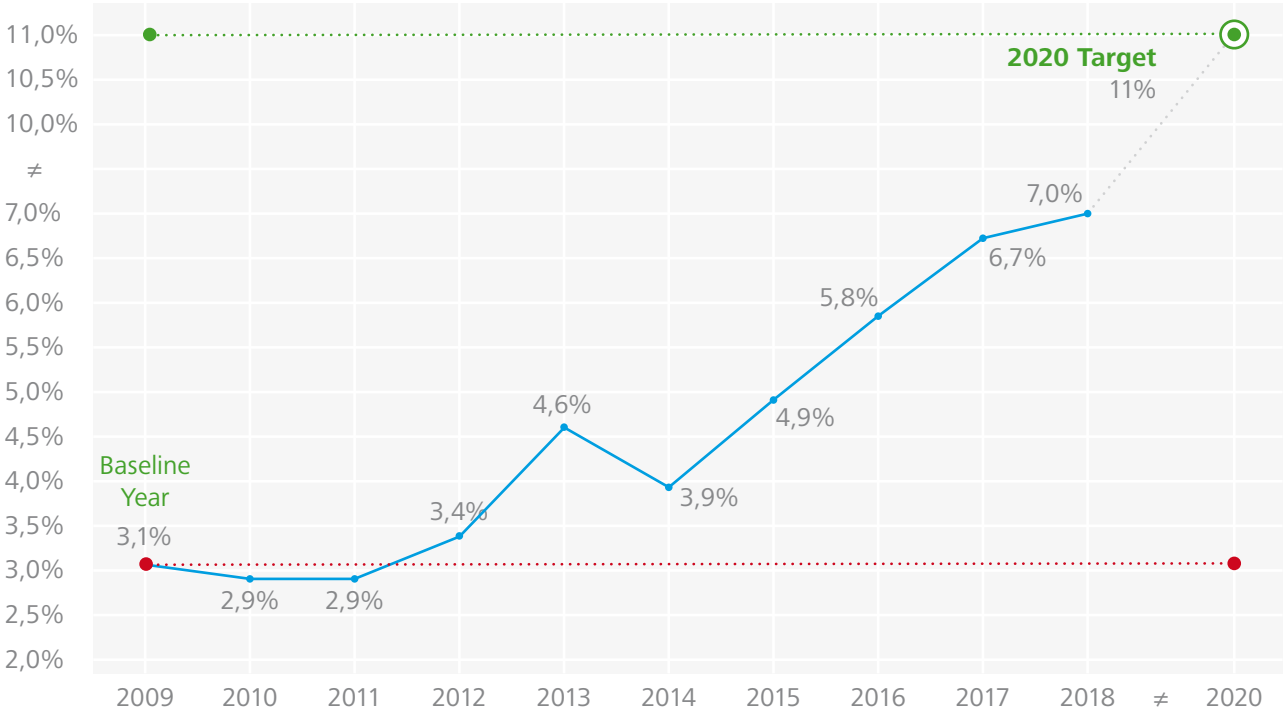
Under the new Law, plants with installed capacity of 1 MW or higher will become fully balance responsible by the end of 2022. The Law also introduces a compensation mechanism for

curtailment, State financing for renewables and exemption for certain large industries from paying the renewables surcharge.

Ukraine adopted a secondary act on guarantees of origin in 2013. However, the State Agency on Energy Efficiency and Energy Saving as the designated body has failed to implement an electronic system compatible with the European Energy Certificate System.

