

Annual Implementation Report 2017/2018

Energy Community Secretariat 1 September 2018

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Energy Community Secretariat Am Hof 4 1010 Vienna

AUSTRIA

Tel:+ 43 1 535 2222 Fax:+ 43 1 535 2222 11

Internet: www.energy-community.org E-mail: contact@energy-community.org Twitter: twitter.com/ener_community

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01 State of Implementation

In-between transitions

The Energy Community in 2018

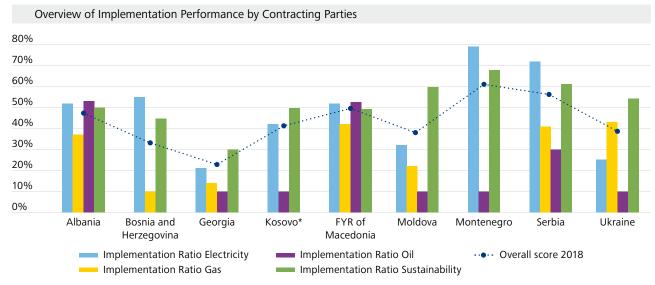
When the Energy Community was created at the beginning of this millennium, the premises on which to build this new community seemed to be rock-solid, almost axiomatic. First premise: deregulation is the path on which the energy sectors in the Contracting Parties would follow the European Union, the same path the latter had embarked on some ten years earlier. Second premise: the energy sectors in the Contracting Parties are characterized by a limited number of large centralized generators and the infrastructure – or rather the absence thereof – needed to connect them to the major consumption centres. Third premise: security of supply, another key objective of the Treaty, depends on additional gas sources and the infrastructure needed to gasify, or at least diversify, the Contracting Parties' generation mix.

The energy transition has called into question all of these firm beliefs and more. With decarbonisation and the fight against climate change becoming the overriding objective of pan-European energy policy, regulation – through targets and their implementation – has made a remarkable comeback. The centralized architecture of the energy sectors is about to be replaced – at least to some extent – by decentralized generation and consumption patterns based on renewable energy sources. This trend, which starts to be felt in the Contracting Parties, calls into question also some of our basic regulatory assumptions and leads to the kind of shift underpinning the Clean Energy Package's new electricity market design. And finally, decarbonisation

means that gasification still remains high on the agenda. But it also means that it cannot be an end in itself, and that Contracting Parties and Member States alike need to take this objective very seriously when deciding about new infrastructure based on and used for fossil fuels, or run the risk of creating sunk costs.

We have called the energy transition currently transforming Europe and the rest of the world the Energy Community's second transition. The first transition, our original one, was meant to be a transition from foreclosed, post-socialist energy sectors in each Contracting Party to open and regionally integrated energy markets. It was based on all the premises mentioned above. The question is: with a change in paradigm from market liberalisation to decarbonisation, is it also time for a radical change of course for the Energy Community? Or in other terms: can we jump over one transition and go right into the next one, with a good chance of success?

We believe the answer is no. This year's implementation report written by the Secretariat's experts once again provides a true and fair view of where the Contracting Parties stand today. By reducing the narrative elements (they can still be found on the Energy Community website) and increasing the graphical elements, we made efforts to depict the state of implementation in an even more understandable way. Over years of intensive cooperation, the Secretariat has gained the insight necessary to provide a straightforward assessment. The results highlight that the Contracting Parties have made progress in their first energy transition, but still need to catch up. The average implementation score is at around 43%.¹



Due to the lack of a gas market, implementation of the gas acquis is not taken into account in the overall score of Kosovo* and Montenegro. Source: compiled by the Energy Community Secretariat

¹ A detailed description of the methodology used for calculating the implementation indicators is available on page 197 of this Report.

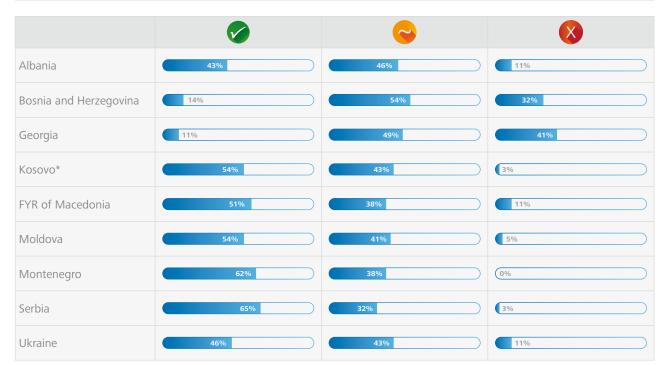
While the full 100% is probably only a theoretical goal, we also learn from this report that many important elements of the acquis have been superficially implemented in some Contracting Parties at best. Take the Third Energy Package's unbundling provisions, for instance, or the independence and (pro-) activity of national agencies such as energy regulators, competition or State aid authorities. Even where they exist, they have only marginally contributed to fulfilling the goal for which they were created in the first place, namely to disrupt or counterbalance the uninhibited power of vertically integrated incumbents, even more so where they are state-owned all along the supply chain. Market opening tends to be postponed with recurring arguments, to avoid price shocks and to keep incumbents in a protected zone to recover from years of non-investment. But inertia often just deteriorates the situation and will lead to a harsh awakening once the second energy transition really kicks in.

So there is still catching up to do to complete the first transition. And it is a necessary task, worth spending efforts and resources at an even higher level of intensity. Successfully completing the first energy transition is important to enable a level playing field between Contracting Parties and EU Member States. With disparate conditions and uneven distribution of risks for investments between the EU and Contracting Parties, one of the main conditions for a successful second energy transition, is not fulfilled. Non-implementation, e.g. of environmental standards, also gives an unfair advantage to those who do not implement

but still benefit from access to the internal market. The amendments to the Energy Community Treaty still under discussion are sine qua non for reaching that level playing field, but will not be sufficient in themselves. We all need to step up efforts to use the Treaty framework, upgraded or not, for more than just superficial changes of the legal and economic realities in the Contracting Parties' energy sectors.

It becomes increasingly clear that without a successful first transition the second one is bound to fail. It would obviously be a mistake not to exploit the Contracting Parties' greatest natural resource - renewable energy. At best, the price of the unfinished first energy transition translates into higher costs than necessary. The high country risk of the Contracting Parties, for instance, is reflected in higher than necessary capital costs. The lack of organized day-ahead and intraday markets are clear handicaps. Getting fit for the energy transition requires not only a fitness of the individual national sectors which makes them resilient for the social and economic challenges associated with decarbonisation, such as fuel change, digitalization, decentralization or innovation. It also requires their integration for the benefit of scaling potential and increasing liquidity and transparency. With regional initiatives such as electricity market coupling and balancing market integration in South East Europe reaching maturity, we are now approaching a point where we will see who is serious and who is not.

Overview of Transposition Assessement by Contracting Parties



Source: compiled by the Energy Community Secretariat

Maybe the most severe challenge for many Contracting Parties is the question of what comes after coal. This question has been on the table most recently with the entry into force of the Large Combustion Plants Directive for existing power plants, and the Industrial Emissions Directive for new ones. It is one thing to campaign for their closure and against new ones. But what is to replace them and provide the necessary back-up energy to balance an increased share of intermittent renewable energy is less obvious. There is no one-size-fits-all answer to the problem, and each of the options requires sound analysis. Yet in all cases, it depends again on whether or not the first energy transition has been completed. Smart support schemes for renewables based on auctions, well-designed capacity mechanisms and intelligent solutions for investments in gas infrastructure which will lead to no-regret investments are widely missing.

While we do need to carry on and intensify our efforts to implement the *acquis communautaire* in and with the Contracting Parties, that does not mean that certain complementary instruments and a recalibration required by the second, the green energy transition, is not necessary. It is clear that the environmental part of the existing Energy Community *acquis* will have to play a greater role in the future. The Environmental Impact Assessment Directive, for instance, needs to be applied for coal and renewables projects – think of hydropower for instance – alike. The implementation of the *acquis* related to emissions – the Large Combustion Plants Directive et. al. – needs

to be effectively monitored and if necessary enforced by national authorities, which are currently still lacking the capacity to do so. The role of distribution system operators and their cooperation will need to be enhanced at a time where the majority of electricity enters the system through the distribution and not necessarily the transmission grid.

Moreover, new areas will need to be covered by the Energy Community, such as cybersecurity. Investment security needs to be improved, e.g. by the creation of special de-risking facilities, by providing early certainty as to future carbon prices applicable in the Energy Community or simply by better implementation. Maybe the most important turn will be the shift from the Third to the Clean Energy (for all Europeans) Package. Certainly because of the new features that the package addresses, such as energy communities (our little bottom-up sisters), aggregators and prosumers. But more importantly because of the shift in governance in which the national energy and climate plans take centre stage. With this, the European Union is currently taking a bold step inspired by the Paris Agreement. Instead of a logic based on obligations and their enforcement, the future of our energy sectors will be decided in a spirit of self-responsibility and cooperation. This new governance seems appropriate to tackle the challenges of the second energy transition in the European Union. Whether and how it works in the Energy Community, which embarks on that adventure from further behind, remains to be seen. But we will not find out if we do not try.

Que Sopec

Janez Kopac

Dirk Buschle



02 Annual Report

Annual Report on the activities of the Energy Community 2018

This Annual Report on the activities of the Energy Community outlines key actions and achievements in the period from 1 September 2017 to 1 September 2018 following the requirements

of Article 52 of the Energy Community Treaty. During this period, the Energy Community Contracting Parties and institutions worked intensively towards implementation of the Treaty *acquis*, as reflected in detail in the Annual Implementation Report 2018, in line with the Energy Community Work Programme for 2017 and 2018.



Energy Community Ministerial Council, 14 December 2017, Pristina, Kosovo*

a. Key Actions

Ministerial Council sets vision for post-2020 climate and energy policy in the Energy Community

Convening under the Kosovo*² Presidency in Pristina on 14 December 2017, the 15th Energy Community Ministerial Council recognized that the targets to increase the share of energy from renewable sources and improve energy efficiency by 2020 taken by the Contracting Parties would soon expire. A new climate and energy framework till 2030 is required to provide certainty to investors and contribute to emission reduction under the global Paris Agreement on climate change.

The Pristina Ministerial Council embarked on a process aimed at setting targets for renewable energy, energy efficiency and green-

house gas emission (GHG) reduction for 2030, beginning with the commissioning of a technical study on establishing a methodology for calculating overall 2030 targets on energy efficiency, renewables and GHG emissions reduction managed under the Energy Community's Energy and Climate Group. The Group has met to advance the discussions on 2030 targets several times at technical level, including in the lead up to the Ministerial Council in Bonn, on the sidelines of the twenty-third session of the Conference of the Parties (COP 23) to the United Nations Framework Convention on Climate Change (UNFCCC). The process was further advanced at the joint meeting of Ministers responsible for energy, environment and climate policy on 22-24 June 2018 in Dürnstein, Wachau.

In early 2018, the Ministerial Council adopted a Recommendation on preparing for the development of integrated national

² 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.

energy and climate plans. In this endeavour, the Contracting Parties are supported by guidelines for the preparation of integrated national energy and climate plans drafted by the Energy Community Secretariat. The new mechanism ensures a robust framework for streamlined reporting and transparent implementation of energy and climate policies.

For the first time, the Secretariat started to assist Contracting Parties in the drafting of climate change legislation, especially in the context of the preparation of integrated national energy and climate plans. The first such draft law was submitted to Kosovo* in June 2018.

Implementation of the Third Energy Package continues

For the third year in a row, the focus remained on the implementation of the Third Energy Package. The Secretariat continued to assist the Contracting Parties in major tasks such as unbundling and certification of transmission system operators, unbundling of distribution system operators and full market opening. This entailed guidance as well as concrete drafting assistance with respect to market rules, e.g. related to balancing, day-ahead markets, market coupling, etc. During this reporting period, the Secretariat published its Opinion on the certification of the Albanian natural gas transmission system operator Albgaz and the certification of the Montenegrin electricity transmission system operator CGES, under the Third Energy Package.

In January 2018, the Energy Community Permanent High Level Group formally adopted two network codes in gas and three in electricity. The technical rules complement the existing gas and electricity *acquis* and constitute an essential element for the efficient functioning of the pan-European energy market. The Secretariat has conducted several workshops to assist the Contracting Parties in the transposition and implementation of the network codes as well as compliance reviews of national acts.

In May 2018, former Yugoslav Republic of Macedonia joined the other seven Contracting Parties which have already transposed the Third Energy Package. The new Energy Law was prepared in close cooperation with the Secretariat. With respect to the newest member of the Energy Community, Georgia, the Secretariat has intensified its efforts to support the country in order to meet the transposition deadlines set in its Accession Protocol.

Closer regulatory cooperation is essential for harmonizing regulatory rules across borders and achieving the aims of the Third Energy Package. The observer status in the Gas and Electricity Working Groups of the Agency for the Cooperation of Energy Regulators (ACER) attained by the Montenegrin National Energy Regulator in December 2017 represents a major milestone. This is the first time that an Energy Community regulator has reached such status.

In situations where assistance had reached its limits, the Secretariat followed up with enforcement action. This includes infringement procedures for those countries that failed to initiate action on the unbundling of electricity distribution system operators. The Secretariat also continued to scrutinize other concrete implementation issues such as the use of public service obligations or electricity distribution tariff setting and their compliance with internal market rules.



WB6 initiative kick-off meeting for regional technical assistance, 19 December 2017, Vienna, Austria

WB6 regional electricity market integration picks up pace

The Contracting Parties of the Western Balkan region have continued activities to integrate their day-ahead electricity markets at the regional level under the so-called Western Balkan 6 (WB6) initiative. Together with 15 EU Member State signatories of the WB6 electricity memorandum, market coupling on all borders between the WB6 and neighbouring EU Member States has started to take shape.

During this reporting period, activities to remove the major legal obstacles to the implementation of day-ahead and balancing markets and their regional integration continued. They set the ground for launching concrete projects for establishing day-ahead markets in WB6 and market coupling. These activities were supported by the Secretariat, to a large extent via the technical assistance to regional energy market connectivity in the Western Balkans, funded by the European Union.

The adoption of a Third Energy Package compliant Law in former Yugoslav Republic of Macedonia was a major step forward, providing the legal ground for the establishment of the dayahead market and its coupling. A project to couple the markets of former Yugoslav Republic of Macedonia and Bulgaria was initiated. The first important milestone was a Memorandum of Understanding on Electricity Day-ahead Market Coupling between the two countries signed by the Ministers on the margin of the EU-Western Balkans summit in Sofia on 18 May 2018. Furthermore, a project for coupling the Italian market with the markets of Albania, Montenegro and Serbia was launched, known as the AIMS project. This follows the ongoing activities to complete the Trans-Balkan corridor and the undersea cable between Italy and 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 Programme, covering the "EU4Energy Governance" project together with the Energy Charter Secretariat through grant contracts with the European Commission. The initiative covers three Energy Community Contracting Parties - Georgia, Moldova and Ukraine and also three other Eastern Partner countries - Armenia, Azerbaijan and Belarus.

The Secretariat delivers technical assistance to improve the legislative and regulatory environment of the energy sector in the participating countries in line with their EU and Energy Community Treaty obligations. Concrete actions include supporting Ukraine, Georgia and Moldova in electricity and gas market reforms and promoting multi-stakeholder dialogue to support the adoption of energy efficiency legislation in the three countries. Moreover, support for identification of key regional energy infrastructure projects, with the aim of fostering trade and improving security of supply, also covers Armenia, Azerbaijan and Belarus.

With over 31 regulatory drafts prepared, the technical assistance has strengthened the legislative and regulatory framework of the countries. In order to facilitate the implementation of legislation, 68 workshops and six high-level policy talks were organized, attended by over 600 officials from all three beneficiary countries. The project runs for four years from June 2016 to June 2020.



EU4Energy Governance High-level Policy Talks, 12 April 2018, Tbilisi, Georgia

Large Combustion Plants Directive enters into force

On 1 January 2018, the implementation phase of Directive 2001/80/EC regulating the emissions of large combustion plants started in the Energy Community. This means that fossil fuel firing power plants have to reduce their emissions of sulphur dioxide, nitrogen oxides and dust significantly. Moreover, plant operators as well as the Contracting Parties have to start monitoring the emissions of these pollutants and report those to the Secretariat. With the aim of facilitating the reporting process, the European Environment Agency has agreed for the Secretariat to make use of its tools for the reporting and assessment of data submitted by the Contracting Parties.

Following the expiry of the implementation deadline, the Secretariat initiated a string of infringement cases linked to the lack of transposition and/or implementation of legislation related to the emissions of large combustion plants in certain Contracting Parties.

Energy efficiency - The first fuel in the Energy Community

Energy efficiency has become increasingly more important in the Energy Community. Energy markets are opening up and competition is introduced, prices are getting closer to cost recovery and consumers have better product and service choices. In order to make energy efficiency "the first fuel", the Secretariat has assisted the Contracting Parties at three levels: adopting an enabling energy efficiency legal and regulatory framework as required by the *acquis*; developing strong implementing institutions; and ensuring public, private and donor financing of energy efficiency measures.

In the last year, the most important milestone was the coming into force of the Energy Efficiency Directive. All Contracting Parties have set their own 2020 targets, reporting it either in their 1st Annual Report or in the National Energy Efficiency Action Plan. With the support of the Secretariat, several Contracting Parties have progressed with respect to the uptake of more market-based financing instruments and setting up energy efficiency revolving funds. The Secretariat also continued to act as intermediary between Contracting Parties and donors/international financial institutions in order to ensure that targeted support is provided where needed most.

The Regulatory Board: Supporting the development of a harmonised regulatory framework for the energy markets

In the reporting period, the Energy Community Regulatory Board (ECRB) – the independent regional body of energy regulators in the Energy Community – continued its efforts to provide a harmonised regional regulatory framework that promotes integration of the Contracting Parties' electricity and gas sectors with the EU neighbouring markets.

2017 brought developments in terms of ECRB's cooperation with other regulatory platforms. Beyond continuing its already well-established cooperation with the Council of European Energy Regulators (CEER) and ACER, ECRB strengthened its activities with the Association of the Mediterranean Energy Regulators. The two regulatory bodies agreed to develop a joint report on customer protection, a promising step towards further enhancing regulatory cooperation.



Energy Community Regulatory School training, 7 December 2017, Vienna, Austria

The launch of the Energy Community Regulatory School in late 2017 kicked-off a dedicated training programme for ECRB members. The Regulatory School provides tailor-made courses for Contracting Parties' regulators on current regulatory challenges stemming from new legislative requirements and market developments, including network codes, REMIT, electricity market coupling and trade.

As in previous years, market monitoring remained a core area of ECRB activities, targeting wholesale and retail market developments for electricity and gas, transparency and gas transmission tarification. Data provided by ECRB members on electricity wholesale and gas and electricity retail markets contributed to ACER's annual market monitoring report.

Sector specific ECRB activities during the reporting period focused on reviewing electricity balancing models, customer protection in closed distribution systems, communication policies and regulatory enforcement powers. The ECRB and its members also contributed to the adoption of the first set of gas and electricity network codes.

Energy Community investment climate receives a boost

Attracting investment in energy infrastructure is one of the key objectives of the Energy Community Treaty. During this reporting period, the Secretariat carried out the second bi-annual selection of Projects of Energy Community Interest (PECI) and Projects of Mutual Interest (PMI) in line with Regulation (EU) 347/2013 on guidelines for trans-European energy infrastructure. The selected projects may benefit from investment incentives and enhanced regulatory conditions.

The call for projects, launched in November 2017, resulted in the submission of twenty-one gas transmission, one liquefied natural gas terminal, one underground gas storage and ten electricity transmission projects. Each project underwent a cost-benefit analysis and was subject to a market simulation.

The analysis showed that a number of countries are in need of boosting their security of supply and diversifying their gas supplies. A large share of the submitted projects correspond to these needs. Several projects would also serve to bring gas to countries that so far had no access to this energy source. Notwithstanding these benefits, a solid business case and financing plan is needed for the projects to go ahead. The Secretariat continues to assist the project promoters and liaise with international financial institutions.

The final list of PECI and PMI projects is subject to approval by the Ministerial Council. Following the list's adoption, the Secretariat will publish detailed information about each project on its online transparency platform, PLIMA.

The Energy Community Secretariat's Dispute Resolution and Negotiation Centre involved in solving high-profile energy disputes

One year after its establishment, the Centre keeps being entrusted with the mediation of complex energy disputes. The most recent dispute brought before the Centre is one between Ashta, a project company of Verbund and EVN, and various Albanian state authorities. The dispute relates to the balancing liabilities for the deviations from scheduled energy production.

Earlier in 2018, the Ukrainian gas transmission system operator, Uktransgaz, asked, and the Ukrainian regulator, NEURC, agreed, for the Centre to facilitate their negotiations over implementation of the amendments to the Ukrainian Gas Transmission Code.

After the successful mediation of a dispute arising out of tariff deviations in the Moldovan electricity sector, Gas Natural Fenosa and the Moldovan regulator, ANRE, called upon the Centre once again, this time with regard to the amount of penalties imposed on the distribution system operator for not complying with the mandatory level of investment. The dispute was settled in June 2018.

In spring 2018, Prof Dr Klaus Toepfer was engaged by the Centre, with the support of the German Government and KfW, to mediate the process between the transmission system operators of Kosovo* and Serbia.

An increasing number of highly qualified energy specialists and mediators have applied to be part of the Energy Community Panel of Mediators. So far, the Panel of Mediators comprises 26 mediators.

Parliamentary Plenum report underlines importance of cross-border cooperation to enhance security of energy supply

During this reporting period, the Energy Community Parliamentary Plenum, which brings together members of Parliament of Energy Community Contracting Parties and the European Parliament to discuss shared challenges in the field of energy, has intensified its activities.

On 19 December 2017, the Parliamentary Plenum adopted its first ever report, the focus of which was security of energy supply. The report was co-drafted by Mr Lev Pidlisetskyi, Member of the Ukrainian Parliament, and Mr Claude Turmes, Member of the European Parliament. Efficient cross-border cooperation among Contracting Parties as well as EU Member States and full compliance with the *acquis* was deemed essential for successfully ensuring security of energy supply.

b. Events

During this reporting period, the Secretariat hosted a record 109 official events with almost 4.000 participants, not taking into account ad-hoc workshops and working group meetings.

This year's highlights included the first meeting of international financial institutions and donors to boost coordination for sustainable development in the Energy Community under the slogan "Working Together – Achieving More" organized by the Energy Community Secretariat in March 2018. Bringing together twenty-two international financial institutions and donors, the conference focused on identifying ways to maximize synergies and avoid overlaps when providing technical or financial support to the Energy Community Contracting Parties.

For the second year in a row, the Secretariat organized the Energy Community Civil Society Day in June 2018. The event contributed to increasing the visibility and transparency of the activities of Energy Community and its institutions, providing at the same time a forum for dialogue on issues that matter to civil society stakeholders.

Building on the success of the first Energy Community Summer School, the second and third editions took place during this reporting period, the second in Ohrid, former Yugoslav Republic of Macedonia, and the third in Split, Croatia. Bringing together 40 postgraduates and young professionals, the Summer School continues to increase the understanding of energy challenges in order to shape a better future by inspiring the design of new, innovative and efficient solutions. Speakers included high level representatives of the European institutions, national authorities, companies and academia. The Energy Community Summer School is supported by the Open Regional Fund for South-East Europe – Energy Efficiency (ORF-EE), as implemented by the German organization Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), and the Visegrad Fund in cooperation with academic institutions.



Energy Community Summer School 2018, 25 August 2018, Split, Croatia

c. Communication

During this reporting period, the Energy Community website received 145.502 visitors, out of which 56.005 were unique visitors. The Energy Community Secretariat published 129 news items, which were distributed to over 3.000 web news subscribers. The news subscription service continued to serve as an effective communication tool with stakeholders and has resulted in Energy Community developments being reported by major media outlets, including the Financial Times, Politico, Interfax and ICIS.

Following the relaunch of the Energy Community website in June 2017, the Secretariat continued to develop the website as a comprehensive tool for communicating Energy Community achievements in the area of Treaty implementation and beyond. This includes the launch of the Energy Community Donor Coordination Platform and the observatory of national secondary legislation adopted by the Energy Community Contracting Parties.

The legislative observatory, live since April 2018, displays the key obligations required by Energy Community directives and regulations and the corresponding references to the national legal act transposing that provision. The Secretariat also published eight new pages which display the reports and action plans submitted by the Contracting Parties to the Secretariat so far.

In May 2018, the Secretariat launched the Energy Community Donor Coordination Platform as the first online tool to feature key donor programmes across all Energy Community Contracting Parties and observer countries. The main purpose of the platform, which covers all sectors under the Energy Community Treaty, is to ensure better donor coordination and information sharing. The tool provides basic project data, technical and financial information as well as tracks the projects' overall realisation.

d. Studies and Publications

The Secretariat published five Policy Guidelines in the course of this reporting period to further assist the Contracting Parties in the implementation of the Energy Community *acquis*, namely on the grid integration of prosumers, distribution network tariffs, development of national energy and climate plans and competitive selection and support for renewable energy. The latter, drafted jointly with the European Bank for Reconstruction and Development (EBRD) and in collaboration with the International Renewable Energy Agency (IRENA), aim to help the Contracting Parties design and implement competitive selection processes for supporting renewable energy.

In November 2017, the Secretariat published a study on distribution network tariffs providing recommendations on setting cost-reflective tariffs. The study served as the basis for the Secretariat's Policy Guidelines on distribution network tariffs aimed at providing guidance to regulatory authorities and the regulated industry as regards best practises in distribution tariff setting.

In April 2018, the Secretariat published policy recommendations aimed at assisting Belarus to design and implement effective reform measures in its energy sectors in line with best European and Energy Community practices. Belarus applied to become an Observer to the Energy Community Treaty in October 2016.

During this reporting period, the Secretariat continued to regularly publish monitoring reports on the Western Balkan 6 regional electricity market, Sustainability Charter and Central and South-Eastern European Gas Connectivity (CESEC) initiatives. The Secretariat also conducted in-depth reviews of national regulatory authorities' independence and performance. The Secretariat reviewed the de iure and de facto compliance of the Ukrainian (NEURC) and Moldovan (ANRE) energy regulators with the Energy Community *acquis*.

e. Staff

During the reporting period, the Energy Community Secretariat employed 36 professionals (21 women and 15 men), bringing together diverse expertise from all areas covered by the Energy Community Treaty. In addition to its permanent staff members, the Secretariat also employed 35 temporary personnel (25 women and 10 men), including interns, secondees and research fellows. The staff employed represented 26 nationalities from all over Europe.

f. Budget 2017

The Energy Community is funded by contributions from the Parties to the Energy Community Treaty. The European Union remains the largest contributor, accounting for roughly 95% of the contributions.

On top of the Parties' contributions, other sources of revenue, totalling EUR 1.689.672, were assigned to defined expenditures arising from the implementation of the following initiatives/regional projects: EU4ENERGY Governance Project (EUR 920.041); technical assistance to connectivity in the Western Balkans on creating a regional electricity market (EUR 497.515); donation for office rent expenditures from the Republic of Austria (EUR 170.000); other initiatives, including the Vienna Forum on European Energy Law and the Energy Community Advisory Committee (EUR 67.116); and the Energy Community Summer School (EUR 35.000).

The final budget for 2017 amounted to EUR 6.278.482.

The breakdown of final budget 2017 is as follows:

- Human resources: EUR 2.457.079.
- Travel expenses: EUR 319.512.
- Office expenses: EUR 331.163.
- Other costs and services: EUR 1.481.056.
- Extraordinary budget (other sources of revenue): EUR 1.689.672.



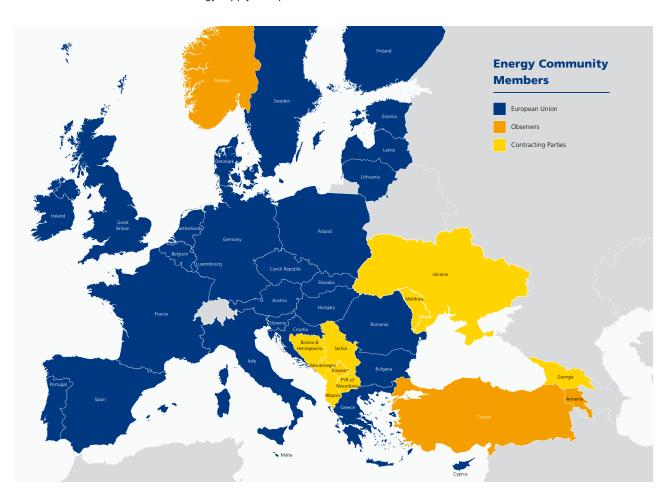
03 Introduction

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. This paves the

way for an integrated energy market, allowing for cross-border trade and integration with the EU market.

By signing the Energy Community Treaty, the Contracting Parties committed to implementing key EU energy legislation within a fixed timeframe.



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 1 September 2018, the Parties to the Treaty are the European Union, and nine Contracting Parties, namely Albania, Bosnia and Herzegovina, Georgia, Kosovo*, former Yugoslav Republic of Macedonia, Moldova, Montenegro, Serbia and Ukraine. Georgia joined the Energy Community on 1 July 2017, which is the third expansion of the Treaty. Armenia, Norway and Turkey are Observers under Article 96 of the Treaty.

Institutional setting

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

The Energy Community Secretariat, based in Vienna, is independent and performs the day-to-day work of the Community. The Secretariat is responsible for reviewing the progress made by the countries in transposing and implementing EU energy law covered by the Energy Community Treaty. The Secretariat's assessment is fed into the annual progress reports of the

European Commission, which take stock of the situation in EU candidate and potential candidate countries.

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 or without compliance, with the decision of the Ministerial Council. If a breach identified by the Ministerial Council has not been rectified, or in other cases of a serious and persistent breach of Energy Community law, a procedure for a decision of the Ministerial Council under Article 92 of the Treaty may be initiated. If a Party to the Treaty persistently fails to comply with its obligations, the Ministerial Council may suspend certain rights derived from the application of the Treaty, including voting rights and right to participate in meetings or mechanisms provided for in the Treaty.

The present Implementation Report 2018 reports about the 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 adoption of a Ministerial Council decision, but the breach has not been rectified yet. It also includes cases where the breaches are not rectified despite adoption of Ministerial Council decisions imposing measures under Article 92 of the Treaty.

Acquis

Since 2006, the Energy Community *acquis* has significantly evolved to incorporate new directives and regulations. Presently, the *acquis* consists of nineteen directives and eight regulations, covering legislation on electricity, gas, oil, infrastructure, renewable energy, energy efficiency, competition and State aid, environment and statistics.

Two recommendations on climate action are also in place, and the activities in this respect have taken centre stage in the Energy Community in anticipation of the so-called Clean Energy Package. In parallel, the Energy Community is in the process of adopting network codes and guidelines for electricity and gas. Two of the total five gas and three out of eight electricity codes have been already incorporated into the *acquis*. The work is expected to continue until 2020.

The tables below display the core Energy Community *acquis communautaire* presently in force³. 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). This year's report is the first to measure Georgia's compliance against the *acquis*, albeit the implementation deadlines as set by the country's Accession Protocol are yet to expire in the majority of cases.



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

3 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



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 2010/30/EU on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products

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



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



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

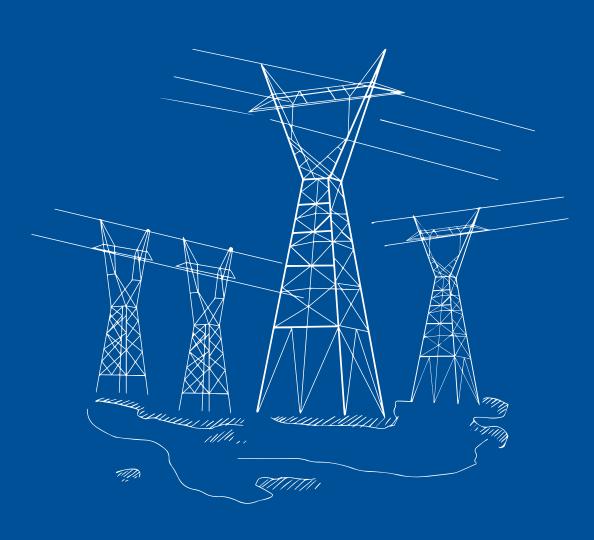


Acquis on Competition

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.

Albania







Summary Implementation

| Summary Indicators | Transposition Assessement | Implementation Status | Descriptions |
|---------------------|------------------------------|-----------------------|---|
| Electricity | | 52% | Implementation in the electricity sector of Albania is moderately advanced. |
| Gas | | 37% | Implementation in the gas sector of Albania is still at an early stage. |
| Oil | ~ | 53% | Implementation in the oil sector of Albania is moderately advanced. |
| Renewable Energy | 0 | 61% | Implementation in the renewable energy sector of Albania is well advanced. |
| Energy Efficiency | 0 | 47% | Implementation in the energy efficiency sector of Albania is moderately advanced. |
| Environment | | 68% | Implementation in the environment sector of Albania is well advanced. |
| Climate | ~ | 16% | Implementation in the climate sector of Albania is yet to begin. |
| Infrastructure | × | 14% | Implementation in the infrastructure sector of Albania is yet to begin. |
| Statistics | | 59% | Implementation in the statistics sector of Albania is moderately advanced. |

Overall number of cases: 3

Electricity: 1

Infrastructure: 1

Energy Efficiency: 1



Electricity Implementation

| Electricity Indicators | Transposition Assessement | Implementation Status | Descriptions |
|------------------------|------------------------------|-----------------------|---|
| Unbundling | | 59% | The transmission system operator (TSO) must implement the missing requirements from its certification decision. The distribution system operator (DSO) is yet to be fully unbundled. |
| Access to the networks | | 91% | The tariffs are approved and published. Two of the borders are allocated through Coordinated Auction Office in South East Europe (SEE CAO), a third one bilaterally. |
| Wholesale market | • | 41% | Regulated wholesale prices and power purchase agreements are still applied by excessive use of public service obligations, contrary to the law. The establishment of a market operator and power exchange is pending. |
| Retail market | • | 40% | Law amendments introduce obstacles for switching. Regulated supply prices are applied for households and small customers, and, through excessive use of public service obligations, for medium-voltage customers. |
| Regional integration | | 29% | Coupling with Kosovo* is in planning stage. No additional coupling initiatives are considered at present. Progress depends on the resolution of the dispute between the TSOs of Kosovo* and Serbia. |

The pace of implementation of the Third Package has gradually decreased and certain critical steps in the development of a competitive market environment in Albania are repeatedly postponed. The establishment of corporate structures for the organized market is in delay, and the adoption of compliant secondary legislation for the retail market is far behind the deadlines established by the Power Sector Law.

Feeble deregulation goes hand-in-hand with the delayed unbundling in the distribution. On that account there is an open dispute settlement case against Albania for non-compliance of the distribution system operator with unbundling requirements. To complete legal unbundling, OSHEE established three independent subsidiaries for distribution system operation, provision of universal service and supply of consumers on the market. Their assets, however, remain with OSHEE, which challenges their independence and leaves the formally unbundled service providers without operational capacity.

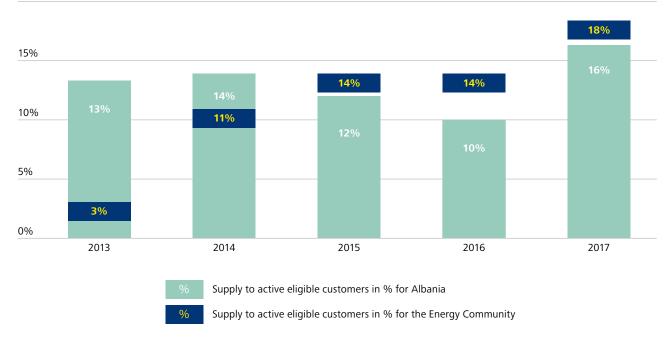
Balance responsibility is implemented by "transitional" balancing rules and KESH is still the sole service provider. In the absence of a local market price, the imbalances are settled using reference hourly prices from the Hungarian day-ahead market. Liquidity of the balancing market could be provided by services across the border, however, cross-border balancing between OST and neighbouring transmission system operators is not in place yet.

The amendments to the Power Sector Law of March 2018 have put in place the missing legal framework for the future organized day-ahead and intraday markets, and set the timing of the Government's decision on establishment of the Albanian power exchange APEX to be taken by September 2018.

The day-ahead and intraday market rules were developed and approved by ERE but their application is postponed until the corresponding functions are set. The momentum needs to be regained in order to accomplish the establishment of the independent market operator in 2019.

Retail Market Opening

20%



Source: Ministry of Infrastructure and Energy

The amendments also extended the duration of the supply of last resort in a way that de facto imposes the regulated supply of all medium voltage customers for two years after the switching conditions are met. Thus, only a few 35 kV customers have actually switched their supplier. The regulated wholesale contract between KESH and OSHEE is extended until 2019, while a public service obligation is imposed on both companies to provide the electricity required to supply all consumers enjoying regulated service conditions. This set of conditions effectively curtails competitive supply for the immediate future. It is of highest priority to abandon conservative measures and promptly apply conditions for effective deregulation.

The Memorandum signed between transmission system operators and regulators of Albania and Kosovo* in August 2018 is targeting end of June 2019 as the deadline for coupling of the day-ahead electricity markets. KOSTT, the transmission system operator of Kosovo*, already expressed its interest to join the Albanian power exchange APEX as a shareholder. The key precondition for practical implementation of the overall activity, however, is the resolution of the dispute between KOSTT and the transmission system operator of Serbia. This would facilitate the putting into operation of the 400 kV interconnector developed with KOSTT as the backbone infrastructure in the integration of the markets, which was commissioned in June 2016 but failed to go live due to the ongoing dispute.



Gas Implementation

| Gas Indicators | Transposition Assessement | Implementation Status | Descriptions |
|------------------------|------------------------------|-----------------------|---|
| Unbundling | | 100% | Albania has unbundled and certified two transmission system operators in line with the <i>acquis</i> . |
| Access to the networks | | 25% | In November 2017, the regulator adopted a commodity-based transmission tariff methodology calculated using forecast investments and set tariffs. The preparation of the relevant transmission codes is in progress. |
| Wholesale market | | 0% | There is no natural gas wholesale market in Albania. |
| Retail market | | 24% | All customers are eligible and there- fore allowed to freely choose and switch their gas supplier. |
| Interconnectivity | 0 | 6% | Albania is not connected to international gas networks. The TAP is currently under construction and is planned to be operational in 2020. |

Following the transposition of the Third Energy Package, Albania has continued with the development of *acquis*-compliant gas market secondary legislation. A key step forward was the certification of the Trans Adriatic Pipeline AG as an independent transmission operator under an exemption decision in 2016 and Albgaz as a transmission and distribution system operator under the ownership unbundling model.

Supported by the Secretariat, the Ministry of Energy and Transport and the national regulatory authority ERE developed and adopted a number of legal acts regulating the organisation of the gas market.

It is important for Albania not to lose this momentum and to ensure that the remaining secondary legal acts are adopted and compliant with the Energy Community *acquis*.

Albania does not have a developed gas market at present. It is thus important for the country to kick off the process of implementation of the Gas Master Plan and thus the gasification of the country.

The capacity building of Albgaz as a combined operator has started with technical assistance from EBRD. Albgaz will be engaged in maintenance of the Trans Adriatic Pipeline (TAP) once it is landed in Albania. On the other hand, TAP AG continues with its construction according to schedule and has published a draft transmission network code.

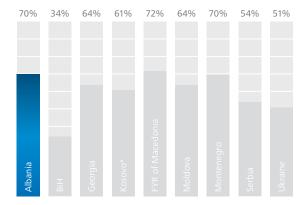
The capacities of ERE will also need to be strengthened, especially with regard to its independence. In this respect, ERE should seek to benefit from the numerous donor programmes available.



Albania National Authorities

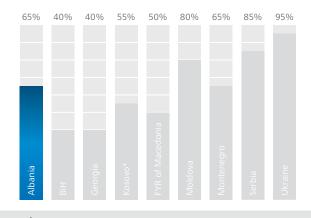


Regulatory Authority



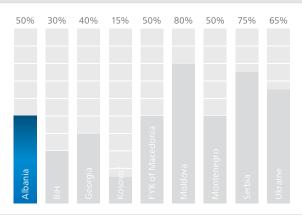
The Energy Regulatory Entity (ERE) has proven its technical regulatory knowledge and commitment to adopt an extensive set of secondary legislation in close consultation with the Secretariat. The regulator completed certification of the national gas and electricity transmission system operators. However, ERE has so far not enforced unbundling of the electricity distributor OShEE and shown sufficient commitment to address complaints concerning potential abuse on the electricity wholesale market. The identified shortcomings are also linked to a lack of sufficient human resources.

Competition Authority



The Albanian Competition Authority (ACA) consists of a commission and a secretariat. Its activities in the energy sector mainly focus on recommendations. Apart from the approval of two mergers, the ACA did not render any decisions in the energy sectors.

State Aid Authority



The State aid authority in Albania consists of the State Aid Commission (SAC), responsible for decision-making, and the State Aid Control Unit (SACU), which provides technical and administrative support to the SAC. Due to the last reorganisation of the ministries, the Ministry of Economy and the Ministry of Finance were merged and the staff originally assigned to the SACU 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 SAC and the SACU is questionable as they are both strongly connected to the Ministry of Economy and Finance. In the reporting period, the SAC approved two measures of state support: State aid in the form of feed-in tariffs for electricity from renewable sources and State aid in the form of a guarantee to OST, the transmission system operator.



Oil Implementation

| Oil Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--------------------------------|------------------------------|-----------------------|--|
| Stockholding obligation | ~ | 40% | According to the current legislation, the oil refineries and wholesale oil and their by-products companies are obliged to maintain minimum stocks, equal to 90 days of average sales. However, the current system is not compliant with Directive 2009/119/ EC. The Ministry of Infrastructure and Energy drafted a new Law on Emergency Oil Stockholding in 2016 and intends to finalize it by the end of 2018. |
| Availability and accessibility | • | 40% | The new draft Law foresees that compulsory stocks maintenance is a priority and compulsory stocks must be available and physically accessible at all times. |
| Reporting | ~ | 70% | Albania submits the Joint Organisations Data Initiative - Oil (JODI) Questionnaire on a regular basis. The draft Law foresees that the Minimum Oil Stocks Agency will keep and continually update detailed records of all stocks that it holds and also all others that are maintained in Albania and in third countries under bilateral agreements. |
| Emergency procedures | ~ | 60% | The new draft Law establishes the necessary procedures for intervention in case of a serious shortage of petroleum products in the market. The release of the stocks is decided by the Government, upon the proposal of the minister in charge of energy and approval of the crisis management committee of the Government. |

Albania's current emergency oil stockholding system is assigned to the oil industry. The draft Law on Emergency Oil Stockholding prepared in 2015 was reviewed again in 2016 by the Ministry of Infrastructure and Energy. The main open issue concerned

the shared obligations between the administration and the oil industry foreseen by the draft Law. The Ministry of Infrastructure and Energy has finalized the draft Law in September 2018 and intends to adopt it by the end of 2018.



Renewable Energy Implementation

| Renewable Energy Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--|------------------------------|-----------------------|--|
| National Renewable Energy Action Plan | | 80% | Albania made significant progress towards the 38% renewable energy target for 2020. |
| Quality of support schemes | 0 | 72% | Feed-in tariffs for hydropower, wind and solar PV are currently in place. Support to new projects through con- tract for differences was postponed until 2021. |
| Grid integration | | 46% | The distribution system operator has to revise the methodology for determining the costs of grid connection and grid reinforcements. A methodology for setting the cost of connection to the transmission network is completely missing. |
| Administrative procedures | | 50% | The administrative procedures for authorization, permitting and licensing are not streamlined and require simplification, including the designation of a one-stop shop for small projects. |
| Renewable energy in transport | X | 1% | A sustainability regime for biofuels is not in place. |

The implementation of the 2017 Law on Promotion of the Use of Energy from Renewable Sources is advancing at a slow pace. Albania has to step up its efforts to adopt the missing secondary legislation to enable a conducive investment framework for investors in renewable energy. In particular, the stability and predictability of the renewable energy framework as well as its transparency and non-discrimination towards the investors shall be ensured.

At present, renewables support is granted through feed-in tariffs, however, the first auction for a 50 MW solar PV plant was launched in August 2018. The introduction of auctions for renewable energy will bring the country on a cost-effective renewable energy deployment path to 2020.

Currently, only final customers connected to the distribution network are charged to compensate the energy from renewable sources from priority producers. Secondary legislation on the methodology used for calculating the renewable energy obligation has to be adopted as soon as possible to remove the discriminatory approach towards final customers. Moreover, the adoption of rules on net-metering schemes for consumers with renewable energy generation facilities up to 500 kW is also a priority.

Transmission and distribution grids need reinforcements to cope with the increased contribution of volatile electricity generation. The network development plans should be updated with a view to facilitate the integration of renewable energy.

Without the adoption of the sustainability regime and establishment of a certification scheme, the actual production and consumption of biofuels in the country cannot be counted towards the transport target.

Shares of Energy from Renewable Sources

2020 Target 38,0% 37,5% 37,1% 37,0% 36,5% 36,0% 35,5% 35,2% 35,0% 34,4% 34,5% 34,0% 33,5% 33,0% 33,2% 32,5% Baseline 31,9% Year 32,0% 31,4% 31,5% 31,5% 31,0% 31,2% 30,5%

2010 Source: EUROSTAT and National Agency of Natural Resources (AKBN)

Total Capacities of Renewable Energy 2017 (MW)

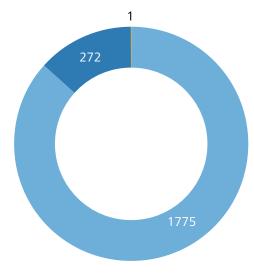
2011

2012

2013

2014

2015



Large hydropower

Small hydropower <10 MW</p>

Solar

30,0%

2009

Source: Ministry of Infrastructure and Energy

Albania reached a 37,1% share of energy from renewable sources in 2016 surpassing its 34,3% median trajectory for 2015-2016. However, this was possible only due to hydropower development. The total renewable energy capacities surpassed for the first time 2.000 MW in 2017, starting from less than 1.500 MW in 2009. Special attention has to be paid to the environmental impacts of hydropower development and the assessment process of these projects needs improvement.

2016

2020

Adequate measures to increase investments in renewable energy projects other than hydropower have to continue while energy efficiency measures shall keep gross final energy con-sumption under control. Due to the fall in technology costs and significant renewable energy potential that the country has, wind and solar photovoltaic (PV) can be deployed cost-effectively.

Total capacities of renewable energy (MW):



Energy Efficiency Implementation

| Energy Efficiency Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--|------------------------------|-----------------------|--|
| National Energy Efficiency Action Plans and Targets | © | 62% | The National Energy Efficiency Action Plan (NEEAP) and targets and the first Annual Report were adopted, albeit with considerable delay. The 2020 target was set, but specific targets required by the Directive are still missing. |
| Energy efficiency in buildings | ~ | 30% | The Law on the Energy Performance of Buildings was adopted in 2016, but there was little progress with respect to the adoption of secondary legislation. Only a limited number of renovation projects has been carried out to date. |
| ESCO market development and financing | ~ | 40% | The 2015 Energy Efficiency Law introduced the ESCO concept. However, delays in the adoption of the by-law and model contracts and establishment of the Energy Efficiency Fund to support ESCO projects have led to no developments on the ESCO market to date. |
| Energy efficient products - labelling | ~ | 38% | After the adoption of the first labelling regulation in 2012, there was no further progress with respect to updating the existing or adopting new regulations required by the 2014 Ministerial Council Decision. |
| Institutional capacities | | 54% | The current institutional capacities are weak and the majority of activities are performed solely by the Ministry of Infrastructure and Energy. The new Energy Efficiency Agency is still not fully staffed and operational and the Energy Efficiency Fund is still to be established. |

Despite the progress previously achieved and the formal strengthening of the legal and institutional framework for energy efficiency, urgent actions are needed to adopt secondary legislation for implementation of both the Law on Energy Efficiency and the Law on Energy Performance of Buildings. The labelling regulation also requires updating.

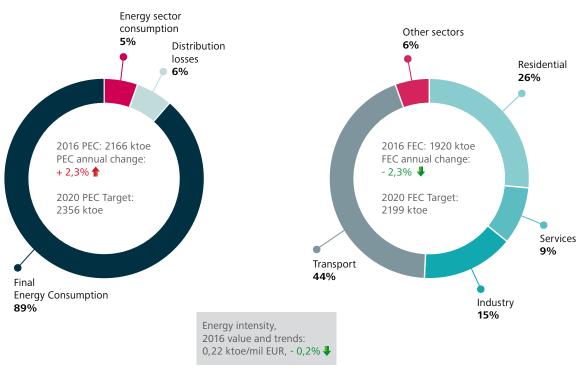
The Energy Efficiency Law should be amended to fully transpose the Energy Efficiency Directive, and the Agency for Energy Efficiency should increase its capacities to support the Ministry in the implementation of energy efficiency policy. The Agency needs to be fully staffed and engaged as the key implementing body and make use of available international technical assis-

The engagement of the private sector through the development of Energy Services Company (ESCO) markets and establishment of the Energy Efficiency Fund is needed to provide additional expertise and financing opportunities for measures and projects in the field of energy efficiency in Albania.