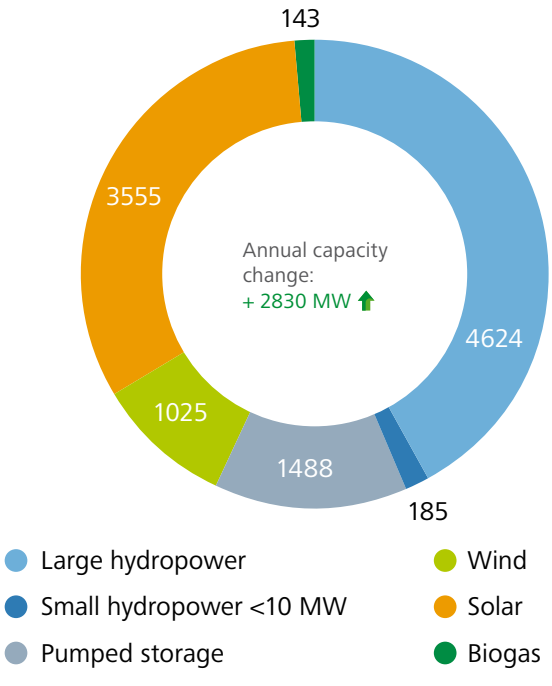
During the next reporting period, Ukraine should introduce a functional market-based renewables support scheme. The electronic system for guarantees of origin should be established without further delays.

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 2019 (MW)



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

In spite (or because) of all shortcomings in the support scheme mechanism, the country increased significantly its renewable energy capacities. In 2019, solar PV capacities more than doubled, reaching 3.555 MW. Small hydro and wind capacities also almost doubled, reaching 185,4 MW and 1.025 MW respectively.

A legal regime for biofuels, which would finally introduce the sustainability criteria and set the mandatory share of liquid biofuels in total annual gasoline sales, should be adopted without further delay.

Total capacities (MW):

11019

Ukraine
Energy Efficiency

Energy Efficiency Implementation

Energy Efficiency Indicators	Transposition Assessement	Implementation Status	Descriptions
Energy efficiency targets and policy measures			The NEEAP is still pending adoption by the government. The drafted Energy Efficiency Law, which is to include the specific targets, also remains to be adopted. The fourth Annual Progress Report was submitted to the Secretariat in September 2020.
Energy efficiency in buildings			Ukraine has adopted thirteen of the fourteen by-laws needed to implement the Buildings Directive, five of which are in the process of being amended, to align with the Energy Efficiency Directive. The missing by-law on minimum energy performance requirements is currently in public consultation. A resolution on the adoption of the national nearly zero-energy buildings plan was adopted.
Energy efficiency financing			The Energy Efficiency Fund was launched in September 2019 with a budget of UAH 1,5 bil. and EUR 100 mil. from the EU and Germany. It is dedicated to increasing energy efficiency in multi-apartment buildings. The energy services market is significantly more developed than in any other Contracting Party. Energy service company projects for buildings renovation 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. Ukraine has drafted but not adopted four out of the five new regulations for the implementation of the new Regulation (EU) 2017/1369 on labelling. 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. Ukraine has not yet prepared the assessment of its high efficiency cogeneration and efficient district heating potential required by the Energy Efficiency Directive. A significant donors programme for the modernisation of district heating systems is under development.

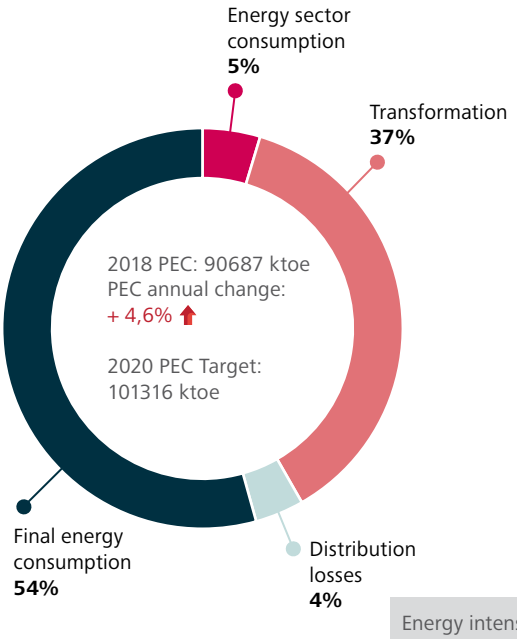
In the past year, Ukraine has continued to make steps towards the final version of the Energy Efficiency Law under the leadership of the Ministry of Energy, including conducting several stakeholder consultations. Nevertheless, given that there were many previous attempts to finalise the Law and send it to the Cabinet of Ministers, which never materialised, and the timeline for its adoption was not known, the Secretariat decided to step up with the infringement case from 2018.