Energy Efficiency Indicators

Primary Energy Consumption (PEC) in 2016 and trends

Final Energy Consumption (FEC) in 2016 and trends



Source: EUROSTAT 2018 data and Contracting Party's Annual Reports under Directive 2012/27/EU

Implementation of Energy Efficiency Product Regulation Overview

| | | | 0=0== | | <u>-</u> 555 | ©= 0== | | | | □□ ⊘ | <u></u> |
|---------------------|-----------------------|------------------------------------|----------------------------|-------------|------------------|-------------------------|---------------------------------|-----------------|---------------|-------------------------------|--------------------------------------|
| FRAMEWORK DIRECTIVE | Household dishwashers | Household refrigerating appliances | Household washing machines | Televisions | Air conditioners | Household tumble driers | Electrical lamps and luminaires | Vacuum cleaners | Space heaters | Water heaters & storage tanks | Domestic ovens, hobs and range hoods |
| | | | | | | | | | | | |

No progress with adoption/implementation

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

Adopted, implementation issues detected

Adopted and implemented



Environment Implementation

| Environment Indicators | Transposition Assessement | Implementation Status | Descriptions |
|---|------------------------------|-----------------------|---|
| Environmental impact assessment (EIA) and strategic environmental assessment (SEA) | | 40% | Efforts in the implementation of legislation related to environmental assessments are not sufficient. Administrative capacities dealing with environmental assessments remain weak. Effective opportunities for the public to participate in decision-making are not ensured. |
| Sulphur in fuels | 0 | 80% | The legislation is being implemented according to the relevant provisions of the Directive. Quality control of sampling and analysis of the fuels covered is not adequately ensured. |
| Large combustions plants and industrial emissions | | 93% | The only large combustion plant in Albania is able to comply with the environmental <i>acquis communautaire</i> . |
| Nature protection | | 60% | The designation of measures for the protection of wild birds as well as their habitats in the protected areas are not sufficiently developed. |

The administrative capacities dealing with environmental assessments in Albania still need significant reinforcement. During the last reporting period, development consents for the construction of new hydropower plants in protected areas were issued. During the environmental impact assessment process, stakeholders shall have sufficient time to effectively participate and transboundary environmental impact assessments must be carried out whenever significant cross-border environmental effects are foreseen.

As regards legislation on the sulphur content of liquid fuels, the competent authorities of Albania have to ensure that the sampling and analysis of the fuels falling under the scope of the Directive takes place in accordance with the standards stipulated therein. The draft law on the sulphur content of marine fuels must be adopted without delay.

Albania has only one thermal power plant (TPP Vlora), which is currently not in operation. The plant is capable of complying with the emission limit values of the Industrial Emissions Directive. Should the plant start operating, the Albanian authorities must ensure the continuous monitoring of the emissions from the plant.

Albania is in a position to properly implement the provisions of the Wild Birds Directive. A system of protected areas has been established, including two strict natural reserves. However, effective protection measures for the designated areas are still lacking. In particular, hydropower projects can significantly jeopardize these areas and therefore particular attention must be given to the appropriate assessment of these projects.

Installations Under the Large Combustion Plants Directive

| # of plants falling under the LCPD | 1 (not in operation) |
|------------------------------------|----------------------|
| # of opted out plants | 0 |
| # of plants falling under the NERP | 0 |

Source: compiled by the Energy Community Secretariat



| Climate Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--|------------------------------|-----------------------|--|
| National greenhouse gas emissions monitoring and reporting systems | | 31% | The draft Law on Climate Change and the draft Decision on a mechanism for monitoring and reporting of GHG emissions includes provisions on establishing a national climate change policy, but no specific reference to projections. Adoption of the drafts is foreseen in the first quarter of 2019. |
| National Energy and Climate Plans (NECPs) | • | 5% | A national working group on the NECPs has not been set up yet, although an Inter-ministerial Working Group on Climate Change (IMWGCC) is active in Albania. Preparatory work on the analytical and technical aspects of the NECP (reference and policy scenarios, templates) has not started yet. Regional consultations will take place after the submission of the draft national plans. |

Albania is a non-Annex-I party to the United Nations Framework Convention on Climate Change (UNFCCC) and ratified the Paris Agreement in November 2016. The country submitted its Third National Communication on climate change to the UNFCCC in October 2016, but no Biennial Update Report.

Its Nationally Determined Contribution (NDC) committed to reduce ${\rm CO_2}$ emissions by 11,5% compared to a baseline scenario in the period 2016-2030 (708 kt ${\rm CO_2}$ reduction in 2030). Albania 's NDC will be revised to include land-use, land-use change and forestry (LULUCF).

The Government is currently working on the finalization of the National Climate Change Strategy and its two annexes, the National Action Plan on Mitigation (NAPM) and the National Adaptation Plan (NAP). Once adopted, these documents will contribute to the concrete implementation of climate change legislation.

Although the preparation of legislation on climate change is progressing, more clearly defined competences and responsibilities of the relevant institutions are necessary in Albania. The limited human capacities in the key ministries as well as the lack of mainstreaming of climate policy across sectors continue to pose a barrier to further progress.

The adoption of the Climate Change Law, the National Climate Change Strategy and the Decision for establishing a mechanism for Monitoring and Reporting of Greenhouse Gas Emissions remain the key priorities for the upcoming period. With the adoption of Recommendation 2018/01/MC-EnC, Albania needs to further improve the harmonization and integration of energy and climate policies and objectives.



Infrastructure Implementation

| Infrastructure Indicators | Transposition Assessement | Implementation Status | Descriptions |
|---|------------------------------|-----------------------|---|
| National competent authority | × | 20% | A national competent authority has not been designated to date. A draft decision exists. |
| Manual of procedures | × | 20% | The first general draft of the manual of procedures exists, but a significant number of details are still missing in order for it to be agreed and published. |
| National regulatory authority involvement | × | 0% | The regulator has not published the required methodology and evaluation criteria. |

Albania should immediately adopt a legal act that ensures the full transposition and proper implementation of Regulation (EU) 347/2013. The national competent authority shall be designated and become operational as soon as possible. It shall publish a manual of procedures for the permit granting process applicable for Projects of Energy Community Interest. The national regulatory authority shall publish the methodology and criteria to be used to evaluate investment in electricity and gas projects and the higher risks incurred by them.

The transposition of the Regulation by Albania is particularly urgent due to its potential to facilitate the realization of ongoing

strategic infrastructure projects, particularly the interconnection 400 kV OHL between Albania and former Yugoslav Republic of Macedonia. The project will improve security of supply and overall operation of the energy system of Albania, positively influence the regional market and its coupling and the ongoing preparations for gasification and gas infrastructure projects.

On 22 June 2018, a Reasoned Request concerning the lack of transposition and lack of notification to the Secretariat of measures transposing Regulation (EU) 347/2013 (Case ECS-2/18) has been submitted to the Ministerial Council.

Proposed 2018 PECI/PMI projects

PECI: 1

PECI: 1

PHI: 1

PHI: 1



Statistics Implementation

| Statistics Indicators | Transposition Assessement | Implementation Status | Descriptions |
|-----------------------|------------------------------|-----------------------|---|
| Annual statistics | | 100% | Five annual questionnaires and the questionnaire on household consumption (MESH) for 2016 are transmitted. |
| Monthly statistics | | 10% | There is no monthly reporting in place. |
| Quality report | | 100% | Quality report is transmitted. |
| Price statistics | ~ | 33% | There is no reporting on prices charged to industrial end-users and on price component. |

Albania remains non-compliant as little was done during the reporting period to improve implementation of monthly and price statistics. As regards annual energy statistics, including quality reporting, Albania has implemented the requirements of the *acquis*.

The institution responsible for energy statistics, the National Agency of Natural Resources (AKBN) has been compiling an annual energy balance and annual questionnaires and submitting them to EUROSTAT in accordance with the *acquis*. The breakdown of energy consumption in households is also transmitted to EUROSTAT.

The activities on the preparation and dissemination of monthly statistics started in March 2014 but until now only monthly electricity data are available. Submission of monthly data on coal, gas, oil and electricity to EUROSTAT or, as a first step, to UN has not started yet.

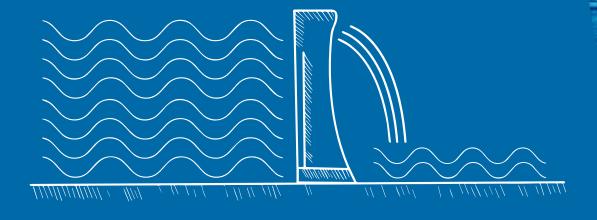
AKBN has submitted its first quality report to EUROSTAT on time.

Price statistics fall in principle under the responsibility of the national statistics institute, INSTAT. In the absence of a clear separation of duties between AKBN and INSTAT, the former began collecting and disseminating data on electricity prices charged to households in cooperation with the regulatory authority. Data linked to natural gas is not relevant for Albania yet.

The prices charged to industrial end-users and the breakdown of prices, both household and non-household, into price components are not reported pursuant to Regulation (EU) 2016/1952. Price reporting has to be completed without delay.

It is recommended for Albania to formalize the cooperation and coordination in data collection and dissemination among the responsible institutions in order to improve data quality and cost effectiveness and to equip the designated institutions with authorities and resources necessary for fulfilling their tasks.

Bosnia and Herzegovina









Summary Implementation

| Summa | ary Indicators | Transposition Assessement | Implementation Status | Descriptions |
|------------|----------------------|------------------------------|-----------------------|--|
| F | Electricity | 0 | 55% | Implementation in the electricity sector of Bosnia and Herzegovina is moderately advanced. |
| 4 | Gas | × | 10% | Implementation in the gas sector of Bosnia and Herzegovina is yet to begin. |
| • | Oil | × | 0% | Implementation in the oil sector of Bosnia and Herzegovina is yet to begin. |
| | Renewable Energy | ~ | 48% | Implementation in the renewable energy sector of Bosnia and Herzegovina is moderately advanced. |
| A B | Energy Efficiency | 0 | 54% | Implementation in the energy efficiency sector of Bosnia and Herzegovina is moderately advanced. |
| 8 | Environment | 0 | 43% | Implementation in the environment sector of Bosnia and Herzegovina is moderately advanced. |
| * | Climate | 0 | 14% | Implementation in the climate sector of Bosnia and Herzegovina is yet to begin. |
| *** | Infrastructure | 0 | 14% | Implementation in the infrastructure sector of Bosnia and Herzegovina is yet to begin. |
| <u>ılı</u> | Statistics | | 58% | Implementation in the statistics sector of Bosnia and Herzegovina is moderately advanced. |





Electricity Implementation

| Electricity Indicators | Transposition Assessement | Implementation Status | Descriptions | | |
|------------------------|------------------------------|-----------------------|--|--|--|
| Unbundling | × | 3% | TSO unbundling and certification is pending adoption of a law transposing the Third Energy Package. Unbundling of all DSOs is delayed and subject of an infringement case initiated in 2018. | | |
| Access to the networks | | 97% | Network tariffs are approved and published. Cross-border capacities are allocated via a regionally coordinated platform, except for the border with Serbia where a bilaterally coordinated procedure applies. | | |
| Wholesale market | × | 56% | Wholesale prices are deregulated, except in Republika Srpska, where production for universal supply is still regulated. Development of the wholesale market and its transparency is only partial. A competitive balancing market is functional, whereas no activities have taken place to set up a day-ahead market yet. | | |
| Retail market | ~ | 81% | All customers are eligible and retail prices are deregulated except for households and small customers. | | |
| Regional integration | ~ | 39% | NOS BIH established cross-border balancing cooperation with each neighbouring TSO. Coupling with neighbouring electricity markets is conditioned on removing the legal obstacles to establishing a local dayahead market. | | |

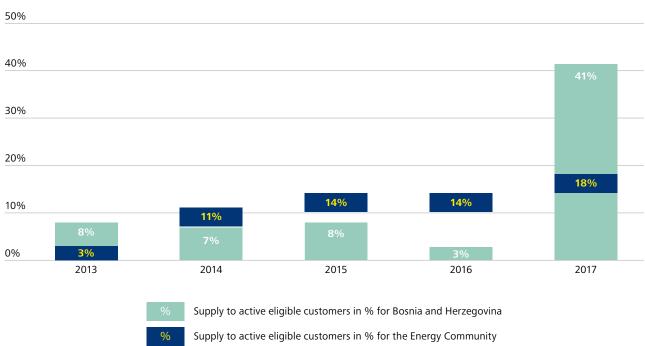
The Third Energy Package is not transposed into the legislation of Bosnia and Herzegovina and the existing legislation does not support the further development of the national electricity market or compliant unbundling and certification of the transmission system operator. The law drafted to bridge these gaps is hostage to the country's difficult constitutional and political structures. Its adoption is a matter of highest priority.

The distribution system operators are still bundled - with electricity production in the Federation of Bosnia and Herzegovina and with electricity supply in Republika Srpska, and compliance programmes are missing. The utility of Brčko District is exempted from legal and functional unbundling, but is still using bundled accounts. The lack of effective unbundling is subject to an infringement case against Bosnia and Herzegovina, initiated by the Secretariat in 2018. It is a substantial obstacle to competition.

All customers are eligible to switch suppliers and only households and small customers can access universal service. There are eight incumbent "public" utilities and a number of private suppliers, which could offer their services across the territory of Bosnia and Herzegovina. Nevertheless, except for a number of large customers supplied on the market, the rest are mainly supplied by their local utilities which also provide universal supply within their area of operation. The advantage of access to domestic alternative supply has never been exploited.

The wholesale market in the Federation of Bosnia and Herzegovina is deregulated. However, while only households and small customers are entitled to regulated supply, the wholesale price of electricity for universal service provided by the incumbent generators in Republika Srpska is still regulated. This is limiting free access to the market and must be abandoned. Cross-subsi-





Source: State Electricity Regulatory Commission of Bosnia and Herzegovina

dies between commercial customers and households, currently averaging at a significant 25%, strongly deter market liberalization efforts and must also be eliminated.

The obligation for publication of electricity market data is not transposed. Nevertheless, NOS BIH is developing tools for provision of data to European Network of Transmission System Operators' (ENTSO-E) transparency platform. The Connection Network Codes were transposed by a decision of the state energy regulator, the deadline for implementation is June 2021.

Preparatory activities for setting up of the organized market in Bosnia and Herzegovina could already commence despite the deficient legal framework. The prospects for market coupling of Bosnia and Herzegovina with Croatia, Montenegro and Serbia depend on the adoption of a new legal framework. The Croatian power exchange CROPEX has expressed its interest to couple with the market of Bosnia and Herzegovina.

The procurement of balancing services (including balancing reserve capacity and balancing energy) takes place on a competitive balancing market on an hourly basis. The rules are approved by the state regulatory authority SERC, and the transmission system operator NOS BIH exchanges balancing services with the other transmission system operators of the SLO-HR-BIH control block, and with Montenegro and Serbia on a bilateral basis.



Bosnia and Herzegovina

Gas

Gas Implementation

| Gas Indicators | Transposition Assessement | Implementation Status | Descriptions |
|------------------------|------------------------------|-----------------------|--|
| Unbundling | X | 0% | None of the three transmission operators have been unbundled or certified. Distribution of gas is performed by the same companies engaged in the supply and trade of natural gas under de minimis clause. |
| Access to the networks | X | 16% | In the Federation, negotiated access without adopted transmission and distribution tariffs is applied, contrary to the <i>acquis</i> . In Republika Srpska, the tariffs are applied only for a spur of the transmission pipeline Karakaj – Zvornik. Third party access is not implemented. |
| Wholesale market | X | 14% | The country's market, divided into two separate entity markets, is foreclosed. Neither an organized exchange nor any other trading platform (e.g. virtual trading point or balancing platform) is in place. |
| Retail market | X | 10% | Customers in Federation of Bosnia and Herzegovina are still captive. In Republika Srpska, there are different suppliers, and regulated prices remain only for household customers. |
| Interconnectivity | X | 16% | For the single interconnection point between Serbia and Bosnia and Herzegovina, negotiations on an interconnection agreement have not started yet. |

Bosnia and Herzegovina is further away from adopting a State law than ever. It would regulate the gas market and transpose the main Third Energy Package requirements. This is why the country is subject to several infringement cases in this context as well as penalizing measures by the Ministerial Council since October 2015.

Whereas the Federation of Bosnia and Herzegovina has not been willing to move ahead without a consensus on broader institutional competences at the state level, Republika Srpska has acted unilaterally and proceeds at its own pace.

At present, Republika Srpska has in general transposed the Third

Energy Package in the gas sector by adopting a Gas Law in 2018 and at same time decoupled its legal and regulatory framework from the state level and consequently the other entity, which will be detrimental to gas market integration of the country.

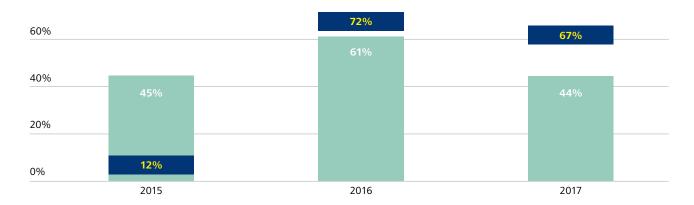
Federation of Bosnia and Herzegovina continues to apply a non-compliant government decree from 2007 and has failed to transpose virtually all key principles of the gas *acquis*.

The Agreement on Removal of a Serious and Persistent Breach under the Energy Community Treaty in the gas sector, signed in 2016 in Sarajevo, has not been respected by any party from Bosnia and Herzegovina.

Retail Market Opening

100%

80%



% Supply to non-households at non-regulated prices in % of total non-households' consumption in Bosnia and Herzegovina

Supply to non-households at non-regulated prices in % of total non-households' consumption in the Energy Community

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

The priorities remain the same as in previous reporting years. Both entities and the State authorities must find a compromise solution under the Energy Community rules to implement the Third Energy Package provisions on the whole territory of Bosnia and Herzegovina. This is even more urgent as the demand

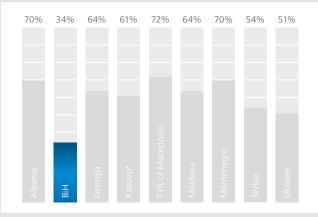
of natural gas in Bosnia rises continuously, and the country is forecasting ambitious gas investment plans. Without a robust regulatory framework and stable market-friendly rules to attract traders, investments and secure gas supplies will remain unfulfilled.



Bosnia and Herzegovina National Authorities

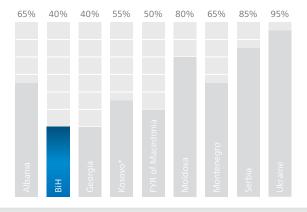


Regulatory Authority



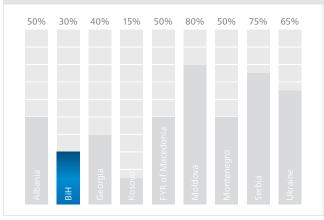
The State Electricity Regulatory Commission (SERC) is the only Contracting Party regulator whose legal set-up does not comply with the Third Energy Package requirement for a single regulatory authority for electricity and gas at national level. This has been subject to infringement procedures. In spite of the legal short-comings, SERC is proactively performing its duties. The establishment of a front-running electricity balancing model is an excellent example. By addressing VAT payments in the network fee, SERC allowed the electricity system operator NOSBIH to participate in regionally coordinated capacity allocation by SEE CAO.

○ 1 ○ Competition Authority



The body in charge of enforcing competition law at state level is the Competition Council. In the past year, the Competition Council did not render any decisions in the energy sectors.

State Aid Authority



The Law on the System of State Aid is enforced by the State Aid Council, assisted by a secretariat. The independence of the State Aid Council remains questionable as both the decision-making body as well as the secretariat are closely linked to the Government in terms of nomination of its members and financing. Furthermore, effective enforcement of the State aid *acquis* is hindered by the limited human resources of the enforcement authority. The State Aid Council failed to take any enforcement action in the energy sectors in the reporting period.



Bosnia and Herzegovina

Oil Implementation

| Oil Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--------------------------------|------------------------------|-----------------------|---|
| Stockholding obligation | × | (0% | Bosnia and Herzegovina does not have compulsory stocks of oil and petro- leum products on the state level and there is no national policy to meet the obligations of Directive 2009/119/EC. |
| Availability and accessibility | X | 0% | Availability and accessibility of oil stocks do not exist. |
| Reporting | | 0% | There is currently no monthly oil data collection being carried out. Such statistics would serve as the basis for determining the amount of stocks to be held in order to meet Bosnia and Herzegovina's stockholding obligations. |
| Emergency procedures | × | 0% | There are no emergency procedures in place in compliance with Directive 2009/119/EC. |

Bosnia and Herzegovina does not have legislation on compulsory stocks of oil and petroleum products on the state level and there is no national policy to meet the obligations of Directive 2009/119/EC. The technical assistance on the oil stocks model for an emergency stockholding system provided by the Secretariat in 2016 has not been followed up by concrete proposals/actions from the Ministry of Foreign Trade and Economic

Relations and the working group established for this purpose. The Ministry of Foreign Trade and Economic Relations should take the leading role in this effort and coordinate the work to establish monthly data collection on a bimonthly basis in full compliance with the Monthly Oil Statistics (MOS). The Joint Organisations Data Initiative - Oil (JODI) Questionnaire is not submitted.



Renewable Energy Implementation

| Renewable Energy Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--|------------------------------|-----------------------|---|
| National Renewable Energy Action Plan | • | 50% | In 2016, Bosnia and Herzegovina reached a 25,3% share of renewables, below the trajectory of 36,7% for the years 2015-2016. Many measures described in the National Renewable Energy Action Plan (NREAP) are lagging behind. |
| Quality of support schemes | 0 | 58% | Feed-in tariffs for various renewable energy technologies were adopted by both entities. Activities towards a market-based approach for granting the support have not started in any entity. |
| Grid integration | • | 54% | A state-level law that imposes priority or guaranteed access for renewables to the transmission network and priority dispatch is not in place. Legally guaranteed priority of connection and dispatch is often not respected in practice. |
| Administrative procedures | • | 52% | Institutional coordination in the authorisation process for small, decentralised renewables producers remains to be improved. Increased clarity and simplification of procedures is needed in both entities. |
| Renewable energy in transport | × | 0% | No activities to introduce incentives, promotional campaigns or the relevant certification scheme for biofuels at state or entity level took place in the reporting period. |

The reform of the renewable energy framework has to be speeded up in Bosnia and Herzegovina. All amendments to the legal and regulatory framework, as proposed by the Secretariat, should be adopted in the upcoming period to ensure compliance with the *acquis*.

In order to align with the Guidelines on State aid for environmental protection and energy 2014-2020, Bosnia and Herzegovina has to introduce auctions for renewable energy in all entities. This will enable the cost-effective achievement of the 2020 renewable energy target.

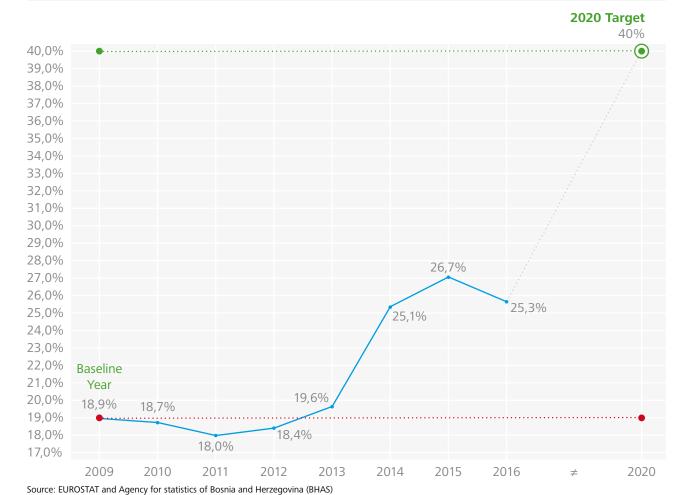
Renewable energy self-consumption of distributed generation has to be allowed by the legislation to encourage and enable customers to become prosumers. Furthermore, the administrative procedures for permitting, construction and licensing need

to be coordinated and streamlined. The system of issue, transfer and cancelation of guarantees of origin has to be implemented in both entities. Compatibility with the standardised European Energy Certificate System and membership in the Association of Issuing Bodies (AIB) remain to be achieved.

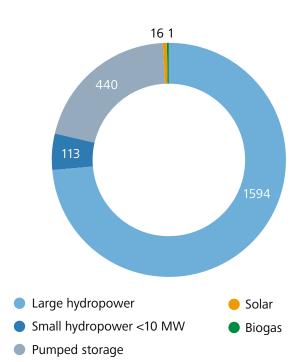
Appropriate measures to increase the share of energy from renewable sources in building regulations and codes remain to be introduced in both entities.

Activities to introduce incentives, promotional campaigns and a relevant certification scheme for biofuels must start without delay. Articles 17 to 21 of Directive 2009/28/EC related to sustainability criteria for biofuels and bioliquids shall be transposed to remove the non-compliance with the *acquis*.

Shares of Energy from Renewable Sources



Total Capacities of Renewable Energy 2017 (MW)



In 2016, Bosnia and Herzegovina achieved a 25,3% share of renewable energy in gross final energy consumption, below the 36,7% median trajectory for 2015-2016. This is due to the downwards revision of biomass consumption and limited investments in newly added renewable energy capacities.

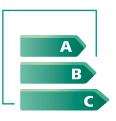
By the end of 2017, the country registered 113 MW of small hydropower plants, 16 MW of solar PV and 1 MW of biogas. No wind project became operational by the end of 2017.

The renewable energy share in transport is lower than 1% and far below the trajectory planned in the NREAP. Without the sustainability criteria in place, any contribution of biofuels or bioliquids cannot be counted towards the target to 2020.

Total capacities of renewable energy (MW):

2165

Source: Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina



Bosnia and Herzegovina

Energy Efficiency

Energy Efficiency Implementation

| Energy Efficiency Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--|------------------------------|-----------------------|--|
| National Energy Efficiency Action Plans and Targets | | 63% | The state-level Energy Efficiency Action Plan was adopted in December 2017, and includes 2020 energy efficiency targets and a forecast of energy savings on state and entity level. The specific targets under the Energy Efficiency Directive are still to be set (central government buildings and energy efficiency obligation scheme). |
| Energy efficiency in buildings | | 59% | Both entities are working on an update of secondary legislation and the training of experts for the certification of buildings is ongoing. There are no registered activities in Brčko District. Energy efficiency programmes for rehabilitation of public buildings are ongoing (combined with an energy management system) and a new programme for the residential sector was launched in November 2017. |
| ESCO market development and financing | • | 53% | Notwithstanding the principal recognition of ESCO projects in current legislation, the ESCO market is not functioning and important legal gaps remain. In June 2018, model contracts and a legal gap analysis were developed under international technical assistance. |
| Energy efficient products - labelling | 0 | 23% | No progress was registered in the reporting period. Republika Srpska adopted nine delegated regulations in March 2016. There have been no activities in Federation of Bosnia and Herzegovina and Brčko District. |
| Institutional capacities | ~ | 48% | Each entity established an energy efficiency and environmental fund. Coordination between state and entity levels has improved with the establishment of the Permanent Coordination Group and different ad-hoc technical working groups, with participation of representatives of public institutions and international donors. |

The reporting period was characterised by certain progress: adoption of the state-level Energy Efficiency Action Plan, a roadmap for implementation of the Energy Efficiency Directive and coordination activities to support the roadmap's implementation. Yet, additional measures remain to be adopted in order for Bosnia and Herzegovina to be compliant with the energy efficiency *acquis*.

The first priority is the transposition of the Energy Efficiency Directive through amendments of the existing primary legislation in the two entities and initiation of this process in Brčko District. Bosnia and Herzegovina must also submit the 2nd Annual Progress Report under the Energy Efficiency Directive. For the Federation, the priority is to implement in parallel the Law on Energy Efficiency through adoption of secondary legislation and to transpose the Labelling Directive. For Republika Srpska, the priority is to complete the implementation of the Buildings Directive.

Energy efficiency criteria should be introduced in state pub-

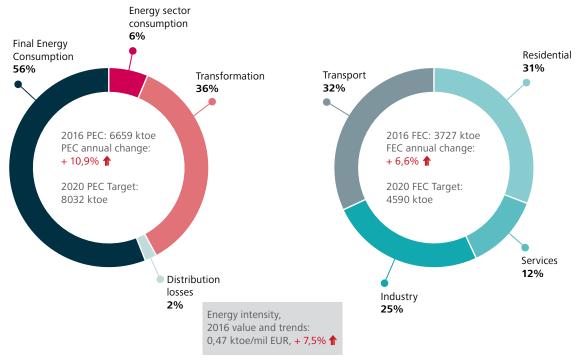
lic procurement procedures and public–private partnership schemes made attractive for energy efficiency projects in order to boost the creation of an energy efficiency market in Bosnia and Herzegovina.

Putting in place adequate structures for monitoring of energy efficiency measures and verification and reporting should be another priority.

Energy Efficiency Indicators

Primary Energy Consumption (PEC) in 2016 and trends

Final Energy Consumption (FEC) in 2016 and trends



Source: EUROSTAT 2018 data and Contracting Party's Annual Reports under Directive 2012/27/EU

Implementation of Energy Efficiency Product Regulation Overview

| | O | | 0= 0== | | 555 | 0= 0== | | | \$\$\$ | BB () | ₩ <u></u> |
|---------------------|-----------------------|---------------------------------------|----------------------------|-------------|------------------|-------------------------|---------------------------------|-----------------|---------------|-------------------------------|--------------------------------------|
| FRAMEWORK DIRECTIVE | Household dishwashers | Household refrigerating appliances | Household washing machines | Televisions | Air conditioners | Household tumble driers | Electrical lamps and luminaires | Vacuum cleaners | Space heaters | Water heaters & storage tanks | Domestic ovens, hobs and range hoods |
| | | | | | | | | | | | |

Adopted, implementation issues detected

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

Adopted and implemented

No progress with adoption/implementation



Bosnia and Herzegovina

Environment

Environment Implementation

| Environment Indicators | Transposition Assessement | Implementation Status | Descriptions |
|---|------------------------------|-----------------------|--|
| Environmental impact assessment (EIA) and strategic environmental assessment (SEA) | ~ | 43% | The entity authorities in Bosnia and Herzegovina are not sufficiently staffed to carry out the task. The transboundary impact of projects is usually not considered and the level of public participation is weak. |
| Sulphur in Fuels | • | 30% | Bosnia and Herzegovina is still under an infringement procedure for the lack of national provisions transposing the 1,00% threshold for heavy fuel oil as well as the 0,10% threshold for gas oil and the implementation thereof. |
| Large combustions plants and industrial emissions | ~ | 50% | The NERP was adopted and its implementation started on 1 January 2018. Three plants have started their opt-out on the same date. |
| Nature protection | • | 47% | In Federation of Bosnia and Herzegov- ina, a network of protected areas is established, albeit without effective protective measures. In Republika Srpska, the 2025 Biodiversity Strategy concedes that an ecological network still needs to be established. |

The entity authorities of Bosnia and Herzegovina have to significantly increase their administrative capacities dealing with environmental assessments. The quality of both environmental impact assessments and strategic environmental assessments has to be improved and early and effective opportunities must be provided to the public to participate in the assessment procedures.

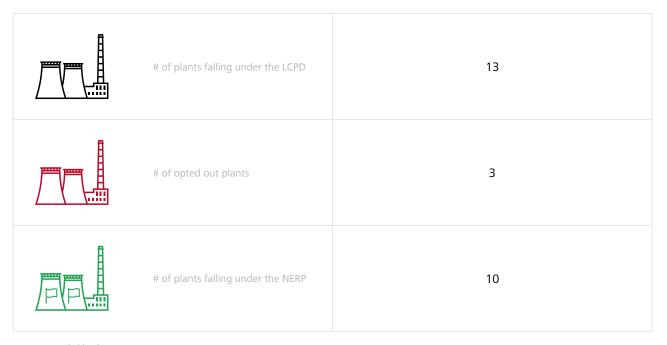
As regards legislation on the sulphur content of liquid fuels, Bosnia and Herzegovina has still not rectified the breaches as stipulated in the Decision of the Ministerial Council adopted in 2016. Consequently, the Secretariat referred the case to the Ministerial Council under Article 92 of the Treaty.

Both entities have established emission limit values for existing plants in their secondary legislation in compliance with the Large Combustion Plants Directive. The National Emission Reduction

Plan (NERP) of Bosnia and Herzegovina, approved by the Secretariat, is in compliance with the Energy Community *acquis communautaire*. Sufficient financing must be ensured by the operators of combustion plants in order to follow through with its implementation.

Based on its entity legislation, Bosnia and Herzegovina is in a position to properly implement the provisions of the Wild Birds Directive. In total, two strict nature reserves, three national parks, sixteen nature monuments, five nature parks and two areas for resource management were established. However, 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 are missing. Furthermore, the ecological network in Republika Srpska needs to be established as identified by the 2025 Biodiversity Strategy.

Installations Under the Large Combustion Plants Directive



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 | ~ | 23% | Bosnia and Herzegovina does not have a clearly defined national GHG inventory system. To date, no agreement on who will manage and store data at national level has been reached. A Climate Change Adaptation and Low Emission Development Strategy has been adopted by the Council of Ministers in 2013. There are no provisions on policies, measures and projections. |
| National Energy and Climate Plans (NECPs) | ~ | 8% | A national working group on the NECPs has been officially set-up in September 2018. Preparatory work on the analytical and technical aspects of the NECP (reference and policy scenarios, templates) has not started yet. Regional consultations took place after the submission of the draft national plans. |

Bosnia and Herzegovina is a non-Annex I country to the United Nations Framework Convention on Climate Change (UNFCCC) since 2000. Bosnia and Herzegovina is reporting regularly to the UNFCCC and ratified the Paris Agreement in March 2017. In 2010, it submitted its First National Communication to the UNFCCC Secretariat. In October 2013, the Second National Communication was adopted. The Third National Communication and the Second Biennial Update Report on greenhouse gas emissions were submitted to the UNFCCC on 13 June 2017. Preparation of the Fourth National Communication and the Third Biennial Update Report on greenhouse gas emissions is in its inception phase.

In its Nationally Determined Contribution (NDC), the emission reduction that Bosnia and Herzegovina unconditionally might achieve, compared to the business-as-usual scenario, is 2% by 2030 which would mean 18% higher emissions compared to the base year 1990. The NDC covers carbon dioxide (CO $_{\rm 2}$), methane (NH $_{\rm 4}$) and nitrous oxide (N $_{\rm 2}$ O). The country is currently preparing its NDC Implementation Plan, which should guide the reduction of emissions in the upcoming years.

Climate change issues remain peripheral to most institutions in Bosnia and Herzegovina, which is manifested by the insufficient number of provisions regulating this issue. Although Bosnia and Herzegovina is reporting regularly to the UNFCCC, action on climate change does not take place. Most of the work so far has been coordinated by the United Nations Development Programme (UNDP) due to limited national capacities.

Bosnia and Herzegovina should adopt national legislation on climate change and transpose the Monitoring Mechanism Regulation. It should strengthen institutional capacities and formally define competences and responsibilities in this area. This includes the establishment of a greenhouse gas inventory system at national level, in accordance with the requirements of Regulation (EU) 525/2013. The country should also develop technical models assessing climate change scenarios and impacts on all sectors of the economy, including a concrete timeframe for priority actions and a list of financial commitments to finally implement its strategy on climate change.

The integration of energy and climate policies in Bosnia and Herzegovina faces several obstacles due to the country's complex institutional set up, the undefined responsibilities of state bodies and limited national capacities. A national working group on NECPs has been formalized to prevent adverse incentives and mitigate inconsistencies between national policies and strategies on energy and climate.



Infrastructure Implementation

| Infrastructure Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--|------------------------------|-----------------------|---|
| National competent authority | ~ | 20% | An analysis performed by the Ministry of Foreign Trade and Economic Relations indicated that the optimal solution for Bosnia and Herzegovina is to designate one state-level competent authority, one competent authority for each entity and one for the Brčko District. Neither authority was designated to date. |
| Manual of procedures | ~ | 20% | The first general draft of the manual of procedures exists, but it was not published to date, neither by the entities nor state-level authorities. |
| National regulatory authority involvement | ~ | 0% | To date, the national regulatory agency did not publish the methodology or the criteria used to evaluate investments in electricity and gas infrastructure projects and the higher risks incurred by them. |

As Bosnia and Herzegovina did not transpose Regulation (EU) 347/2013, as adapted and adopted by the Ministerial Council, it is not compliant with the provisions of the Regulation for which the deadlines have already expired. The country therefore breaches the Energy Community infrastructure *acquis*.

On 22 June 2018, a Reasoned Request was submitted to the Ministerial Council against Bosnia and Herzegovina concerning the lack of transposition and lack of notification to the Secretariat of the measures transposing Regulation (EU) 347/2013 (Case ECS-3/18).

Bosnia and Herzegovina's authorities must adopt a legal act that will ensure transposition of the Regulation into its national legislation.

The Regulation's transposition is particularly important due to its potential to facilitate the realization of the 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.

| | Proposed 2018 PECI | 'PMI projects | |
|-----------------------|--------------------|---------------|---------------|
| Electricity: 1 | PECI: 1 | PMI: 3 | Gas: 3 |



Bosnia and Herzegovina

Statistics

Statistics Implementation

| Statistics Indicators | Transposition Assessement | Implementation Status | Descriptions |
|-----------------------|------------------------------|-----------------------|---|
| Annual statistics | | 77% | Questionnaire on household consumption (MESH) is not transmitted. |
| Monthly statistics | | 20% | No monthly reporting is in place. |
| Quality report | | (0% | Quality report is not transmitted. |
| Price statistics | | 67% | Price components for 2017 were not compiled. |

The responsible institutions of Bosnia and Herzegovina have achieved certain progress with regard to annual statistics, but failed to comply with the key requirements of the *acquis*, particularly related to monthly energy statistics and price statistics.

The full set of annual energy statistics was compiled and transmitted to EUROSTAT following the defined procedure although with considerable delay.

The results of the survey of energy consumption in households from 2015 were not adequately captured, which was reflected in the quality of reported data in the questionnaires on renewable energy sources. The breakdown of the energy consumption in households per final use is not reported, as required by the *acquis*.

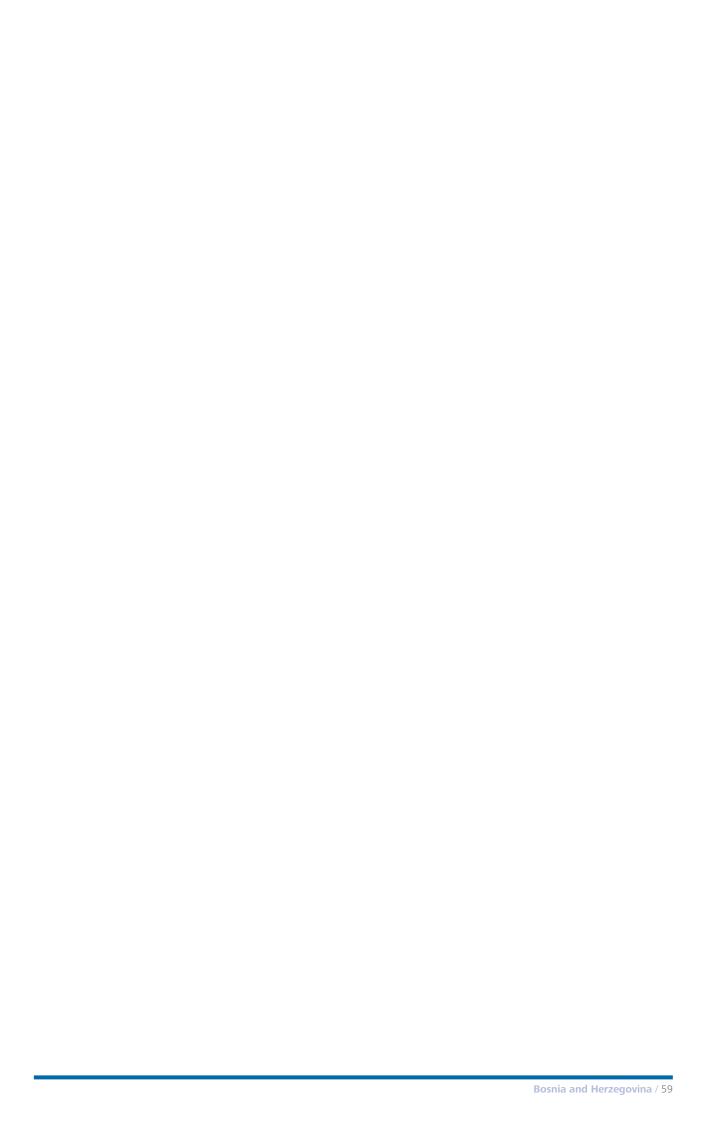
The Agency for statistics of Bosnia and Herzegovina (BHAS) started to compile monthly reports for electricity and coal, but the submission of monthly data to EUROSTAT was suspended in 2017 and has not been resumed yet. A comprehensive administrative framework for monthly reporting is still missing, along with a corresponding IT solution.

The quality report due in 2018 has not been submitted to EU-ROSTAT yet.

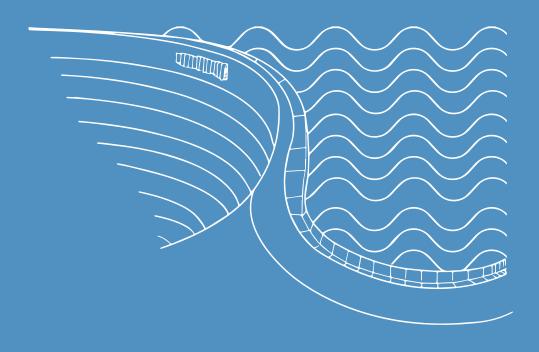
The prices of electricity and natural gas charged to industrial and household end-users, broken down per consumption band and per taxation level, are compiled and aggregated and submitted to EUROSTAT.

As regards the breakdown of components of electricity and natural gas prices, the required data for the second semester of 2017 covering disaggregated prices for industrial end-users and for households were not submitted to EUROSTAT in a compliant manner.

National statistics institutions have to pay special attention to meeting the quality related requirements, including the completeness, timeliness, quality reporting and revision policy and to complete monthly data collection in line with the *acquis*. Reporting of the disaggregated prices of electricity and natural gas charged to end-users is an ultimate priority.



Georgia









Summary Implementation

| Summa | ary Indicators | Transposition Assessement | Implementation Status | Descriptions |
|-------------|----------------------|------------------------------|-----------------------|---|
| F | Electricity | × | 21% | Implementation in the electricity sector of Georgia is still at an early stage. |
| 6 | Gas | X | 14% | Implementation in the gas sector of Georgia is yet to begin. |
| • | Oil | 0 | 10% | Implementation in the oil sector of Georgia is yet to begin. |
| | Renewable Energy | X | 30% | Implementation in the renewable energy sector of Georgia is still at an early stage. |
| A B | Energy Efficiency | ~ | 26% | Implementation in the energy efficiency sector of Georgia is still at an early stage. |
| 8 | Environment | 0 | 39% | Implementation in the environment sector of Georgia is still at an early stage. |
| ** | Climate | | 15% | Implementation in the climate sector of Georgia is yet to begin. |
| *** | Infrastructure | X | 21% | Implementation in the infrastructure sector of Georgia is still at an early stage. |
| <u>lili</u> | Statistics | | 50% | Implementation in the statistics sector of Georgia is moderately advanced. |

Overall number of cases: **0**

No open Article 91 cases

No open Article 92 cases



Electricity Implementation

| Electricity Indicators | Transposition Assessement | Implementation Status | Descriptions |
|------------------------|------------------------------|-----------------------|---|
| Unbundling | X | 15% | Unbundling rules with respect to TSOs and DSOs are yet to be adopted and implemented. |
| Access to the networks | × | 26% | Third party access is guaranteed to certain categories of system users, including suppliers. System access is based on the regulator's approved network tariffs. Compliant system access and congestion management rules are yet to be established. |
| Wholesale market | × | 19% | Wholesale prices are partially deregu- lated, however, regulated generators produce the majority of domestically consumed electricity. The balancing market is based on direct bilateral arrangements. An organised electricity market is not yet in place. |
| Retail market | × | 24% | The customers' eligibility right is formally granted, but an efficient supplier switching mechanism is not in place and is underused in practice. Retail prices are fully regulated. |
| Regional integration* | × | 3% | Georgia has no connection with any other Contracting Party or EU Member State. Its power system operates in a synchronous regime with Russia and Azerbaijan, and in a parallel asynchronous regime with Turkey. There is no regional electricity market integration initiative. |

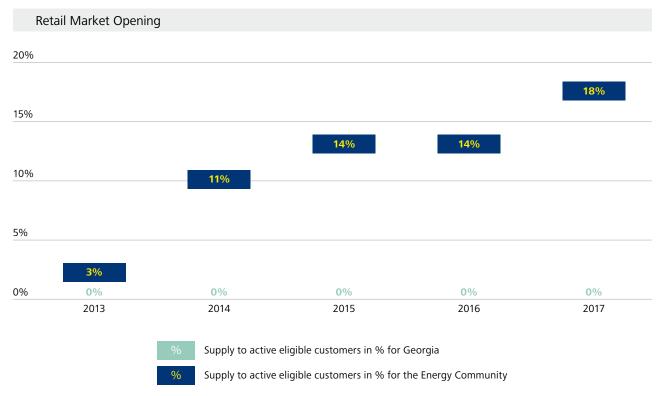
^{*} not taken into account in overall assessment.

According to the Accession Protocol, Georgia committed to implement Third Energy Package rules on electricity by 31 December 2018. An additional period of one year was agreed as necessary for testing and adjusting the relevant implementing provisions and market instruments. In order to have all rules in full effect on 1 January 2020 at the latest, the new legislation, including the new Law on Energy and secondary legislation, must be put in place without delay.

Unbundling of vertically integrated market incumbents is one of the key priorities for Georgia. Even if currently active electricity transmission companies are not engaged in generation or supply, vertical integration remains at the state level where the Ministry of Economy and Sustainable Development exercis-

es control over state-owned energy undertakings performing generation, transmission and trade activities. Separation within the State shall be ensured together with the designation of a future transmission system operator.

All three undertakings licensed for distribution of electricity are also engaged in supply. Electricity supply is in fact inherently linked with distribution and each authorised distributor is automatically granted the status of an incumbent supplier. Legal and functional unbundling of distributors is of core significance to ensuring the separation of commercial interests from infrastructure activities and, subsequently, in encouraging new market entries by independent suppliers.



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

Besides being highly concentrated and illiquid, Georgia's electricity market also remains intensely regulated. Despite the fact that wholesale prices of domestically produced electricity are partially deregulated and set based on bilateral sale and purchase agreements, the major share of annual demand is still covered by regulated generators. At the retail level, all prices for electricity supplied to final customers remain regulated.

Considering the pro forma eligibility of customers and a low threshold of 1 kWh of annual consumption for customers' direct participation in the wholesale market, all customers are nominally able to choose their supplier and acquire electricity directly from generators or wholesale traders. However, because of market concentration, absence of an effective supplier switching mechanism and prevailing price regulation, there is only a marginal shift towards non-regulated relations. Only two customers are reported as trading directly in the wholesale market.

The main challenge for Georgia is the creation of an open, competitive and liquid electricity market. Full opening of the market should be ensured through gradual phasing out of regulated

prices and comprehensive price reform promoting market-based prices. Establishment of an organised electricity day-ahead market should also become a priority.

As the future electricity market is currently being designed, Georgia should aim for a gradual opening of the market and avoid any further concentration of market powers. For the latter, system operators must be separated from electricity trading interests. An independent market operator shall be designated to proceed with the reform.

A major concern for the development of a competitive market and price deregulation in Georgia is the presence of long-term guaranteed power purchase agreements concluded with new generators. In cases where the termination of such agreements is not possible, market opening should include gradual market release of existing generation capacities, whereas new investments should be supported by creating a transparent and stable regulatory regime, developing a resilient electricity network and enhancing cross-border interconnection capacities.



Georgia

Gas Implementation

| Gas Indicators | Transposition Assessement* | Implementation Status | Descriptions |
|------------------------|-------------------------------|-----------------------|---|
| Unbundling | × | 7% | The TSO is legally and to a large extent functionally independent from other gas undertakings. Distribution is still carried out by incumbent suppliers. Unbundling rules are yet to be established and implemented. |
| Access to the networks | × | 12% | A comprehensive system of transparent and non-discriminatory third party access is yet to be established and enforced. The capacity allocation procedure does not allow for open and transparent booking. An entry/exit transmission tariff methodology is missing. |
| Wholesale market | × | 20% | 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 | × | 8% | The customers' eligibility right is formally granted but is underused in practice. End-user gas retail prices remain partially regulated. The necessary legal instruments for customer protection are yet to be established. |
| Interconnectivity | × | 40% | Georgia has well-developed cross-border connections with all neighbouring gas systems. However, diversification of external gas supplies remains at stake. A gas emergency plan is yet to be developed. |

^{*} Implementation deadline for Georgia is 31 December 2020.