The adoption of the Energy Efficiency Law in compliance with Directive 2012/27/EU remains the utmost priority for Ukraine.

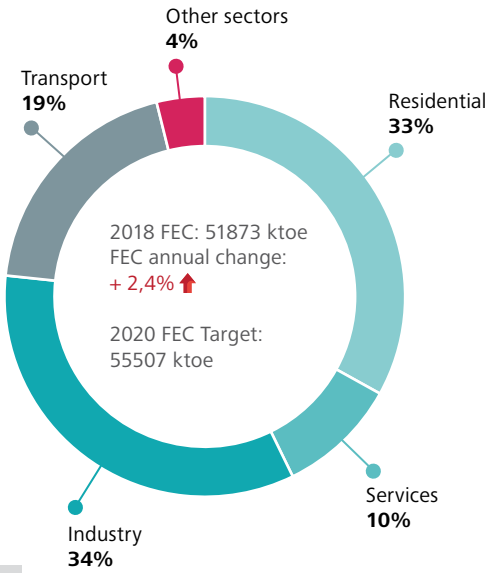
Ukraine's second priority is to adopt the already drafted framework and product regulations for the implementation of the Labelling Regulation (EU) 2017/1369.

2018 Energy Efficiency Indicators and Trends

Primary Energy Consumption (PEC)



Final Energy Consumption (FEC)



Energy intensity,
2018 value and trends:
0,94 ktoe/mil EUR, + 1,1%

Source: EUROSTAT 2020 data and the 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

Ukraine
Environment

Environment Implementation

Environment Indicators	Transposition Assessement	Implementation Status	Descriptions
Environmental impact assessment (EIA) and strategic environmental assessment (SEA)	✓	69%	Legislation to fully transpose the amendments to the Environmental Impact Assessment (EIA) Directive introduced by Directive 2014/52/EU has to be adopted. Administrative capacities should be further strengthened to address the lack of proper quality control of EIA reports and the lack of a systematic screening process for projects subject to Annex II of the EIA Directive. A proactive approach is required for better public inclusion in the decision-making process.
Sulphur in fuels	✓	85%	Ukraine has rectified the breach identified by Ministerial Council Decision 2016/05/MC-EnC. The provisions on marine fuels were adopted.
Large combustions plants and industrial emissions	~	50%	Ukraine revised its National Emission Reduction Plan (NERP) and plant inventory in 2019 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. While compliance with the 2019 NERP ceilings is achieved, the lack of finance made available for the implementation of the NERP remains problematic even after two years of implementation.
Nature protection	~	53%	Protected areas still lack effective protective measures and administrative capacity that can properly assess the impacts of energy projects on the protected sites.

The Law on Environmental Impact (EIA) Assessment should be upgraded in order to fully transpose the amendments introduced by Directive 2014/52/EU. In particular, serious improvements are needed in the selection criteria which define if projects listed in Annex II of the Directive are subject to an EIA. Legal measures to ensure a higher level of quality of the EIA reports (by e.g. accreditation of providers) should be introduced in the transposing legislation. The Government should continue the capacity-building programme in order to properly address the EIA procedures, including ensuring effective public participation in the decision-making processes. Strategic Environmental Assessment reports must be prepared for all plans and programmes (or similar documents, e.g. strategies) in relation to energy (e.g. energy supply, development of mines and use of coal, utilisation of renewables, etc.). A strategic environmental assessment should be conducted for the upcoming National Energy and Climate Plan.

As regards legislation on the sulphur content of liquid fuels, Ukraine complied with the Decision of the Ministerial Council establishing a serious and persistent breach and 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 were also transposed during the last reporting period. Ukraine should focus its efforts on the implementation of the provisions related to all fuels falling under the scope of the Directive, with particular regard to systematic compliance monitoring of the products concerned.