Adoption of the new Law on Energy and further enactment of compliant secondary legislation is the first priority in order to build the necessary legal framework for gas market reforms.

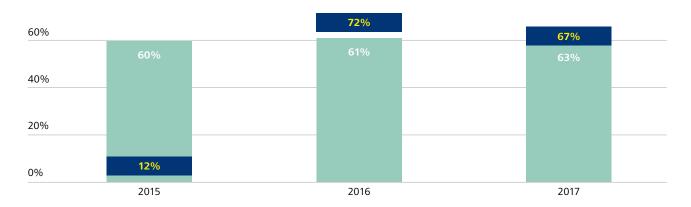
As key priorities in reforming its gas sector, Georgia must seek for unbundling of vertically integrated undertakings, establish a system for open and transparent access to gas networks and put in place the necessary instruments for efficient supplier switching. Further on, measures for gradual opening of the gas market should be considered in the context of current legislative developments and introduced so as to trigger competition and enhance market liquidity.

Existing intergovernmental agreements and long-term contracts guarantee the availability and affordability of gas for Georgia but, at the same time, they restrict market liquidity and limit its potential for diversification. Reform of the wholesale gas market should follow after the adoption of the Gas Market Concept Design and other necessary regulatory acts. In particular, revised bilateral market instruments should be launched by 31 December 2020. Establishment of the organised gas market in Georgia, including a gas exchange, is not expected for several more years due to the lack of liquidity.

Retail Market Opening

100%

80%



% Supply to non-households at non-regulated prices in % of total non-households' consumption in Georgia

% Supply to non-households at non-regulated prices in % of total non-households' consumption in the Energy Community

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

Georgia, considering its marginal domestic gas production, will remain a net importer of gas. Currently, the country has well-developed cross-border connections with all neighbouring gas systems and provides so far the only possible onshore route for transit of Azeri and Russian gas to Turkey and Armenia respec-

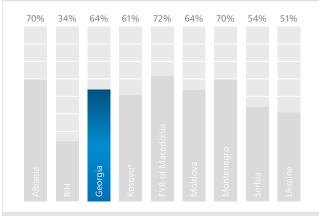
tively. This strategic role of Georgia may be further exploited for opening and integration of its internal gas market, thus attaining more diversified external sources, additional flexible peak supply solutions and increased competition both at wholesale and retail levels.



Georgia National Authorities

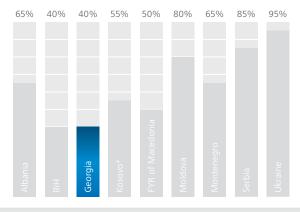


Regulatory Authority



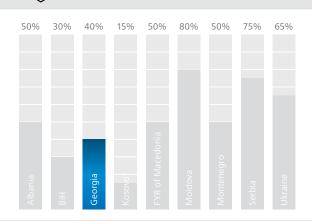
GNERC is the single authority equipped with nation-wide competences in electricity and gas. This corresponds to the requirements of the *acquis*, albeit the Third Energy Package has not been transposed yet. GNERC is headed by five commissioners including a chairperson, each with a term of six years in office. A rotation scheme is in place. The regulator has a large degree of independence, including budgetary autonomy. Central legal shortcomings entail the lack of a limit for the renewal of commissioners' terms and criteria for selection of commissioners. A clear timeframe for their appointment procedure is also missing. The competences of GNERC are largely in line with the *acquis*, with one critical exception, which is the right to approve electricity and gas market rules. The regulator has the right to carry out inspections and issue penalties although only up to a level that is below the requirements of the *acquis*.

Competition Authority



The Competition Agency is responsible for the enforcement of competition law in Georgia. However, the regulatory authority, GNERC, is responsible for enforcement in the regulated sectors of the economy, including electricity and natural gas sectors. GNERC does not have the same effective enforcement tools as the Competition Agency.

State Aid Authority



The Competition Agency is also responsible for the enforcement of State aid law in Georgia. However, its competence is limited due to a narrow definition of State aid.



Oil Implementation

| Oil Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--------------------------------|------------------------------|-----------------------|---|
| Stockholding obligation | 0 | 10% | Georgia holds no emergency oil stocks at present. The Oil Stockholding Act and secondary legislation are expected to be adopted in the course of this year. |
| Availability and accessibility | • | 10% | The draft Oil Stockholding Act foresees that the compulsory stockholders shall ensure that emergency stocks are available and physically accessible at all times. The emergency stocks shall be identifiable and accountable at any time and must be accessible for verification. |
| Reporting | 0 | 10% | According to the draft Oil Stockholding Act, the Central Stockholding Entity shall submit at the end of each month a statistical summary to the Statistical Agency. |
| Emergency procedures | • | 10% | Currently, no procedures are in place to release emergency oil stocks. However, in the event of a disruption in supply, the release of the stocks is decided by a decree of the Minister. Where there is an effective international decision regarding the release of the stocks, the Government is entitled to decide on the release of the stocks as fulfilment of its international obligations. |

Georgia holds no emergency oil stocks at present. The Secretariat assisted Georgia in aligning its legislation with the Energy Community oil *acquis*. A five-year action plan (2018-2023) for oil stockholding, the Oil Stockholding Act of Georgia and the related annexes were drafted and consulted with all relevant stakeholders in the country. The Secretariat expects that both

primary and secondary legislation will be adopted in the course of this year.

The Joint Organisations Data Initiative (JODI) Questionnaire is not submitted.



Renewable Energy Implementation

| Renewable Energy Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--|------------------------------|-----------------------|--|
| National Renewable Energy Action Plan | ~ | 20% | The National Renewable Energy Action Plan was prepared. The deadline for its adoption is 31 December 2018. The country is not obliged to set a binding 2020 renewables target. |
| Quality of support schemes | 0 | 35% | The system of promoting hydropower based on guaranteed power purchase agreements is distorting the market and not in line with the State aid rules. |
| Grid integration | ~ | 55% | Provisions for guaranteed and priority access are not implemented. Compliant rules on renewable energy integration into the market and grids are not in place. |
| Administrative procedures | ~ | 43% | Administrative procedures, involving various authorities, are not coordinated and streamlined. |
| Renewable energy in transport | × | 0% | Sustainability criteria for biofuels and bioliquids have to be adopted by 31 December 2018. |

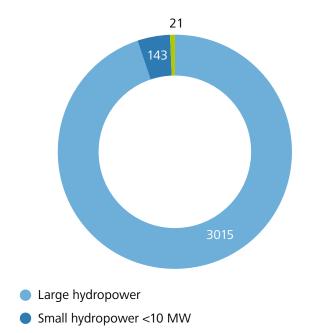
The legal framework is currently being reviewed with the view of incorporating a special law dedicated to renewables to meet the requirements of Directive 2009/28/EC. The law is expected to be completed by the 31 December 2018 deadline. Furthermore, a National Renewable Energy Action Plan (NREAP) setting an indicative target to 2020 is planned to be adopted by the same deadline. The country does not have a binding target due to its late accession to the Energy Community.

The new renewable energy law is expected to transpose the requirements for market based support schemes for renewable energy compliant with the Guidelines on State aid for environmental protection and energy 2014-2020; grid connection and integration of renewable energy into the system; streamlining,

simplification and coordination of procedures for authorization; licensing and the one-stop shop; and the system to issue, transfer and cancel guarantees of origin for energy from renewable sources.

According to Georgia's Accession Protocol, the sustainability criteria for biofuels and bioliquids shall be adopted by 31 December 2018. This gives Georgia still some months to comply with this obligation. The draft NREAP includes measures for the transport sector, and the draft law defines overall principles and responsibilities with respect to the promotion of biofuels. Nevertheless, secondary legislation will be required to ensure proper implementation of Articles 17 to 21 of Directive 2009/28/EC.

Total Capacities of Renewable Energy 2017 (MW)



Source: Ministry of Economy and Sustainable Development

Wind

Georgia has reached a 33% share of renewable energy in 2015. Albeit not having a binding target for 2020, Georgia is taking further steps to increase the promotion of renewable energy beyond the development of hydropower.

In addition to 3015 MW of large hydropower plants, 143 MW of small hydropower and 21 MW of wind were in operation in Georgia by the end of 2017.

The introduction of auctions for granting support to renewable energy will enable the cost-effective development of renewable energy for the benefit of energy users in Georgia.

Total capacities of renewable energy (MW):

3179



Energy Efficiency Implementation

| Energy Efficiency Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--|------------------------------|-----------------------|--|
| National Energy Efficiency Action Plans and Targets | 0 | 24% | The 1st draft EEAP, which will set the 2020 target for primary energy consumption and final energy con- sumption, has been drafted and put to public consultation. |
| Energy efficiency in buildings | ~ | 28% | The law was drafted and is currently being discussed by the Parliament. |
| ESCO market development and financing | 0 | 30% | The energy services market is not yet developed and there are no projects implemented with ESCO financing to date. |
| Energy efficient products - labelling | ~ | 12% | Nine of the eleven mandatory labelling regulations are prepared. Their adoption is pending. |
| Institutional capacities | 0 | 33% | Once the decisions on establishing the Energy Efficiency Focal Entity and the Energy Efficiency Fund are taken, these institutions will need significant capacity building. |

According to its Accession Protocol, Georgia's transposition deadlines are as follows: 31 December 2018 for the Energy Efficiency Directive, 30 June 2019 for the Energy Performance in Buildings Directive and 31 December 2018 for the Energy Labelling Directive.

In the reporting period, Georgia made good progress with preparation of the primary legal framework. The first priority remains the adoption of all three laws, on Energy Efficiency, on

Energy Performance of Buildings and on Labelling before the end of 2018, in order to meet the deadlines set in the Accession Protocol.

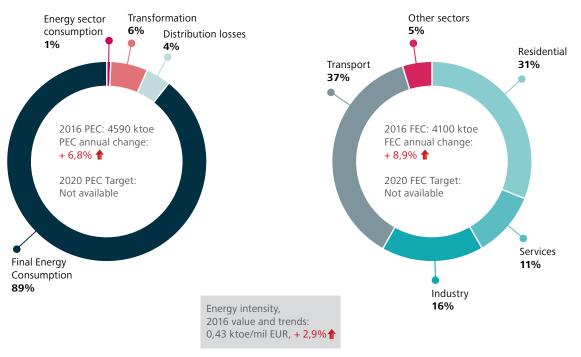
The second priority is to update the Energy Efficiency Action Plan and start its implementation.

Finally, Georgia should adopt the necessary by-laws to ensure full implementation of all three laws mentioned above.

Energy Efficiency Indicators

Primary Energy Consumption (PEC) in 2016 and trends

Final Energy Consumption (FEC) in 2016 and trends



Source: EUROSTAT, International Energy Agency (IEA) data and Contracting Party's Reports

Implementation of Energy Efficiency Product Regulation Overview

| | | | 0= 0== | | <u>-</u> 555 | 0=0== | | | \$\$\$ | | |
|---------------------|-----------------------|---------------------------------------|----------------------------|-------------|------------------|-------------------------|---------------------------------|-----------------|---------------|-------------------------------|--------------------------------------|
| FRAMEWORK DIRECTIVE | Household dishwashers | Household refrigerating appliances | Household washing machines | Televisions | Air conditioners | Household tumble driers | Electrical lamps and luminaires | Vacuum cleaners | Space heaters | Water heaters & storage tanks | Domestic ovens, hobs and range hoods |
| | | | | | | | | | | | |

Adopted and implemented Adopted, implementation issues detected No progress with adoption/implementation

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



Environment Implementation

| Environment Indicators | Transposition Assessement | Implementation Status | Descriptions |
|---|------------------------------|-----------------------|--|
| Environmental impact assessment (EIA) and strategic environmental assessment (SEA) | ~ | 40% | With the new legislation just having entered into force, implementation of environmental impact assessments is at an early stage. Georgia needs to step up its efforts to ensure that the procedures are carried out in accordance with the Environmental Assessment Code. |
| Sulphur in Fuels | ~ | 65% | The rules on land-based fuels were adopted in May 2017 and preparation for their implementation is ongoing. Rules on marine fuels are not yet adopted. |
| Large combustions plants and industrial emissions | × | 13% | Georgia is to ensure that the transposition of the provisions of both directives takes place by the deadlines in the Accession Protocol. Therefore, Georgia has to urgently step up its efforts in this domain. |
| Nature protection | ~ | 53% | Georgia shall focus its efforts on the establishment of effective measures in the protective areas as well as the further designation of such areas. |

The new Environmental Assessment Code entered into force on 1 January 2018, which is the first comprehensive piece of legislation in Georgia on environmental impact assessment and strategic environmental assessment. One of the most important features of the draft code is the introduction of screening and scoping procedures.

The Environmental Assessment Code includes improved procedures for public involvement in the environmental impact assessment as well as provisions on transboundary impact assessment.

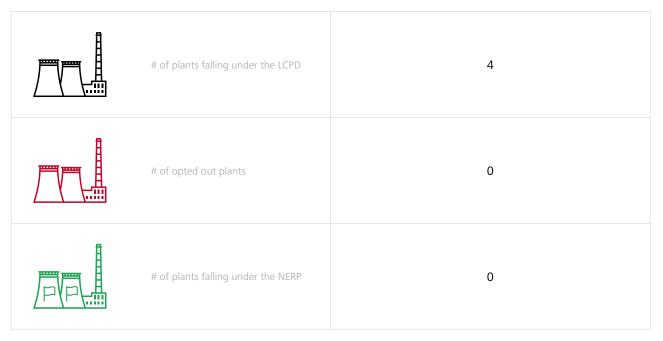
The necessary measures for the implementation of the Strategic Environmental Assessment Directive were introduced by the Environmental Assessment Code, with effect as of 1 July 2018. These provisions ensure that environmental assessments of certain strategic plans and programmes are carried out and that effective public participation takes place.

As regards legislation on the sulphur content of liquid fuels, the Government Order on the establishment of sulphur content limit values in certain liquid fuels was adopted in May 2017, transposing the requirements of heavy fuel oil and gas oil into national law. The adoption of draft legislation on marine fuels should be ensured by the Georgian authorities as soon as possible.

With regard to large combustion plants, domestic legislation that could ensure compliance with either the Large Combustion Plants or the Industrial Emissions Directive has not been adopted yet.

With regard to nature protection, certain steps were taken under the Bern Convention with the official adoption of three designated Emerald sites in this Contracting Party during the reporting period and the announcement of thirty-five further candidate sites. Ensuring the proper functioning of the Emerald Network, which is highly compatible with the Natura 2000 network, would be beneficial for the future classification process.

Installations Under the Large Combustion Plants Directive



Source: compiled by the Energy Community Secretariat



| Climate Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--|------------------------------|-----------------------|--|
| National greenhouse gas emissions monitoring and reporting systems | ~ | 30% | National GHG inventories are elaborated following the 2006 IPCC Methodology. The legislative framework and software tool for GHG data management is under development. As a result of inter-ministerial coordination, the Low Emission Development Strategy (LEDS) was drafted in Georgia. Its adoption is pending. The country is in the process of creating a national system for policies, measures and projections and updating its legislation in line with European standards. |
| National Energy and Climate Plans (NECPs) | ~ | 4% | A national working group on the NECPs has not been set-up yet. Preparatory work on the analytical and technical aspects of the NECP (reference and policy scenarios, templates) has not started yet. Regional consultations took place after the submission of the draft national plans. |

Georgia ratified the Paris Agreement and as a Non-Annex I Party to the UNFCCC submitted its Third National Communication, which among other issues, includes a Climate Change Strategy, a national inventory of greenhouse gases (GHG) and measures for mitigation of GHG emissions.

Back in 2015, the Government of Georgia submitted the Nationally Determined Contribution (NDC) to the UNFCCC, where it pledged to reduce GHG emissions by 15% below the business as usual (BAU) scenario by the year 2030. The conditional target (subject to international support) represents a 25% reduction below the BAU by 2030⁴. In parallel, Georgia is developing a Climate Action Plan for 2020-2030 in order to implement the NDC across all relevant sectors.

Georgia has no dedicated legislation on climate change. However, the Law on Air Protection was amended in 2016 to include some climate provisions and a set of normative acts on climate (Law on Fluorinated Greenhouse Gases, Law on Ozone Depleting Substances) were drafted in 2017 to fulfil the country's commitments under the Georgia-EU Association Agreement, as well as the NDC.

Preparation of dedicated climate change legislation is a priority for Georgia, along with the prompt adoption of the draft Low Emission Development Strategy (LEDS). Although the integration of energy and climate policies has not become a state priority yet, some positive examples do exist, such as the inter-ministerial coordination for the purpose of developing LEDS as well as the inclusion of climate priorities in the National Energy Strategy.

⁴ In absolute terms, a 15% reduction below BAU would mean about 32% below the 1990 level, and a 25% below BAU would mean approximately 41% below the 1990 level



Infrastructure Implementation

| Infrastructure Indicators | Transposition Assessement | Implementation Status | Descriptions |
|---|------------------------------|-----------------------|--|
| National competent authority | × | 0% | The national competent authority has not been appointed yet. |
| Manual of procedures | × | 20% | The first general draft of the manual of procedures exists, but it is yet to be agreed among stakeholders and published. |
| National regulatory authority involvement | × | 50% | The Georgian national regulatory authority has drafted but not yet published its methodology and evaluation criteria. |

Even tough Georgia became a full member of the Energy Community only in the course of 2017, all the deadlines related to Regulation (EU) 347/2013, which are valid for all other Contracting Parties, remain valid for Georgia as well. Nevertheless, GNERC was the first to draft the methodology and evaluation

criteria related to the projects of higher risk, as defined in the Regulation.

Georgia should adopt a legal act that will ensure the transposition of Regulation (EU) 347/2013, into its national legislation.

Proposed 2018 PECI/PMI projects

Gas:

PECI: 1



Statistics Implementation

| Statistics Indicators | Transposition Assessement | Implementation Status | Descriptions |
|-----------------------|------------------------------|-----------------------|---|
| Annual statistics | | 100% | Five annual questionnaires and MESH for 2016 are transmitted. |
| Monthly statistics | | 52% | Monthly data are collected, but not transmitted to EUROSTAT. |
| Quality report | | 0% | Quality report is not transmitted. |
| Price statistics | | (0% | There is no price reporting yet. |

As a new Contracting Party, Georgia has achieved significant progress in bringing its practices closer to what is required by the *acquis* on statistics. The statistics are produced by the national statistics institute, GeoStat.

The energy balance produced by GeoStat is in compliance with Annex B of Regulation (EC) 1099/2008 and five questionnaires were transmitted to and published by EUROSTAT.

In addition, GeoStat conducted a survey of final energy use by the residential sector in 2017, with technical assistance provided by the Secretariat. The results were integrated in the annual data collections including the necessary revision of data series and disaggregated data on final energy consumption in households reported to EUROSTAT in the defined questionnaire.

As to the monthly statistics, Georgia collects and disseminates monthly JODI gas and oil data, as well as production, export and import and supply of electricity. Along with improving the completeness of these collections, Georgia has to transmit the data to EUROSTAT in order to achieve full compliance with Annex C and D of Regulation (EC) 1099/2008.

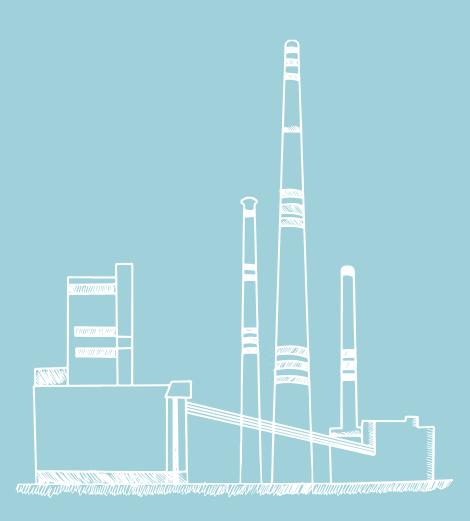
GeoStat introduced quality assurance procedures and prepares quality reports for different domains. The report on quality of transmitted energy data, however, has not been submitted to EUROSTAT yet as required under the Regulation.

The prices of natural gas and electricity charged to end-users, broken down by consumption bands, taxation levels and price components are not disseminated yet. To obtain data on natural gas and electricity prices, GeoStat signed a cooperation memorandum with GNERC in April 2017.

The main challenges in terms of compliance with the statistics *acquis* are related to the production of short-term monthly statistics, as well as price statistics for electricity and natural gas sectors.

In addition, the collected data have to be transmitted to EU-ROSTAT for dissemination.

Kosovo*







Summary Implementation

| Summary Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--------------------|------------------------------|-----------------------|---|
| Electricity | | 42% | Implementation in the electricity sector of Kosovo* is moderately advanced. |
| Gas* | | 30% | Implementation in the gas sector of Kosovo* is still at an early stage. |
| Oil | 0 | 10% | Implementation in the oil sector of Kosovo* is yet to begin. |
| Renewable Energy | 0 | 51% | Implementation in the renewable energy sector of Kosovo* is moderately advanced. |
| Energy Efficiency | 0 | 54% | Implementation in the energy efficiency sector of Kosovo* is moderately advanced. |
| Environment | 0 | 56% | Implementation in the environment sector of Kosovo* is moderately advanced. |
| Climate | 0 | 15% | Implementation in the climate sector of Kosovo* is yet to begin. |
| Infrastructure | | 85% | Implementation in the infrastructure sector of Kosovo* is almost completed. |
| Statistics | © | 77% | Implementation in the statistics sector of Kosovo* is well advanced. |

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





Electricity Implementation

| Electricity Indicators | Transposition Assessement | Implementation Status | Descriptions |
|------------------------|------------------------------|-----------------------|--|
| Unbundling | | 44% | The regulator's decision on the certification of the TSO is pending. The DSO is unbundled in a compliant manner. |
| Access to the networks | 0 | 54% | Third party access is based on publicly available tariffs. Allocation of cross-border capacities by the TSO is subject to the entry into force of the Connection Agreement with ENTSO-E. |
| Wholesale market | 0 | 33% | Wholesale prices are fully deregulated. Day-ahead and balancing markets are not operational. Regulation (EU) 543/2013 on publication of market data is yet to be transposed. |
| Retail market | | 68% | All customers are eligible, and supply prices for high voltage customers are deregulated. The regulator postponed price deregulation for medium voltage customers until 1 April 2019. |
| Regional integration | | 14% | Regional integration is prevented by the unresolved dispute between the TSOs of Kosovo* and Serbia and entry into force of the Connection agree- ment with ENTSO-E. |

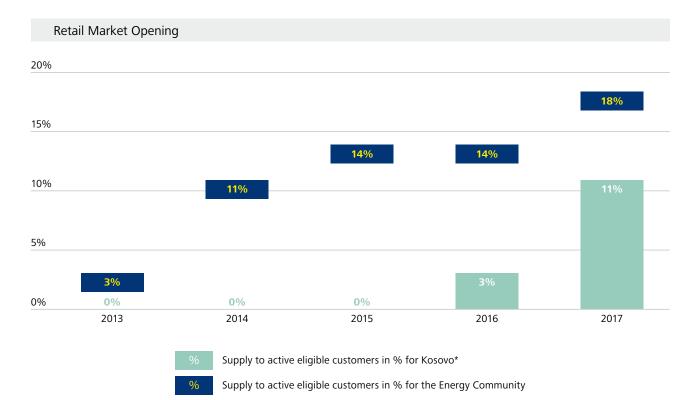
Implementation of the Third Energy Package compliant set of laws adopted in 2016 has slowed down, in particular with regard to electricity market opening and competition development. The lack of regional integration of Kosovo*'s market is limiting the possibilities for competition development. The resolution of a long-standing dispute between the transmission system operators of Kosovo* and Serbia, respectively KOSTT and EMS, is a main prerequisite for unlocking cross-border cooperation and integration of the market.

Negotiations between KOSTT and EMS are facilitated by the Energy Community Dispute Resolution and Negotiation Centre and supported by technical assistance under the WB6 regional energy market connectivity programme. However, no concrete progress has been made yet. The absence of a political solution to this dispute also led to power deviations originating from Kosovo* and Serbia, resulting in frequency deviations in the overall synchronous area of Continental Europe. Finding a sustainable solution to the frequency deviations requires action at political level.

Nevertheless, the ongoing dispute should not prevent Kosovo* from continuing to reform its electricity market. The certification of the transmission system operator shall be finalised in accordance with the deadlines set by the laws. The rules for grid and system operation, in particular those related to system balancing, shall be improved in order to reflect Third Energy Package requirements. In addition, Regulation (EU) 543/2013 on publication of market data and a set of Connection Network Codes must be transposed and implemented by Kosovo*.

The wholesale market is fully deregulated, whereas the retail market remains deregulated for the supply of high voltage customers only. The deregulation of supply prices for medium voltage customers was postponed until 1 April 2019, due to an apparent lack of competition. In practice, supply to all final customers is provided by one supplier, KESCO. Two other licensed retail suppliers have not been active in the market.

The regulator shall step up its monitoring of the functioning of the market and take measures to improve competition in line with the law. In addition, a new biannual report on the functioning of the electricity market must be issued by the regulator.



Source: Ministry of Economic Development

The contractual framework for the construction of the new thermal power plant Kosova e Re, envisaging the establishment of a single buyer of electricity produced by the plant, is expected to additionally impede market opening.

Activities on establishing a day-ahead market and its coupling

with the Albanian day-ahead market shall continue in line with the commitments and deadlines set in the Memorandum of Understanding on day-ahead market coupling between the transmission system operators and national regulatory authorities of Kosovo* and Albania, facilitated under the WB6 regional energy market connectivity programme.



Gas Implementation

| Gas Indicators | Transposition Assessement | Implementation Status | Descriptions |
|------------------------|------------------------------|-----------------------|---|
| Unbundling | | 23% | The ownership unbundling model will be the only possible option for a future gas transmission system operator. |
| Access to the networks | | 33% | No tariff methodology is adopted in Kosovo*. No secondary acts related to transmission or distribution exist. |
| Wholesale market | | 29% | The gas market is theoretically open as of 1 January 2015. In the absence of any natural gas supplies to Kosovo*, the Contracting Party does not have a market concept or rules in place. |
| Retail market | | 34% | There are no provisions regulating the natural gas supply or explicitly excluding such a possibility. The adopted Regulation on security of supply rules transposed some elements of Regulation (EU) 2017/1938. |
| Interconnectivity | • | 30% | No interconnections exist at present. |

Kosovo* has achieved little progress with respect to improving its compliance record with the gas *acquis* in the past year. The only notable achievement was the adoption of an administrative instruction on security of supply of natural gas by the Ministry of Economic Development.

While Kosovo* does not have a gas market, the development of *acquis*-compliant gas market secondary legislation remains the highest priority in terms of creating an adequate regulatory

environment for future gas penetration.

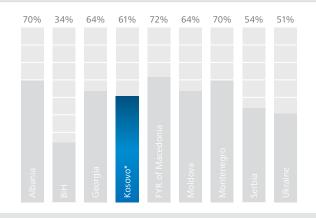
Kosovo* should also continue to explore all possible options how to become connected to the gas transmission systems of other neighbouring Contracting Parties, which would bring another energy resource to the country. This would allow Kosovo* to pursue the energy transition in line with the decarbonisation agenda and help the development of a national gas market.



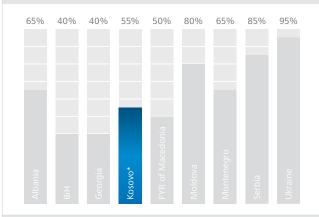
Kosovo* National Authorities



Regulatory Authority

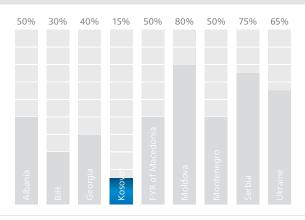


The Energy Regulatory Office (ERO) continued improving its profile at the national level. The first steps in liberalizing the electricity market and the mutual recognition of licenses based on the principle of reciprocity proves that the regulator is starting to live up to its competences. Nevertheless, the lack of a decision-making quorum for almost one year, remedied in March 2018, blocked the regulator's effective functioning. In July 2018, new risks to ERO's independence were brought to the attention of the Secretariat once again. Should the related legal reforms be adopted, they would introduce serious constraints to the functional, organisational and budgetary independence of the regulator.



The authority in charge of enforcing the Law on Protection of Competition is the Kosovo Competition Authority (KCA), composed of a commission and a secretariat. The KCA has so far not investigated any cases in the energy sectors. In the reporting period, the KCA prepared a report regarding the current state of monopolies in Kosovo* for fourteen markets, including the energy market. It comes to the conclusion that there is not sufficient competition on the supply market with KESCO as the only active supplier.

State Aid Authority



The authority responsible for enforcing the Law on State Aid consists of the State Aid Department (SAD), which receives, analyses and monitors notifications, and the State Aid Commission (SAC), which acts as an independent decision-making body. Due to the integration of the SAD into the ministry, its independence is questionable. Furthermore, the SAD still has no sufficient human and technical resources to actively enforce the State aid *acquis*. Furthermore, the members of the SAC have not been appointed. Therefore, Kosovo* lacks an effective enforcement institution. There have still been no enforcement activities in the energy sectors since the Law on State Aid first entered into force in 2014.



Oil Implementation

| Oil Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--------------------------------|------------------------------|-----------------------|---|
| Stockholding obligation | ~ | 10% | The Ministry of Trade and Industry drafted a Law on Compulsory Oil Stockholding in March 2014. According to the Government's legislative programme for the year 2018, the Law is expected to be adopted by fourth quarter of 2018. |
| Availability and accessibility | ~ | 10% | The draft Law on Compulsory Oil Stockholding foresees that compulsory oil stocks must be available and physically accessible at all times. |
| Reporting | ~ | 10% | No oil data collection is currently taking place and the Joint Organisations Data Initiative (JODI) Questionnaire is not submitted. |
| Emergency procedures | ~ | 10% | Currently, no procedures are in place to release emergency oil stocks. The draft Law foresees that the Government shall, on a proposal of the Minister in charge for oil, adopt a Response Plan with reserves to be implemented in the case of a supply interruption. |

In Kosovo*, the main law governing the oil sector is the Oil Market Law of 2005, as amended in 2009. The Ministry of Trade and Industry (responsible for oil and petroleum products) drafted a new Law on Compulsory Oil Stockholding in March 2014, with the assistance of the Secretariat. The Law was expected to be adopted in the fourth quarter of 2016 or first quarter of 2017. Despite the Secretariat's support and efforts, its approval by the Government and thus subsequent adoption by the Parliament is still pending. This delay is justified by the Ministry of

Trade and Industry due to the Law's high financial impact and current lack of budget. The Ministry of Trade and Industry and the Ministry of Finance are analysing options on how to find the needed financial resources. According to the Government's legislative programme for the year 2018, the Law is expected to be adopted by fourth quarter of 2018.

The Joint Organisations Data Initiative (JODI) Questionnaire is not submitted.



Renewable Energy Implementation

| Renewable Energy Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--|------------------------------|-----------------------|--|
| National Renewable Energy Action Plan | | 60% | In 2016, Kosovo* registered a 24,6% share of energy from renewable sources, mostly due to statistical revision of biomass data. This puts the country on the trajectory to reach its 25% target in 2020. |
| Quality of support schemes | 0 | 54% | Support schemes based on feed-in tariffs exist for small HPPs, wind, biomass, biogas, and solar PV. Due to the decline in solar PV cost, the existing feed-in tariffs are overcompensating investors. |
| Grid integration | ~ | 56% | Rules on transmission and distribution grid connection and access are adopted and published. The methodology for setting the cost of connections to the transmission grid was adopted by the regulator in 2018 but not published. |
| Administrative procedures | | 54% | The regulation on the creation of a one-stop shop was adopted by the Government in 2018. An inter-institutional group is to streamline the administrative procedures related to permitting and licensing and remove other investment barriers. |
| Renewable energy in transport | × | 0% | There is no certification scheme defined or relevant body established to implement the sustainability criteria for biofuels and bioliquids. |

Since the adoption of the 2016 Law on Energy and the Law on Electricity partially transposing the provisions of the Renewable Energy Directive, very little has been done in practice to advance the promotion of renewable energy in Kosovo*. The country must finalize the ongoing revision of the existing regulatory acts and adopt the remaining acts to complete the legal framework in compliance with the Guidelines on State aid for environmental protection and energy 2014-2020. The reform of support schemes so that the aid is based on premiums paid on top of the electricity price sold on the market remains to be introduced.

Rules on renewable energy self-consumption for distributed generation to encourage and enable customers to become prosumers should be adopted.

The regulator has to implement the system for the issuing, transfer and cancellation of guarantees of origin in practice.

An inter-institutional group set-up in 2018 to implement the regulation for the creation of a one-stop shop for renewable energy is expected to streamline and simplify the existing permitting and licensing procedures. Transparency and non-discrimination among renewable energy producers have to be improved.

The adoption of the Law on Trade in Petroleum Products and Renewable Fuels and the Administrative Instruction on Biofuels aimed at transposition of Articles 17 to 21 of the Directive is pending for more than three years. The Ministry of Trade and Industry finalised the draft Law and sent it to the Cabinet of Ministers in June 2018.

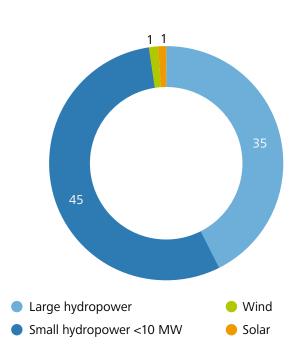
Shares of Energy from Renewable Sources





Source: EUROSTAT and Kosovo Agency for Statistics (KAS)

Total Capacities of Renewable Energy 2017 (MW)



Source: Ministry of Economic Development

In 2016, Kosovo* achieved a 24,6% share of renewable energy in gross final energy consumption, which is above its 21,6% median trajectory for 2015-2016. This was due to the revision of biomass consumption for heating by household customers rather than investment in renewable energy. By the end of 2017, Kosovo* has registered 80 MW of hydropower and only 1 MW of wind and solar each in spite of their potential to be deployed cost-effectively.

Kosovo* intends to achieve the 10% target in transport by relying fully on liquid biofuels sourced from imports until the end of 2017, after which domestic production should contribute to fulfilling the target. However, the actual share is still at 0%.

Total capacities of renewable energy (MW):

87



Energy Efficiency Implementation

| Energy Efficiency Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--|------------------------------|-----------------------|---|
| National Energy Efficiency Action Plans and Targets | | 67% | The 3rd EEAP was adopted in August 2017, and includes a 2020 final energy cap consumption target. The new Energy Efficiency Law was drafted, setting the energy efficiency obligation scheme and the annual renovation target for central government buildings. |
| Energy efficiency in buildings | | 39% | Following the adoption of the Law on Energy Performance of Buildings in 2016, the majority of by-laws remain to be adopted. The energy efficiency programme for the rehabilitation of public buildings and a new programme for households, launched in April 2018, are ongoing. |
| ESCO market development and financing | 0 | 43% | The 3rd EEAP and draft Energy Efficiency Law include provisions for the development of an ESCO market and establishment of a revolving fund. In May 2018, model ESCO contracts were prepared. |
| Energy efficient products - labelling | | 51% | The 2012 labelling regulation implemented only the Ministerial Council Decision from 2010. Kosovo* intends to update the regulation after the adoption of the Energy Efficiency Law in order to bring it in line with the <i>acquis</i> . |
| Institutional capacities | ~ | 65% | The two Ministries and the Energy Efficiency Agency are active and the new Energy Efficiency Fund is envisaged to be established by the new Law as an independent entity. Despite that, implementation and enforcement capacities remain weak. |

Kosovo* made progress during the reporting period, mainly by adopting the 3rd EEAP, finalizing the draft Energy Efficiency Law (currently in Parliament) and adopting the 2nd Annual Report under the Energy Efficiency Directive.

However, the first priority for Kosovo* remains the adoption of the new Energy Efficiency Law and the relevant secondary legislation to transpose Directive 2010/30/EU.

The establishment of an energy efficiency fund, adoption of ESCO supporting regulation and strengthening of institutional and human capacities of the Energy Efficiency Agency are important to achieve progress towards the creation of Kosovo*'s energy efficiency market.

Transposition of the labelling delegated regulations should continue, as well as finalization of secondary legislation to introduce energy efficiency criteria in public procurement.

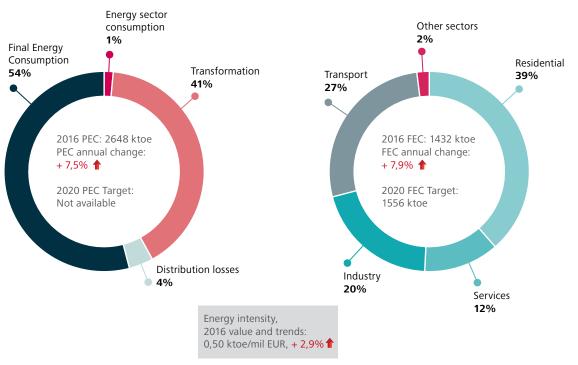
Energy efficiency statistics should be improved to enable accurate monitoring, evaluation and verification of the achieved savings.

A Monitoring and Verification Platform (MVP) for energy savings as a result of EEAP measures, already made available to the Agency, should be put into operation as the tool for monitoring and verification of energy savings.

Energy Efficiency Indicators

Primary Energy Consumption (PEC) in 2016 and trends

Final Energy Consumption (FEC) in 2016 and trends



Source: EUROSTAT 2018 data and Contracting Party's Annual Reports under Directive 2012/27/EU

Implementation of Energy Efficiency Product Regulation Overview

| | Ö | | 0= 0== | | <u>-</u> \$\$\$ | 0= 0== | | ĝ! | <u> </u> | II () | |
|---------------------|-----------------------|---------------------------------------|----------------------------|-------------|--------------------|-------------------------|---------------------------------|-----------------|---------------|-------------------------------|--------------------------------------|
| FRAMEWORK DIRECTIVE | Household dishwashers | Household refrigerating appliances | Household washing machines | Televisions | Air conditioners | Household tumble driers | Electrical lamps and luminaires | Vacuum cleaners | Space heaters | Water heaters & storage tanks | Domestic ovens, hobs and range hoods |
| | | | | | | | | | | | |

No progress with adoption/implementation

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

Adopted, implementation issues detected

Adopted and implemented



Environment Implementation

| Environment Indicators | Transposition Assessement | Implementation Status | Descriptions |
|---|------------------------------|-----------------------|--|
| Environmental impact assessment (EIA) and strategic environmental assessment (SEA) | | 43% | In Kosovo*, there is a lack of specialized institutional structures as well as administrative capacities able to deliver expert opinions on environmental reports. |
| Sulphur in Fuels | | 93% | The customs authorities as well as the Market Inspectorate in cooperation with authorised inspection bodies carry out the quality control of the petroleum products falling under the scope of the Directive. |
| Large combustions plants and industrial emissions | ~ | 60% | For existing plants, the NERP was adopted and its implementation started on 1 January 2018. |
| Nature protection | • | 27% | Kosovo* is at an early stage of implementing the obligations related to nature protection, with the designation of protected areas being at an early stage still to happen. Effective protection for designated protected areas is not in place. |

The use of both environmental impact assessments and strategic environmental assessments need further improvement in the energy sector, with an increased uptake of public participation and quality control of the environmental reports. Particular attention must be given to the environmental impact assessment of the Kosova e Re project, which has to be fully in compliance with the *acquis communautaire* on environment.

As regards legislation on the sulphur content of liquid fuels, the authorities of Kosovo* have to ensure that the sampling and analysis of the fuels falling under the scope of the Directive takes place in accordance with the standards stipulated therein. The provisions on marine fuels do not apply to this Contracting Party.

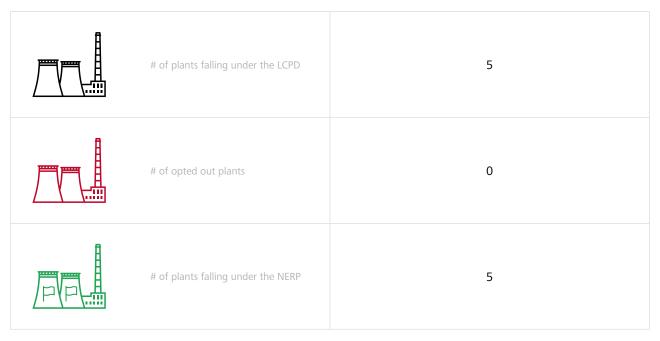
With regard to large combustion plants, work on amendments to the Administrative Instruction on emission limit values from large combustion plants as well as the Law on Industrial Emissions was initiated. The currently applicable legal framework fails to comply with the provisions of the Large Combustion

Plants and Industrial Emissions Directives. In order to address this shortcoming, the Secretariat sent an Opening Letter to the Contracting Party in June 2018.

Kosovo* intends to build a new power plant, Kosova e Re, with a net electric power of 450 MW. This plant falls under the scope of the Industrial Emissions Directive and has to meet its thresholds for new plants.

Kosovo* still has no protected areas under either the Ramsar Convention or the Emerald Network. A new Administrative Instruction on strictly protected wild species was adopted in the second half of 2017. While preparations of the inventory and the mapping of natural habitat types and biodiversity have started, no measures for the protection of wild birds have been established yet and no enforcement is taking place in practice with regard to infrastructure projects in potential special protected areas.

Installations Under the Large Combustion Plants Directive



Source: compiled by the Energy Community Secretariat



| Climate Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--|------------------------------|-----------------------|--|
| National greenhouse gas emissions monitoring and reporting systems | | 25% | A Climate Change Law was drafted, but its internal review is still pending. National GHG inventories were developed for the periods 2008-2009, 2008-2013, 2012-2014 and 2015 (2006 IPCC guidelines), but they are not fully compliant with Regulation (EU) 525/2013. Kosovo* has developed a new National Strategy (2017-2026), to be adopted by 2018, and an Action Plan (2017-2019) for Climate Change, adopted in March 2018. Legislation defining national systems for policies, measures and projections has not been introduced yet. |
| National Energy and Climate Plans (NECPs) | | 8% | In line with Recommendation 2018/01/ MC-EnC, a national working group on the NECPs was established in September 2018. Preparatory work on the analytical and technical aspects of the NECP (reference and policy scenarios, templates) is expected to start by the end of 2018. Regional consultations will take place after the submission of the draft national plans. |

Kosovo* is not a signatory party of the United Nations Framework Convention on Climate Change (UNFCCC). However, it has the responsibility to respond to its requirements with respect to setting targets for reducing energy use and increasing the share of renewable energy as one of the signatory parties of the Energy Community Treaty.

The preparation of climate change legislation and strategy is one of the key priorities identified in the National Environmental Strategy (NES) and National Environmental Action Plan (NEAP) of Kosovo*.

Kosovo* started reviewing its national greenhouse gas emissions monitoring and reporting systems and adopted two administrative instructions with a view to align with Regulation (EU) 525/2013. The adoption of framework legislation on climate change would be highly beneficial to clarify competences and responsibilities in this area.

The integration of energy and climate policies in Kosovo* is at an initial stage. Human and technical capacities remain the main challenges to perform this task, as well as harmonizing energy and climate objectives across sectors. A national working group on NECPs has already been established, in line with Recommendation 2018/01/MC-EnC.



Infrastructure Implementation

| Infrastructure Indicators | Transposition Assessement | Implementation Status | Descriptions |
|---|------------------------------|-----------------------|---|
| National competent authority | | 100% | The national competent authority was established by a decision of the Minister of Economic Development on 7 August 2017. |
| Manual of procedures | | 50% | The Ministry of Economic Development drafted the manual of procedures. However, the manual is still to be published. |
| National regulatory authority involvement | | 100% | Kosovo*'s regulatory authority has published its methodology and the criteria required by the Regulation on 10 May 2017. |

Kosovo* is one of the few Contracting Parties that have transposed Regulation (EU) 347/2013. The Minister of Economic Development adopted the Administrative Instruction on the Promotion of Joint Regional Investments in the Energy Sector on 20 February 2017. A national competent authority has also been designated.

Nevertheless, the Regulation remains to be fully implemented. Kosovo* should publish a manual of procedures for the permit granting process, applicable for Projects of Energy Community Interest, as soon as possible. The manual has already been drafted with the support of technical assistance funded by the Secretariat.

Proposed 2018 PECI/PMI projects

Gas:

PECI: 1



Statistics Implementation

| Statistics Indicators | Transposition Assessement | Implementation Status | Descriptions |
|-----------------------|------------------------------|-----------------------|---|
| Annual statistics | | 92% | Five annual questionnaires and MESH for 2016 are transmitted. |
| Monthly statistics | | 0% | There is no monthly reporting. |
| Quality report | | 0% | Quality report is not transmitted. |
| Price statistics | | 100% | Data on electricity prices are trans- mitted. |

While annual statistics have been improving in terms of timeliness and quality, Kosovo's* compliance with the *acquis* on monthly statistics remains at a critical level.

Since 2015, the annual questionnaires have been submitted to and published by EUROSTAT and International Energy Agency (IEA).

The breakdown of energy consumption in households is compiled by the Kosovo Agency for Statistics (KAS) and transmitted to EUROSTAT, but its quality is questionable.

The frequency of statistics collection is yearly and quarterly. An EU-financed project provided technical assistance to KAS for monthly statistics, but the new reporting system is not in operation yet. No monthly data are compiled or disseminated yet.

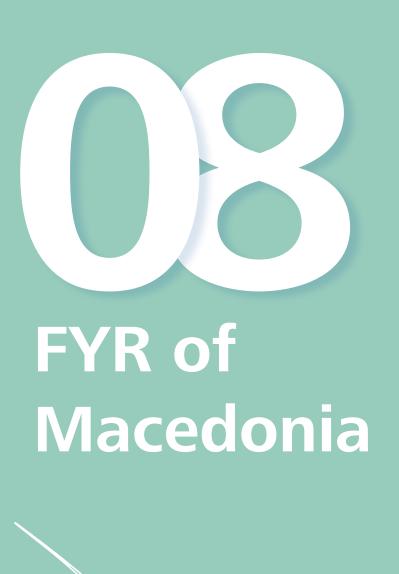
Quality report which was due for 2018 has not been submitted to EUROSTAT yet.

The data for industrial and household consumers were compiled and aggregated in the format and tables defined by EUROSTAT. Electricity prices are reported by the distribution system operator and the public supplier of electricity. Electricity prices per consumption band and breakdown by taxation levels are submitted to and subsequently published by EUROSTAT. Price components for industrial end-users are reported in accordance with the *acquis*. Gas prices are not relevant for Kosovo*.

The established compilation procedure enables regular price data reporting in compliance with the *acquis*.

Monthly data collection, as the key 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 related General Policy Guideline.

Also, KAS should establish a broader quality management system, as recommended in the comprehensive Peer Review Report of 2017 and transmit the quality report on statistical surveys in energy sector.









Former Yugoslav Republic of Macedonia

Summary Implementation

| Summa | ary Indicators | Transposition Assessement | Implementation Status | Descriptions |
|----------------------|----------------------|------------------------------|-----------------------|--|
| F | Electricity | | 52% | Implementation in the electricity sector of former Yugoslav Republic of Macedonia is moderately advanced. |
| <u>\(\lambda \)</u> | Gas | | 42% | Implementation in the gas sector of former Yugoslav Republic of Macedonia is moderately advanced. |
| • | Oil | 0 | 53% | Implementation in the oil sector of former Yugoslav Republic of Macedonia is moderately advanced. |
| | Renewable Energy | 0 | 54% | Implementation in the renewable energy sector of former Yugoslav Republic of Macedonia is moderately advanced. |
| A D | Energy Efficiency | | 52% | Implementation in the energy efficiency sector of former Yugoslav Republic of Macedonia is moderately advanced. |
| 8 | Environment | 0 | 54% | Implementation in the environment sector of former Yugoslav Republic of Macedonia is moderately advanced. |
| ** | Climate | 0 | 14% | Implementation in the climate sector of former Yugoslav Republic of Macedonia is yet to begin. |
| *** | Infrastructure | | 27% | Implementation in the infrastructure sector of former Yugoslav Republic of Macedonia is still at an early stage. |
| <u>ılı</u> | Statistics | | 98% | Implementation in the electricity sector of former Yugoslav Republic of Macedonia is almost completed. |

Overall number of cases: 0

No open Article 91 cases

No open Article 92 cases



Electricity Implementation

| Electricity Indicators | Transposition Assessement | Implementation Status | Descriptions |
|------------------------|------------------------------|-----------------------|--|
| Unbundling | | 54% | The TSO is only legally unbundled. A decision on the transfer of TSO shares to the Ministry of Transport has been adopted by the controlling entity. The DSO with more than 100.000 customers is legally and functionally unbundled. |
| Access to the networks | ~ | 90% | The tariffs are approved and published. The interconnection capacities are allocated in accordance with Auction Rules approved by ERC, including auctions on one border conducted by SEE CAO. |
| Wholesale market | ~ | 32% | Wholesale prices remain regulated for the incumbent generation company obliged to provide electricity for households and small customers under universal supply and supply of last resort until 1 January 2019. Activities on setting up a day-ahead market have been initiated. |
| Retail market | | 53% | The new Law introduced eligibility for all customers, thus resolving the dispute initiated by the Secretariat. Regulated retail prices are available only to customers entitled to universal service and supply of last resort. |
| Regional integration | | 32% | The TSO participates in the regional auction office SEE CAO. Target date for commissioning of market coupling with Bulgarian IBEX is mid-2019, subject to go-live of the day-ahead market. Network codes are not transposed yet. |

The adoption of the Energy Law in May 2018 marks a turning point in the transposition of the Third Energy Package. Nevertheless, until its implementation is complete, former Yugoslav Republic of Macedonia remains largely non-compliant with the electricity *acquis*, in particular with regard to unbundling of the transmission system operator, market opening, price regulation and balancing.