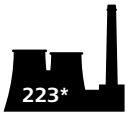
With regard to large combustion plants, the key priority for Ukraine remains the implementation of the National Emission Reduction Plan (NERP). The 2019 NERP amendments revised the plant inventory based on the common stack approach and included district heating plants in the Contracting Party. The amendments do not change the annual emission ceilings stipulated in the NERP. Ukraine complied with its reporting obligations under the Large Combustion Plants Directive in May 2020 by submitting its emissions data to the European Environment Agency for the reporting year 2019. Certain gaps exist due to the lack of data from plants located in conflict areas. The emission ceilings for all three pollutants are met, which is mainly caused by low heat

and electricity demand. A significant increase of sulphur dioxide emissions is recorded, the main reason of which is the change in fuel supply (lack of access to anthracite).

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. 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 2033 at the latest. The operating hours of the plants concerned are reported together with emissions data.

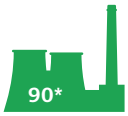
A number of complaints have been registered under the Bern Convention on the Conservation of European Wildlife and Natural Habitats concerning the impacts of energy projects on protected Emerald sites. Concerns about presumed threats were raised about wind farm development projects in the Polonina Borzhava, Zatoky and Cholhynskyi sites, while the Holosiyin National Park, Sviati Hory, Iziumska Luka Regional Landscape Park, Ukrainskyi Stepovyi Nature Reserve and Riznykivskyi are concerned by hydrocarbons extraction or gas stations. Dialogue with the local communities and the civil society sector has to be ensured when conflict between planned energy projects and nature protection goals emerges.

Installations under the Large Combustion Plants Directive



of plants falling under the LCPD

of which opted out plants



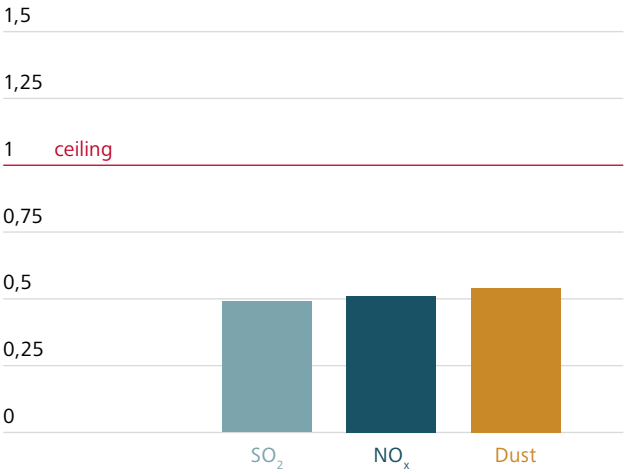
of which plants falling under the NERP

* In 2019, Ukraine did a revision of its LCP register based on the common stack approach.

** Under Decision 2015/07/MC-EnC, certain plants in Ukraine are entitled to use 40.000 hours for opted-out plants. 61 plants fall into that category.

Source: compiled by the Energy Community Secretariat

2019 emissions versus NERP ceilings



	SO_2	NO_x	Dust
2019 emissions by all plants under the LCPD	599,270	119,146	155,896
2019 emissions by plants under the NERP	452,907	92,180	101,093

Amount of operational hours used from opt-out period[5]

Average of plants under Decision 2013/05/MC-EnC[6]	Expected expiry of opt-out period:*	December 2023
	Remaining hours	15.115
	Operating hours consumed in 2018 and 2019	4.885
Average of plants under Decision 2015/07/MC-EnC[7]	Expected expiry of opt-out period	December 2032
	Remaining hours	34.996
	Operating hours consumed in 2018 and 2019	5.004

*Calculations for the expected expiry of the opt-out period are based on 2018 and 2019 average load factor.

Source: compiled by the Energy Community Secretariat

5 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.

6 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.

7 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 2033. The list of plants was adopted by Decision 2016/19/MC-EnC.

Ukraine
Climate

Climate Indicators	Transposition Assessement	Implementation Status	Descriptions
National greenhouse gas emissions monitoring and reporting systems			Secondary legislation to implement the provisions of the recently adopted Law on the Principles of Monitoring, Reporting and Verification (MRV) of greenhouse gas emissions have been adopted. However, further revision of the existing legal framework is needed to be in line with the Monitoring Mechanism Regulation.
National Energy and Climate Plans (NECPs)			The timeline for NECP finalization will be prolonged by several months. The plan is unlikely to be adopted before 2021. There were no drafts of the plan sent for review to the Secretariat by the cut-off date of the present report.

Ukraine's Nationally Determined Contribution (NDC) under the Paris Agreement includes a target of reducing greenhouse gas (GHG) emissions by at least 40% below 1990 levels by 2030. The second NDC is under preparation. Due on 1 January 2018, the country's seventh National Communication and the joint second and third Biennial Report have still not been submitted.

The Monitoring, Reporting and Verification of GHG Emissions Law transposes provisions of Directive 2003/87/EC related to the creation of a monitoring, reporting and verification (MRV) system. The Law itself will take effect in 2021. The list of activities, which are subject to MRV of GHG emissions adopted in September 2020 reflects the rules of Directive 2003/87/EC. Basic rules for the functioning of a registry system for GHG and installations are in place. The legal basis on the creation and maintenance of national inventory systems, on the formation and maintenance of the National Electronic Registry of anthropogenic emissions and removals of greenhouse gases transpose elements of Regulation (EU) 525/2013. Further alignment is needed however with the legislative package scheduled for adoption under the MRV law to be in line with the Regulation.

The country's long-term vision of low-carbon development is based on previously adopted strategic documents, including the Low Carbon Development Strategy until 2050. A new Concept of Green Energy Transition until 2050 of February 2020 is foreseen to be substantially modified by the Government before being submitted for approval. At present, the Ministry of Energy is about to launch a revision of the Energy Strategy until 2035, the most important forecasting instrument regarding GHG emissions. It is supposed to be submitted for approval to the Government in Q2 2021.

The National Energy and Climate Plan (NECP) is not likely to be adopted before 2021, partly due to its interlinkage with the development of the second NDC and the Energy Strategy 2035 revision. Due to structural changes in relevant Ministries, the composition of the NECP technical working group should be updated and the group revived soon. So far, NECP related questions were considered by an Expert Council supporting the Ministry of Energy created in May 2020. In July 2020, external experts submitted a draft of the NECP to the Ministry of Energy, which is now being analysed by the Ministry's departments and the Expert Council. The analytical basis of the plan is still to be finalized. The Council also recommended to draw upon different modelling capacities of other institutions in Ukraine when commencing the work on the analytical basis of the NECP.

Ukraine
Infrastructure

Infrastructure Implementation

Infrastructure Indicators	Transposition Assessement	Implementation Status	Descriptions
National competent authority	~	20%	Ukraine's transposition of Regulation (EU) 347/2013 and designation of the national competent authority is still pending. The draft Law prepared by the Ministry of Energy has not yet been sent to the Government for adoption.
Manual of procedures	X	0%	The manual of procedures, as defined by Regulation (EU) 347/2013, is yet to be drafted.
National regulatory authority involvement	X	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 authority has not published the methodology and criteria as required by the Regulation.

The Secretariat in 2020 assisted Ukraine in preparing the draft Law on Projects of the Highest National Priority in the Field of Energy, transposing Regulation (EU) 347/2013. The draft foresees that the Cabinet of Ministers of Ukraine acts as the national competent authority, with a possibility to transfer its power to the so-called Interdepartmental Commission.

On 29 November 2018, the Ministerial Council adopted a decision establishing a breach of Ukraine for non-transposition of Regulation (EU) 347/2013, which has not yet been rectified.

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 like rehabilitation of the overhead power lines 400 kV to Slovakia and Romania (suggested PMI 2020), as well as oil pipelines projects (Brody – Adamowo and Southern Druzhba pipelines, suggested as PECI and PMI 2020) might be positively influenced by the Regulation's adoption.