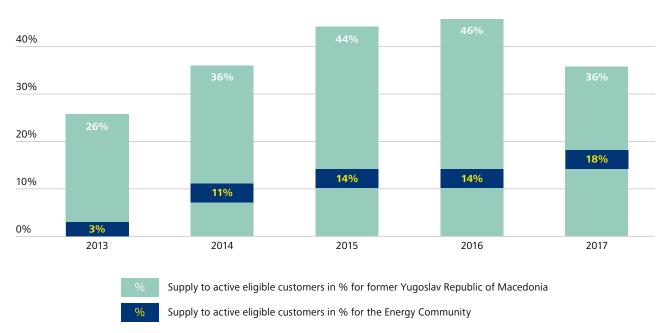
To ensure the Law's implementation in practice, secondary legislation has to be drafted and adopted, which is challenging considering the short deadlines and number and scope of regulations that have to be developed or revised.

Whereas the unbundling of the distribution system operator is almost complete, save for the rebranding, the transmission system operator has to be legally and ownership unbundled and certified in the procedure yet to be defined by certification rules. The access to the system and access to the network are regulated in line with the *acquis*, including access to the network at regulated, published network tariffs and to the interconnectors via the coordinated auction platform or joint auctioning.

The transmission system operator is submitting information to ENTSO-E in accordance with the Regulation on data publication, however, the Regulation is yet to be transposed through the reporting rules which are to be adopted by 5 December 2019.

Retail Market Opening





Source: Ministry of Economy

According to the Energy Law, ENTSO-E network codes are directly applicable based on ratified international agreements and membership in ENTSO-E.

Currently, the undertakings providing public service are exempted from balancing responsibility. In addition, balancing services will be provided at regulated prices until the transmission system operator starts procuring balancing services in a non-discriminatory and market-based manner, not later than January 2019 according to the Law. The drafting of new balancing market rules, to be developed by September 2018, is supported by technical assistance under the WB6 connectivity programme.

The Government is obliged to prescribe the operation of an organized market until 5 December 2018 and to either designate the established market operator to manage the day-ahead market or to launch a procedure to select a service provider.

Based on an analysis conducted under the WB6 connectivity programme, an operator of the organized market shall be established with domestic institutional ownership and a cost-effective service provision. The Memorandum of Understanding on electricity day-ahead market coupling was signed between the transmission system operators, regulatory authorities and power exchanges of Bulgaria and former Yugoslav Republic of Macedonia, as well as between the two ministries.

The new Law removes the obligation for mandatory sales at the wholesale market and introduced competitive purchases for all public service providers.

Price regulation in the wholesale market, still present in the form of regulated prices of electricity supplied by the incumbent generator, shall be abolished at the latest by January 2019.

Activities on setting up a day-ahead market and its coupling have been initiated, but further progress will require amendment of VAT rules and termination of regulated prices in the wholesale market, not just for generation but also for balancing services.

In retail, sales in the competitive market exceeded 50% of total final consumption since all eligible customers were forced to switch and did not have access to regulated supply. The customers with consumption below 100 MWh in 2017 will remain captive until 1 January 2019.

The competitive procedure for selection of the provider of universal supply and supply of last resort has to be conducted by the Government, in accordance with the procedural rules, yet to be adopted. Such a procedure is expected to eliminate any need for price regulation in retail.

The existing rules on customer protection, and especially protection of vulnerable customers, have to be revised in accordance with the new Law.



FYR of Macedonia

Gas

Gas Implementation

| Gas Indicators | Transposition Assessement | Implementation Status | Descriptions |
|------------------------|------------------------------|-----------------------|---|
| Unbundling | | 10% | The TSO is not unbundled in line with the Third Energy Package. The DSO regime is in compliance. |
| Access to the networks | | 46% | Third party access is in place but capacity allocation and transparency need to be improved. An entry/exit transmission tariff methodology is missing. |
| Wholesale market | | 49% | The wholesale gas prices are fully deregulated. There is no virtual trading point and contracts are bilateral, on monthly or yearly basis, and market is still illiquid. |
| Retail market | | 79% | All customers are formally eligible, and end-user gas prices are deregulated. There are six active retail suppliers. |
| Interconnectivity | ~ | 24% | A technical agreement with the Bulgarian TSO regarding the only interconnection point is in place, but not aligned with Regulation (EU) 2015/703. A Memorandum of Understanding was signed with the Greek TSO on the future interconnection of the two systems. |

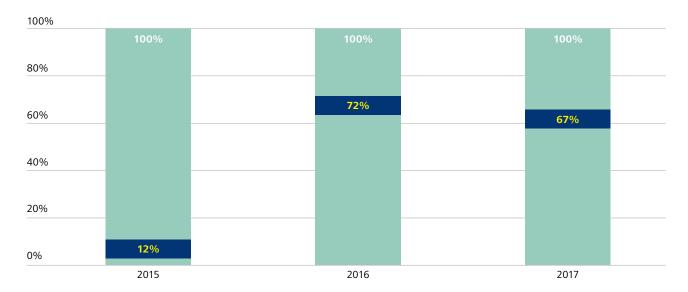
Following a political impasse lasting several years, former Yugoslav Republic of Macedonia has visibly shifted up a gear as regards the transposition of the Energy Community *acquis*. The new Energy Law, approved in June 2018, transposes the requirements of the Third Energy Package and clears the way towards ownership unbundling and certification of the country's transmission system operator.

Thanks to the negligible share of households in gas consumption, former Yugoslav Republic of Macedonia is the only Contracting Party with a fully deregulated wholesale and retail market. As the supply market is dominated by one source – Russia's Gazprom - and is limited to bilateral trading agreements, the

market is illiquid. The country's existing gas penetration remains marginal, partly due to a long-standing dispute between the State and Makpetrol, the country's biggest gas importer and supplier, concerning the ownership of the transmission network.

The first and utmost priority for former Yugoslav Republic of Macedonia is finalising and executing the appropriate transmission system operator unbundling model, by which the deadlocked relationship between the State and Makpetrol over GAMA should be resolved. This will open up new possibilities for network and market developments and foster interconnectivity of former Yugoslav Republic of Macedonia with its neighbours, in line with mandatory EU network codes.

Retail Market Opening



% Supply to non-households at non-regulated prices in % of total non-households' consumption in FYR of Macedonia

% Supply to non-households at non-regulated prices in % of total non-households' consumption in the Energy Community

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

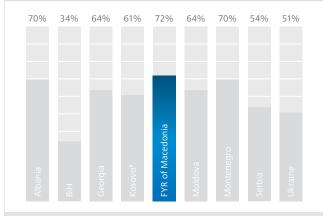
The remaining priorities relate to ensuring that the relevant secondary legislation is in place. Most of the required legal acts already exist and require revision only, while the remaining few have to be developed from scratch, as required by the new Energy Law. Having in mind the dedication of the Macedonian authorities, it can be expected that this will be done within the deadlines foreseen by the Law, i.e. by June 2019.



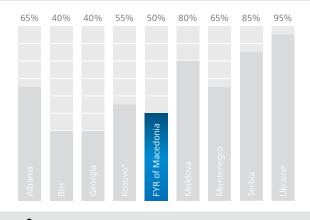
FYR of Macedonia National Authorities



Regulatory Authority

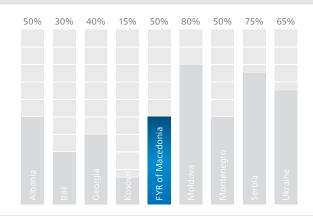


The legal basis for the operation and competences of ERC has been adjusted to the Third Energy Package only in May 2018. ERC is headed by seven commissioners, one of whom acts as president. Their term is limited to five years, renewable once. Management has autonomy in defining the authority's internal organisation even though its statutes formally require Parliament's approval. Legal reforms did not introduce a selection committee of neutral experts for selecting commissioners but foresee appointment by the Parliament based on a proposal of the Government. The previously existing vague selection criteria have been eliminated. ERC has committed to actively execute its duties. It remains to be seen whether the new management will be ready to fully use the regulator's competences and actively design the energy market.



The Commission for Protection of Competition (CPC) has been established in 2010 and is responsible for competition enforcement. However, the CPC did not render any decision in the area of competition, nor did it carry out any investigation in the energy sectors.

State Aid Authority



The Commission for Protection of Competition (CPC) is also responsible for State aid enforcement. However, there have been no decisions by the CPC in the area of State aid in the energy sectors.



Oil Implementation

| Oil Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--------------------------------|------------------------------|-----------------------|--|
| Stockholding obligation | • | 70% | The Parliament has adopted three laws amending the Law on Compulsory Oil Reserves, each time postponing the application of the Law by one year. According to the latest amendment, the Law is envisaged to enter into force as of 1 January 2019. |
| Availability and accessibility | • | 50% | The Oil Reserves Agency is in charge of ensuring that the compulsory reserves are at all times available and physically accessible and preventing their removal from the storage area without its permission. |
| Reporting | • | 40% | The State Statistical Office supplies monthly oil data for the MOS Questionnaire. The Joint Organisations Data Initiative (JODI) Questionnaire is not prepared and submitted to the Secretariat. |
| Emergency procedures | • | 50% | The Law on Compulsory Oil Reserves foresees that in case of an emergency oil supply disruption, the Government shall adopt a decision on releasing the compulsory reserves into circulation. The Intervention Plan is prepared but not yet approved by the Government. |

In former Yugoslav Republic of Macedonia, the Law on Compulsory Oil Reserves, adopted in October 2014, was supposed to be applicable as of 1 January 2015. However, the Parliament has adopted three laws amending the Law on Compulsory Oil Reserves, each time postponing the application of the Law by one year. According to the latest amendment, the Law is envisaged to enter into force as of 1 January 2019. The approval of

the necessary by-laws and action plans is in delay. The country's oil stocks corresponded to 65 days of average daily consumption in September 2018, a decrease from July 2017 when stocks stood at 70 days.

The Joint Organisations Data Initiative (JODI) Questionnaire is not submitted.



Renewable Energy Implementation

| Renewable Energy Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--|------------------------------|-----------------------|--|
| National Renewable Energy Action Plan | 0 | 50% | NREAP is not designed to achieve the country's legally binding renewable energy target of 28%, instead only a 24% target in 2020 is foreseen due to the revision of biomass. |
| Quality of support schemes | | 64% | Feed-in tariffs for small hydro, wind, solar PV and power plants using biogas and biomass are in place. The 2018 Energy Law will introduce support granted on a competitive basis. |
| Grid integration | | 65% | Priority access and dispatch are implemented in practice. Rules on connection to the grids are published by the transmission and distribution system operators. Rules on renewable energy self-consumption are not in place. |
| Administrative procedures | • | 71% | Investor guides for various renewable energy technologies are published. While a one-stop shop is yet to be established, a simplified procedure for solar PV installation on buildings is in place. |
| Renewable energy in transport | × | 2% | The legal framework is completely non-compliant with Directive 2009/28/ EC in the transport sector due to the lack of transposition and implementation of the sustainability criteria for biofuels and bioliquids. |

With the adoption of the Energy Law in May 2018, the country has transposed Directive 2009/28/EC. Several by-laws are to be adopted to enable its implementation. The Law also includes requirements for a competitive bidding process to grant support to renewable energy producers as well as market integration of renewables in compliance with the Guidelines on State aid for environmental protection and energy 2014-2020. The support scheme based on a feed-in premium is expected to be introduced once the day-ahead trading platform is in place.

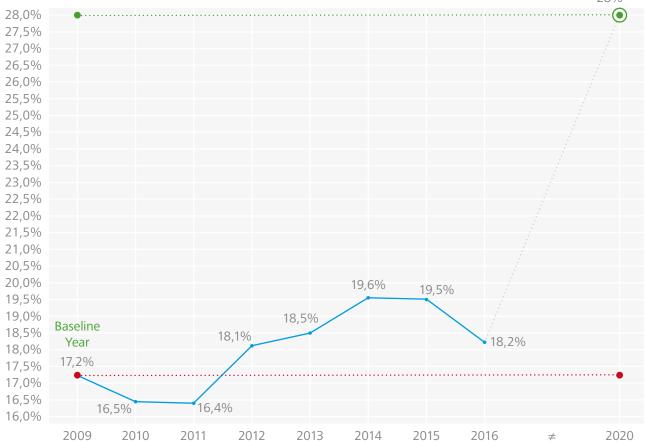
The regulator has to ensure that rules for connection and access to the networks are implemented in a non-discriminatory and objective way for private and state companies, as currently the state companies are being treated with priority. A one-stop shop for all permit applications is yet to be established.

The system of issue, transfer and cancelation of guarantees of origin in compliance with the 2018 Energy Law has to be implemented. Compatibility with the standardised European Energy Certificate System and membership in the Association of Issuing Bodies (AIB) remain to be achieved.

Provisions related to the sustainability of biofuels are still not transposed and the country's legal framework remains completely non-compliant with Directive 2009/28/EC in the transport sector. The actual renewable energy share in the domestic transport fuel market is negligible – 0,1% - and far from the NREAP trajectory.

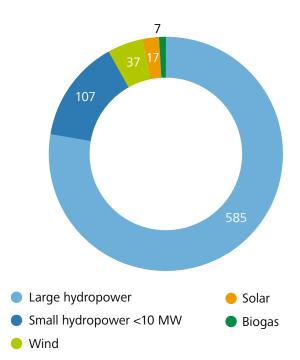
Shares of Energy from Renewable Sources





Total Capacities of Renewable Energy 2017 (MW)

Source: EUROSTAT and State Statistical Office (SSO)



Source: Ministry of Economy

In 2016, former Yugoslav Republic of Macedonia achieved only an 18,2% share of renewable energy in gross final energy consumption, instead of its 24,6% median trajectory for 2015-2016. The current NREAP is not designed to achieve the legally binding renewable energy target of 28%, instead only 24% is foreseen. Due to a revision of biomass consumption data in compliance with EUROSTAT, the Ministry has submitted a request for the review of the target to the 2018 Ministerial Council.

In order to ensure compliance with the Guidelines on State aid for environmental protection and energy 2014-2020, the capacity cap per type of renewable energy technology has to be removed enabling the cost-effective achievement of the 2020 renewable energy target.

Total capacities of renewable energy (MW):

753



Energy Efficiency Implementation

| Energy Efficiency Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--|------------------------------|-----------------------|---|
| National Energy Efficiency Action Plans and Targets | | 70% | The 3rd EEAP was adopted in July 2017. The 1st Annual Report, setting the 2020 target of maximum 3014 ktoe in primary energy consumption, and maximum 2093 ktoe in final energy consumption, as well as the 2nd Annual Report were prepared. The Contracting Party is on track regarding the EEAP and target setting obligations. |
| Energy efficiency in buildings | | 42% | The implementation is significantly lagging behind because many pieces of key secondary legislation are missing or not updated. |
| ESCO market development and financing | • | 28% | The energy services market is not yet developed and only very few projects were implemented with ESCO financing to date. Significant secondary legislation is needed to develop the market for energy performance contracting. |
| Energy efficient products - labelling | | 60% | The implementation status review is based on State Market Inspectorate and Surveillance Body's reports. The body remains rather weak, and its reports are few and ad–hoc. |
| Institutional capacities | ~ | 40% | The Ministry of Economy's Department for Energy responsible for energy efficiency needs urgently dedicated/ expert staff for its policy development and legal framework transposition. The Energy Agency should be given a more significant role in implementation. |

Former Yugoslav Republic of Macedonia, after a couple of years of stagnation in energy efficiency reform, re-engaged in the second half of 2017 with the new Government in place. Since then, a much stronger cooperation with the Secretariat and good progress with adopting the EEAP and preparing the key reports required by the Energy Efficiency Directive was noted.

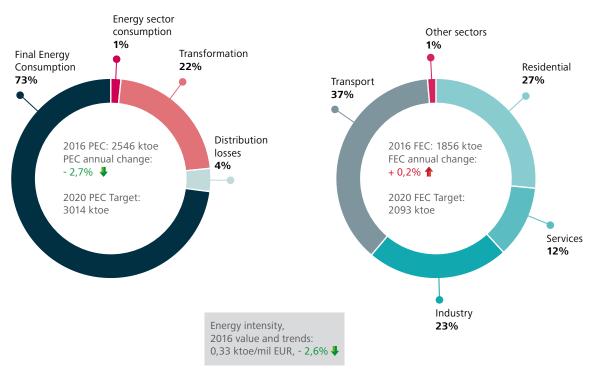
In late 2017, it was decided to prepare an Energy Efficiency Law that transposes the Energy Efficiency Directive, the Energy Performance of Buildings Directive and the framework Directive on Labelling of energy-related products. The work on this is on-going at the date of publication of this report and the Law is planned to be adopted by the end of 2018.

The lack of institutional capacity in the Ministry of Economy – Department for Energy is 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. The other institution involved, the Energy Agency that has more technical expertise, needs to upgrade its coordination and cooperation with the Ministry, and also have a larger role in the legal framework development.

Energy Efficiency Indicators

Primary Energy Consumption (PEC) in 2016 and trends

Final Energy Consumption (FEC) in 2016 and trends



Source: EUROSTAT 2018 data and Contracting Party's Annual Reports under Directive 2012/27/EU

Implementation of Energy Efficiency Product Regulation Overview

| | | | 0=0== | | <u>-</u> \$\$\$ | 0=0== | | | | □□ ⊘ | |
|---------------------|-----------------------|------------------------------------|----------------------------|-------------|--------------------|-------------------------|---------------------------------|-----------------|---------------|-------------------------------|--------------------------------------|
| FRAMEWORK DIRECTIVE | Household dishwashers | Household refrigerating appliances | Household washing machines | Televisions | Air conditioners | Household tumble driers | Electrical lamps and luminaires | Vacuum cleaners | Space heaters | Water heaters & storage tanks | Domestic ovens, hobs and range hoods |
| | | | | | | | | | | | |

Adopted and implemented
Adopted, implementation issues detected
No progress with adoption/implementation

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



Environment Implementation

| Environment Indicators | Transposition Assessement | Implementation Status | Descriptions |
|---|------------------------------|-----------------------|--|
| Environmental impact assessment (EIA) and strategic environmental assessment (SEA) | | 49% | Efforts in the implementation of legislation related to environmental assessments are not sufficient, in particular with regard to the quality control of environmental impact assessments and public participation. |
| Sulphur in Fuels | | 80% | The legislation is being implemented according to the relevant provisions of the Directive. Quality control of sampling and analysis of the fuels covered is not sufficiently ensured. |
| Large combustions plants and industrial emissions | | 53% | Former Yugoslav Republic of Macedo- nia has adopted its NERP. The emission reductions indicated therein have yet to be carried out in a timely manner. |
| Nature protection | 0 | 33% | The designation of special protected areas is still at an early stage. The process is progressing at a slow pace. Adequate staffing is not in place. |

With regard to environmental impact assessment, the administrative capacities of former Yugoslav Republic of Macedonia are still inadequate and weak. Therefore, further improvement, both at central and local level, is necessary. Furthermore, public participation needs to be strengthened, with particular regard to the hydropower and mining sectors.

With regard to strategic environmental assessment, focus shall be given to the implementation of the national legislation. It must be ensured that the environmental effects of plans and programmes related to network energy are properly taken into account.

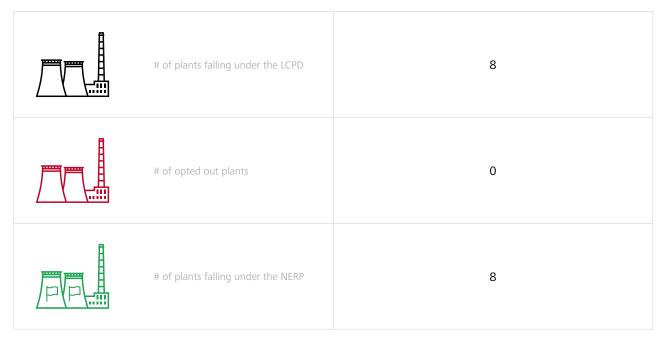
As regards the legislation on the sulphur content of liquid fuels, the competent authorities of former Yugoslav Republic of Macedonia have to ensure that the sampling and analysis of the fuels falling under the scope of the Directive takes place in accordance with the standards stipulated therein. The provisions on marine fuels do not apply to this Contracting Party.

In the field of emission control from large combustion plants, proper implementation of the National Emission Reduction Plan,

which was adopted in 2017, is the key priority. In order to achieve compliance, it is key that adequate financing is allocated for emissions abatement. Furthermore, the competent authorities shall have emission reporting systems in place so that the data that needs to be provided from January 2019 onwards will be available.

As for nature protection and wild birds, three potential special protected areas under the Wild Birds Directive have been identified and the authorities of former Yugoslav Republic of Macedonia developed a plan for future field research therein. Effective measures against the deliberate killing or hunting of wild birds, deliberate destruction or damaging nests and eggs and/or removal of their nests are to be established for the protection of endangered species. The amendment to the Law on Nature Protection, aimed at increasing the human resources dedicated to this area, shall also be adopted. Furthermore, the obligation to protect the habitats of wild birds shall be respected and taken into account by the Contracting Party in the development of new projects related to network energy.

Installations Under the Large Combustion Plants Directive



Source: compiled by the Energy Community Secretariat



FYR of Macedonia

Climate

| Climate Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--|------------------------------|-----------------------|--|
| National greenhouse gas emissions monitoring and reporting systems | ~ | 27% | The national inventory system for GHG emissions meets the reporting principles of the UNFCCC but lacks provisions defining competences. Work on a long-term climate action strategy is only to start in October 2018. Provisions for policies, measures and projections and an analysis on GHG emission reduction are included in the 2005 Law on Environment. |
| National Energy and Climate Plans (NECPs) | ~ | 5% | A national working group on the NECPs has not been set up yet. Preparatory work on the analytical and technical aspects of the NECP (reference and policy scenarios, templates) has not started yet. Regional consultations will take place after the submission of the draft national plans. |

Former Yugoslav Republic of Macedonia is a non-Annex I Party to the United Nations Framework Convention on Climate Change (UNFCCC) since 1998. The country ratified the Paris Agreement in November 2017 and has so far submitted to the UNFCCC three National Communications on Climate Change and two Biennial Update Reports.

Its Nationally Determined Contribution (NDC) include a mitigation scenario with existing policies and measures (WEM) and an ambitious scenario with additional measures (WAM) such as natural gas and geothermal plants, phasing out incandescent light bulbs and the electrification of transport. WEM indicates a 30% reduction of $\rm CO_2$ emissions from fossil fuels by 2030 from business-as-usual levels, while WAM refers to a 36% $\rm CO_2$ emissions reduction by 2030 compared to the business-as-usual scenario.

Almost 80% of the total greenhouse gas emissions are ${\rm CO_2}$ emissions originating from the energy, buildings and transport sectors. Emissions from agriculture, forestry and other land uses (as well as from industrial processes and waste) have a relatively small share. Due to the extensive use of fossil fuels and particularly the dominant share of domestic lignite for elec-

tricity production, there is significant potential in the country for policies and measures leading to GHG emissions reduction. Vulnerable sectors and climate change adaptation measures will be addressed by revised future NDCs.

More clearly defined competences and responsibilities of the relevant institutions are necessary to align with the Monitoring Mechanism Regulation. Further actions are also needed on the greenhouse gas inventory, mitigation policies, projections, adaptation policies and measures in order to align with Regulation (EU) 525/2013.

The Law on Environment, which contains climate provisions, should be supplemented by an overarching Law on Climate Action, transposing Regulation (EU) 525/2013. This should be prepared and adopted with no further delay.

Work on the upcoming Long-Term Strategy on Climate Action, envisaged to start by October 2018, should be closely coordinated among ministries in order to identify synergies and prevent inconsistencies among national strategies on energy and climate.