Proposed 2020 PECI/PMI projects: 4

Electricity: 2	Gas: 0	Oil: 2
PMI: 2	PECI: 0 PMI: 0	PECI: 1 PMI: 1

Ukraine
Statistics

Statistics Implementation

Statistics Indicators	Transposition Assessement	Implementation Status	Descriptions
Annual statistics	✓	100%	The five annual questionnaires for 2018 and the questionnaire on final energy consumption of households were submitted.
Monthly statistics	✓	80%	Monthly coal, electricity and natural gas data are compiled and transmitted to EUROSTAT. Monthly oil data are not transmitted. Short-term monthly data are not reported yet.
Price statistics	~	67%	Price statistics for electricity and natural gas are transmitted but are not broken down per price component.

By starting to transmit monthly data to EUROSTAT, Ukraine has improved its implementation status with respect 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 2018 were transmitted timely to EUROSTAT and published in the respective databases. Preliminary annual data for 2019 were also transmitted timely and published. The breakdown of energy consumption of households per final use, which was missing before, is now reported as required by the acquis covering the period from 2016 onwards. 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 are also compiled and available in the JODI database. SSSU collects information on oil stocks, but it is not publicly available. Monthly oil data 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. Components of electricity and natural gas prices charged to end-users are not reported yet, and hence Ukraine has still not achieved full compliance with the acquis on electricity and gas prices. SSSU methodologies include reporting of disaggregated prices charged to end-users. Implementation depends on the regulatory regime and unbundling of network operators.

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 obligations from the acquis on oil. The breakdown of electricity and natural gas prices into components and their annual reporting have to be implemented without delay.

Ukraine
Cybersecurity

Cybersecurity Implementation

Cybersecurity indicators	Transposition Assessement	Implementation Status	Descriptions
Institutions and legislation			Energy-specific provisions and cross-border cooperation are missing in the current cybersecurity policy and legal framework. Rules and mechanisms for implementation are to be developed and the designation of critical energy infrastructure and services should be completed.
Requirements for operators and energy regulatory authority			A risk assessment methodology for cybersecurity in energy is missing. The energy network operators develop their cybersecurity environment based on applicable standards. Legal obligations for cyber protection, building the resilience and incident reporting are not specific to the energy sector. The role and necessary powers of the energy regulatory authority NEURC in cybersecurity need to be established.

The cybersecurity landscape in Ukraine is rather complex, and competences are overlapping. Following the Information Security Doctrine approved by the Ukraine President in 2017, the National Security and Defence Council, the Cabinet of Ministers, and the Ministry of Information Policy share the responsibilities. The National Institute for Strategic Studies is also accorded specific powers. The cybersecurity legal framework is fragmented and still in development. In 2020, the Ministry of Energy took the initiative to develop a cybersecurity strategy for the energy sector and to advance critical energy infrastructure resilience through international cooperation.

The four-year Cybersecurity Strategy based on the Convention on Cybercrime was approved in 2016. Its goal is to ensure a safe cyberspace through creation of a legal and institutional cybersecurity system, high capabilities of the stakeholders to counteract cyber threats and efficient protection of critical information infrastructure. Even though energy companies are recognized as targets of cyberattacks, there are no energy-specific policies and measures, and the cross-border component is missing. The development of a new cybersecurity strategy is under way.

The Law on the Basic Principles of Cybersecurity, adopted in 2017, introduced the designation of critical infrastructure in energy and the concept of risk assessment, but left the specification of criteria to sectoral legislation. The Law identifies responsible stakeholders and facilitates cooperation between authorities. A law on protection of critical infrastructure, aiming to transpose Directive 2016/1148/EC (NIS Directive), was drafted in 2018 but its adoption was delayed. The draft is currently under review by the Committee on Digital Transformations of the Verkhovna Rada.

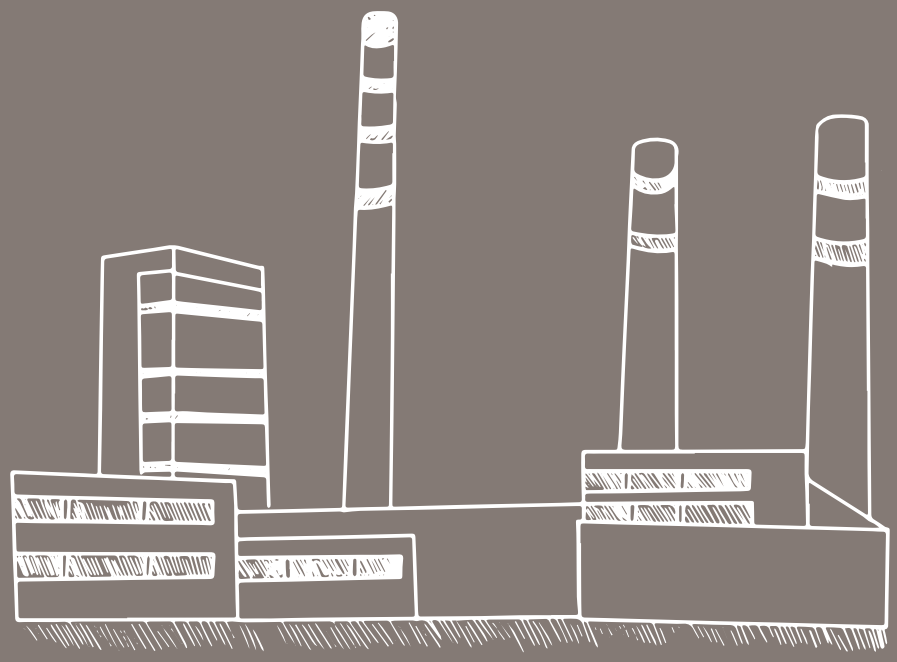
In 2019, the Government adopted the General Requirements for Cybersecurity of Critical Infrastructure, which transpose some aspects of the NIS Directive and apply to energy in a general manner, with no energy-specific references. Among others, the act obligates the operators to establish an information security risk management policy, designate information security officers and develop security plans. The draft Rules of Procedure for Designation of Critical Infrastructure, currently pending adoption by the Government, include the energy sector and provide energy-specific criteria. The independent audit on information security in critical infrastructures is regulated by the corresponding rules adopted by the Government.

The governmental computer emergency response team (CERT-UA), established by the State Service for Special Communication and Information Protection, applies its cyber incident response capability since 2009. Its responsibility extends over the energy sector. In 2016, the Security and Defence Council created a National Coordination Centre for Cybersecurity for detecting, preventing and responding to cyber incidents and predicting potential cyber threats, with similar competences as the CERT-UA.

The rules on security of electricity supply define the obligation for assessment of supply risks that include cybersecurity but fail to detail a specific risk assessment methodology. Security requirements and obligations for notification of threats are generally imposed by the Cybersecurity Law, with no reference to specific criteria or mechanism for the energy sector.

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

14 Methodology



14 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 41 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

The summary table on page eight 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.

1. A total of 41 **implementation sub-indicators** 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;

2. Key sectoral implementation indicators aggregating the values of the sub-indicators at sectoral level: electricity, gas, oil, sustainability (including renewable energy, energy efficiency, environment, climate), produced per Contracting Party (see pages 7 and 8 of this report);

3. Summary indicators – the overall implementation score for each Contracting Party and overall (average) implementation score for the Energy Community calculated based on the sectoral indicators;

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	0,25
Wholesale market	0,20
Retail market	0,20
Interconnectivity	0,10
3. Oil	**0,09**
Stockholding obligation	0,25
Availability and accessibility	0,25
Fuel specifications of petrol, diesel and gas oil for non-road mobile machinery	0,25
Monitoring compliance and reporting including the lay down the rules on penalties	0,25
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
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	0,40
Requirements for operators and and energy regulatory authority	0,60

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