Infrastructure Implementation

| Infrastructure Indicators | Transposition Assessement | Implementation Status | Descriptions |
|---|------------------------------|-----------------------|--|
| National competent authority | × | 30% | An analysis conducted by the Ministry of Economy recommended that either a new Council of Strategic Projects within the Government or a department within the Ministry of Transport and Infrastructure is designated as the competent authority. No follow up activities have taken place. |
| Manual of procedures | × | 50% | A unified procedure for permitting of infrastructure projects exists. However, it is not in line with Regulation (EU) 347/2013. The manual of procedures, based on Regulation (EU) 347/2013, was drafted but it is yet to be adopted. |
| National regulatory authority involvement | × | 0% | The national regulatory authority did not publish the methodology and the relevant evaluation criteria for investments in electricity and gas infrastructure projects. |

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

To assist the country in the transposition of the Regulation, the Secretariat provided the Ministry of Economy technical assistance in December 2017. The Ministry shall, based on the Technical Assistance Report and recommendations, prepare the proper legal act, which will ensure transposition of Regulation (EU) 347/2013.

Given the deadline that already expired, former Yugoslav Republic of Macedonia shall proceed with the Regulation's transposition as soon as possible. The swift implementation of the Regulation shall follow.

Proposed 2018 PECI/PMI projects

PECI: 1

PECI: 1

PHI: 1

PMI: 1



FYR of Macedonia

Statistics

Statistics Implementation

| Statistics Indicators | Transposition Assessement | Implementation Status | Descriptions |
|-----------------------|------------------------------|-----------------------|---|
| Annual statistics | | 100% | Five annual questionnaires and MESH for 2016 are transmitted. |
| Monthly statistics | | 90% | Monthly data are transmitted. There is no short-term monthly reporting. |
| Quality report | | 100% | Quality report is transmitted. |
| Price statistics | | 100% | Data on electricity prices are transmitted. |

The energy statistics of former Yugoslav Republic of Macedonia are produced and disseminated in compliance with the *acquis*.

Annual data are compiled and disseminated in questionnaires for coal, oil, natural gas, electricity, heat and renewable energy by the State Statistical Office (SSO). Annual questionnaires are communicated to EUROSTAT timely and in compliance with the *acquis*.

The results of the survey of consumption in households conducted in 2015 were integrated in annual energy statistics. The results provided disaggregated data on residential consumption of energy, as timely reported in the respective questionnaire, as well as updated data on production and consumption of energy from renewable sources in households.

SSO releases monthly energy statistics on electricity, natural gas, oil and petroleum products and solid fuels.

From 2014, SSO collects and submits to EUROSTAT monthly energy statistics which are subsequently published by EUROSTAT. Former Yugoslav Republic of Macedonia collects and disseminates monthly data as defined in Annex C of Regulation (EC)

1099/2008, however, the short-term monthly data on oil, gas and electricity are not compiled in time to be transmitted to the EUROSTAT yet.

SSO has already established a quality system for producing quality reporting as required under the Energy Community Treaty and a corresponding quality report is submitted to EUROSTAT.

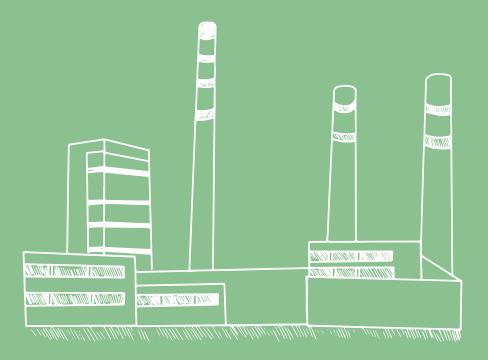
Prices of electricity charged to industrial end-users and house-holds and prices of natural gas charged to industrial end-users are compiled and submitted to EUROSTAT. Natural gas is not supplied to households in former Yugoslav Republic of Macedonia.

SSO reported disaggregated electricity prices for industrial end-users as well as disaggregated electricity prices for households, pursuant to the *acquis*.

Former Yugoslav Republic of Macedonia has transposed and implemented key requirements of the energy statistics *acquis* whereas only timeliness, primarily of short-term datasets, and quality of collections has to be improved further in accordance with best practices and statistical standards.



Moldova







Summary Implementation

| Summa | ry Indicators | Transposition Assessement | Implementation Status | Descriptions |
|------------|----------------------|------------------------------|-----------------------|---|
| F | Electricity | | 32% | Implementation in the electricity sector of Moldova is still at an early stage. |
| 4 | Gas | | 22% | Implementation in the gas sector of Moldova is still at an early stage. |
| • | Oil | 0 | 10% | Implementation in the oil sector of Moldova is yet to begin. |
| | Renewable Energy | | 65% | Implementation in the renewable energy sector of Moldova is well advanced. |
| A B | Energy Efficiency | | 69% | Implementation in the energy efficiency sector of Moldova is well advanced. |
| 8 | Environment | 0 | 60% | Implementation in the environment sector of Moldova is moderately advanced. |
| ** | Climate | 0 | 17% | Implementation in the climate sector of Moldova is yet to begin. |
| *** | Infrastructure | | 18% | Implementation in the infrastructure sector of Moldova is yet to begin. |
| <u>ılı</u> | Statistics | | 94% | Implementation in the statistics sector of Moldova is almost completed. |

Overall number of cases: 2

Procedure by Article 91

Energy Efficiency: 1



Electricity Implementation

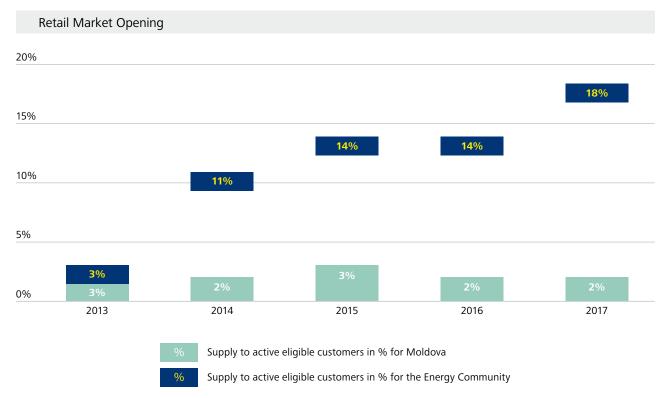
| Electricity Indicators | Transposition Assessement | Implementation Status | Descriptions |
|------------------------|------------------------------|-----------------------|--|
| Unbundling | | 25% | The Government adopted an unbundling decision for Moldelectrica in August 2018 enabling the company to apply to the regulator for certification under the Third Energy Package rules. Functional unbundling of the DSOs has to be finalised for all private and state-owned companies. |
| Access to the networks | 0 | 44% | The tariffs are approved and published. Allocation of cross-border capacities with the Ukrainian system are not performed based on market principles and fail to comply with Regulation (EC) 714/2009. |
| Wholesale market | ~ | 21% | Wholesale electricity prices are market-based except for the domestic combined heat and power plants. The day-ahead and balancing markets, as well as their transparency, are still to be implemented. |
| Retail market | | 61% | All customers are eligible, nevertheless, regulated supply services are still accessible to all customers. |
| Regional integration | | 9% | There is no bilateral market integration with Ukraine yet due to delays in market reforms in both countries. The interconnection project with Romania has advanced with the endorsement of the loan agreements by the Government. Connection Network Codes are yet to be transposed. |

Moldova has made some progress with respect to the implementation of the Third Energy Package, as transposed via the Electricity Law, namely the start of the transmission system operator unbundling process and endorsement of the wholesale market design concept. Moreover, the implementation of the Electricity Law was advanced by the partial adoption of new or review of existing secondary legislation acts by the Government and regulator by the deadline of August 2018 according to the Law.

However, the remaining secondary legal acts to complete the implementation of the Third Energy Package in electricity need to be put in place. The review process of the draft electricity market rules is expected to be finalised in October 2018, three months after the deadline set by the Law. Until the implemen-

tation of new market rules, Moldova's electricity procurement rules have to be improved further in terms of more stringent requirements for the bidders and compliance with the steps set in the call for proposals.

The unbundling process of Moldelectrica was unlocked with the adoption of the unbundling decision on the transmission system operator in August 2018. This enables the operator and the regulator to initiate the certification process. The unbundling of accounts also needs to be implemented by Energocom, who is active in regulated and non-regulated activities, as the 'central electricity supplier'- the single buyer of electricity from renewable sources from producers receiving support and a supplier in the wholesale and retail market.



Source: Ministry of Economy and Infrastructure

In relation to the access to the system, a review of the transmission tariff based on the newly adopted methodology is needed to enable viability of the company to operate and develop the transmission network.

The transmission system operators of Moldova and Ukraine have to strengthen their cooperation in order to implement the rules for access to cross-border capacities in compliance with Regulation (EC) 714/2009. Newly revised rules are expected to be adopted and implemented by the end of 2018. Bilaterally coordinated cross-border capacity allocations have to be introduced at the Moldovan-Ukrainian border.

Electricity market transparency Regulation (EU) 543/2013 was only partly transposed in a decision adopted by the regulator in 2017 and needs to be revised. Transparency of the transmission system operator has to increase significantly, as currently very limited information on access to the system is made available to the market participants. Transposition of the Connection Network Codes is still pending albeit the deadline expired on 12 July 2018.

The lack of competition in the wholesale electricity market of Moldova is affecting competition in the retail market. Out of twenty suppliers licenced by the regulator, only Energocom is active, supplying to three large customers at unregulated prices. The adoption and implementation of the revised electricity market rules in compliance with the concept design of the wholesale market is expected by the end of 2018. It should improve the current design of the electricity and balancing market in Moldova.

Competition is not likely to improve before Moldova couples its electricity market either with Ukraine or the European market through the interconnection with Romania, the commissioning of which is expected by the end of 2021. The endorsement by the Government of the loan agreements for the project on interconnection with the Romanian electricity system using backto-back stations is a step towards gaining access to competitive supplies from the European electricity market and improving the security of supply.



Gas Implementation

| Gas Indicators | Transposition Assessement | Implementation Status | Descriptions |
|------------------------|------------------------------|-----------------------|--|
| Unbundling | | 10% | Moldovatransgaz and Tiraspoltransgaz, daughter companies of incumbent Moldovagaz, are exempted from the Third Energy Package unbundling and certification rules until 1 January 2020. Vestmoldtransgaz, an emerging TSO, is not certified yet. |
| Access to the networks | | 25% | There is no entry/exit tariff methodology in place. Capacity allocations are not performed. |
| Wholesale market | | 25% | Moldova's gas market is entirely mo- nopolized and illiquid. More than 99% of contracted gas import quantities are being acquired from Gazprom. |
| Retail market | ~ | 26% | All customers, though eligible to freely choose and switch their gas supplier in theory, can benefit from gas supplies under regulated prices without restrictions in time and clearly defined and transparent rules. |
| Interconnectivity | ~ | 26% | Although an important transit route of Russian gas, Moldovatransgaz has not concluded an interconnection agreement with Ukraine. |

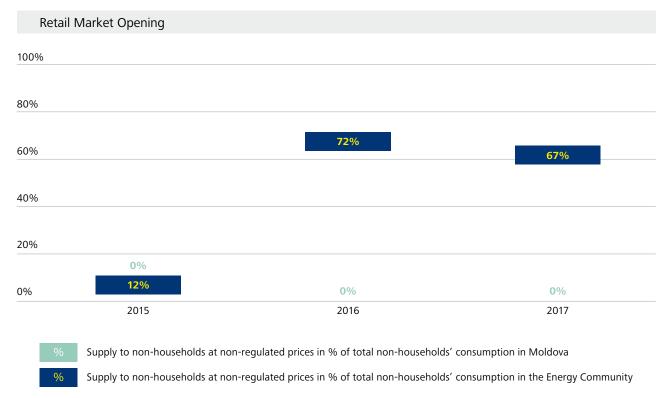
In 2016, Moldova transposed the vast majority of the Third Energy Package by the Law on Natural Gas. Since then, the country, with significant technical and institutional support from the Energy Community Secretariat, has drafted the core secondary legal acts that would rectify the remaining uncertainties and complete the transposition of the gas *acquis*. However, very few secondary acts were adopted to date.

ANRE and the Secretariat prepared fully compliant transmission and distribution network codes and draft market rules. The draft entry/exit transmission tariff methodology is in its final stages of preparation. The Secretariat is also assisting Moldovatransgaz to implement the interoperability concept and conclude an interconnection agreement with Ukraine in line with Commission Regulation (EU) 2015/703 (interoperability network code). The drafts should be adopted as soon as possible.

Moldova should start preparing the certification of Vestmoldtransgaz and Moldovatransgaz in compliance with the Third Energy Package in order to ensure the completion of the procedure by 1 January 2020, as set by its Accession Protocol to the Energy Community Treaty.

Strengthening the institutional set up and independence of ANRE should also be a priority.

All key gas market activities in the country remain concentrated within the corporate group of one vertically integrated company - Moldovagaz. The company is responsible for gas imports from Russia and exercises control over the country's two gas transmission system operators, Moldovatransgaz and Tiraspoltransgaz. Through its twelve subsidiaries, Moldovagaz controls about 70% of Moldovan gas distribution networks, and it also acts as a major retail supplier. The Law effectively and unduly



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

allows end-user price regulation to all customer categories, thus making the Law non-compliant with the Directive's provisions on public service obligations.

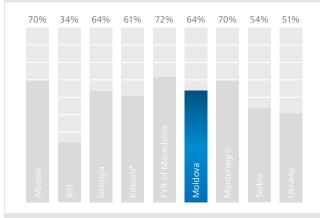
Rules and procedures for supplier switching are adopted, and the supply rules are drafted. In practice, however, only incumbent suppliers are active in the market. Vestmoldtransgaz was sold to Transgaz in 2018 with the obligation of the latter to invest in the Ungenhi Chishianu pipeline. Diversification of gas supplies in Moldova depends primarily on making operational its interconnector with Romania through the Iasi-Ungheni pipeline, and in particular on its projected extension to Chisinau. Moldova is an important route for the transit of Russian gas to Turkey and the Western Balkans. In recent years, the amount of gas transported through Moldova was around 20 Bcm/y.



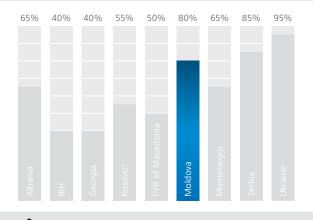
Moldova National Authorities



Regulatory Authority

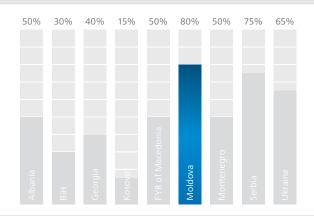


The Secretariat receives sporadic complaints by the regulated industry and civil society on performance and decisions of the regulator. Nevertheless, ANRE has made good progress in developing secondary legislation and started taking responsibility for addressing energy market challenges. The continuous praxis of the Ministry of Justice to narrow down competences of the agency by restrictively interpreting legal provisions is however of concern. Elements for improving the organisational set-up and independent operation of ANRE beyond the alignment of national legislation with the *acquis* have been defined in an action plan in 2016 but have not been implemented.



The authority in charge of enforcing competition law in Moldova is the Competition Council. In the area of competition, the Competition Council investigated a case of bid rigging by the companies Dominic J.S.C. and Comert-Gaz J.S.C. and imposed sanctions on the two companies.

State Aid Authority



The Competition Council is also responsible for enforcement of State aid law. In the area of State aid, the Competition Council examined the support measures granted to S.E. Vestmoldtransgaz and its successor J.S.C. Eurotransgaz in the context of the Ungheni-Chisinau and the Iasi-Ungheni projects and came to the conclusion that the support does not confer an economic advantage since it was remunerated above the market price.



Oil Implementation

| Oil Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--------------------------------|------------------------------|-----------------------|--|
| Stockholding obligation | ~ | 10% | At present, Moldova has no emergency oil stocks. A draft law on creating and maintaining a minimum level of oil product stocks was prepared in 2017 but not yet adopted. |
| Availability and accessibility | ~ | 10% | There are no emergency oil stocks, however, the draft law foresees that the Material Reserves Agency shall ensure the constant accessibility and availability of emergency oil stocks to be used in exceptional circumstances, in accordance with the relevant decision of the Government. |
| Reporting | ~ | 10% | No data are reported. One of the duties of the central public authority for regulating, monitoring and supervising the oil stocks, foreseen in the draft law, is to present by the 10th of February of each year to the central public administration body in the energy field a summary of the register of emergency stocks. The Joint Organisations Data Initiative (JODI) Questionnaire is not submitted. |
| Emergency procedures | ~ | 10% | There are no emergency procedures in place but the draft law foresees that oil stocks within Moldova as well as those maintained outside the country can be released and put into circulation by a decision of the Government. |

At present, Moldova has no oil stocks. The country has drafted a law on creating and maintaining a minimum level of oil product stocks in 2017. The draft foresees that before its entry into force the Government will submit proposals to bring existing legislation into conformity with this law. The draft law foresees

its entry into force on 1 January 2021 and it complies with Directive 2009/119/EC.

The Joint Organisations Data Initiative (JODI) Questionnaire is not submitted.



Renewable Energy Implementation

| Renewable Energy Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--|------------------------------|-----------------------|--|
| National Renewable Energy Action Plan | | 80% | Moldova has registered a 26,9% share of energy from renewable sources in 2016, surpassing its 17% target, due to statistical revision of biomass data. The technology objectives in the NREAP were revised by the Government in 2018. |
| Quality of support schemes | | 72% | Until the introduction of auctions in 2019, the support is granted via feed-in tariffs determined on a project by project basis in line with the methodology adopted by the regulator. |
| Grid integration | | 58% | Methodologies for determining costs of connection to the transmission and distribution grids for new producers have not been issued. Self-consumption of electricity from renewables acknowledged in the legislation is not fully implemented yet. |
| Administrative procedures | | 65% | A transparent, simplified and non-dis- criminatory framework is transposed in the legislation and partially imple- mented. |
| Renewable energy in transport | • | 2% | Initial progress is registered with the appointment of the Energy Efficiency Agency as the certificativon body, including for voluntary schemes. Renewable energy share in the transport sector is 0,03%. |

The implementation of the 2016 Law on Promotion of the Use of Energy from Renewable Sources is gradually advancing. Moldova has to step up its efforts to adopt the missing secondary legislation to enable a conducive investment framework for investors in renewable energy.

Moldova is the second Contracting Party that envisages the introduction of market-based support schemes to comply with the Guidelines on State aid for environmental protection and energy 2014-2020. The new auction rules were adopted in July 2018 and the first auction round is expected in 2019.

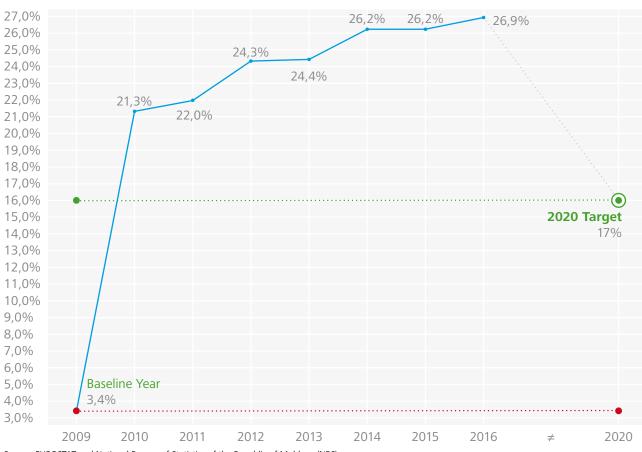
Renewable energy projects developed with imported second hand equipment do not receive support and do not get the eligible producer status. Power purchase agreements can be signed with suppliers at the market price, currently at 52,8 EUR/MWh.

Methodologies for determining costs of connection to the transmission and distribution grids for new renewable energy producers remain to be adopted. The current practice of the network operators to provide information only on a case-by-case basis is not compliant. Self-consumption of electricity from renewable energy sources acknowledged in the legislation is not implemented yet.

Full implementation of the transparent, simplified and non-discriminatory framework transposed in the legislation remains to be achieved taking into account the particularities of individual renewable energy technologies.

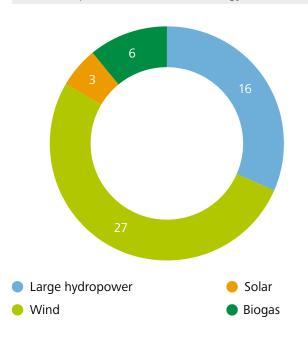
Following the delay in the transposition of provisions on renewable energy in transport, a methodology for calculating the impact of biofuels on the emission of greenhouse gases was drafted, while the regulation for the calculation of final consumption of energy from renewable sources in transport will be drafted in the next period. Nevertheless, the sustainability criteria for biofuels and bioliquids remain to be transposed and implemented to enable the production of biofuels and bioliquids in the country to count towards the target.

Shares of Energy from Renewable Sources



Source: EUROSTAT and National Bureau of Statistics of the Republic of Moldova (NBS)

Total Capacities of Renewable Energy 2017 (MW)



Source: Ministry of Economy and Infrastructure

The 2016 statistical data revealed that Moldova has registered a 26,9% share of energy from renewable sources surpassing its 17% target. This achievement is mostly due to the revision of biomass data and switching to biomass heating.

In July 2018, the Government revised the renewable energy technology objectives in the electricity sector projected in the NREAP. The review reflected the latest information on renewable energy potential and technology costs.

Total capacities of renewable energy (MW):

52



Energy Efficiency Implementation

| Energy Efficiency Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--|------------------------------|-----------------------|---|
| National Energy Efficiency Action Plans and Targets | | 85% | The 3rd EEAP and the 2020 target in primary energy consumption and final energy consumption were adopted in line with the Energy Efficiency Directive. |
| Energy efficiency in buildings | | 54% | The implementation of the Buildings Directive is incomplete. Following a gap analysis, the missing by-laws are being developed. |
| ESCO market development and financing | • | 51% | The energy services market is not yet developed and there are very few projects financed via the ESCO model to date. The legal and regulatory barriers to using energy performance contracting were identified and are addressed through secondary legislation. |
| Energy efficient products - labelling | | 62% | Eight out of the twelve regulations for implementation are adopted and the rest are being prepared. Customers Protection and Market Surveillance Agency undertook market surveillance activities in 2017 for the entire list of energy related products regulated by energy labelling and eco-design legislation. |
| Institutional capacities | | 75% | The Energy Efficiency Agency absorbed the Energy Efficiency Fund following the Energy Efficiency Law's adoption in 2018. The new institution will need significant capacity building and a large number of operating procedures. |

In the reporting period, Moldova made good progress by identifying the missing regulations required to implement the Energy Performance of Buildings Directive.

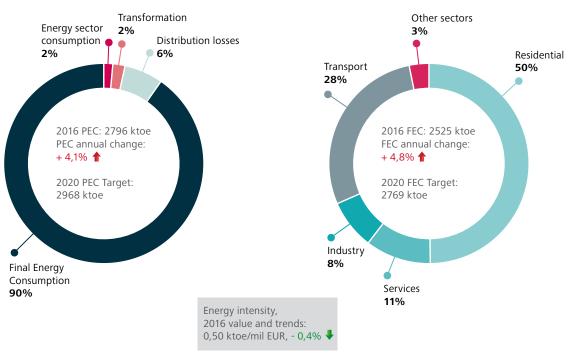
The first priority is the implementation of the Energy Efficiency Law to bring Moldova into compliance with new Directive 2012/27/EU. The second priority is to finalise work towards full

compliance of the Law on Energy Performance of Buildings with Directive 2010/31/EU by developing and implementing the buildings certification system, including the certificate calculation software. Finally, Moldova should adopt the necessary missing by-laws to ensure full transposition of the energy labelling *acquis*.

Energy Efficiency Indicators

Primary Energy Consumption (PEC) in 2016 and trends

Final Energy Consumption (FEC) in 2016 and trends



Source: EUROSTAT 2018 data and Contracting Party's Annual Reports under Directive 2012/27/EU

Implementation of Energy Efficiency Product Regulation Overview

| | | | 0=0== | | 555 | 0= 0== | | | | □□ ⊘ | |
|---------------------|-----------------------|---------------------------------------|----------------------------|-------------|------------------|-------------------------|---------------------------------|-----------------|---------------|-------------------------------|--------------------------------------|
| FRAMEWORK DIRECTIVE | Household dishwashers | Household refrigerating appliances | Household washing machines | Televisions | Air conditioners | Household tumble driers | Electrical lamps and luminaires | Vacuum cleaners | Space heaters | Water heaters & storage tanks | Domestic ovens, hobs and range hoods |
| | | | | | | | | | | | |

Adopted and implemented Adopted, implementation issues detected No progress with adoption/implementation

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



Environment Implementation

| Environment Indicators | Transposition Assessement | Implementation Status | Descriptions |
|---|------------------------------|-----------------------|--|
| Environmental impact assessment (EIA) and strategic environmental assessment (SEA) | | 71% | The Ministry of Environment must be adequately staffed to handle these procedures, including the arrangements for early and effective opportunities for public participation. |
| Sulphur in Fuels | | 93% | Implementation of the provisions of the Directive is essentially ensured. |
| Large combustions plants and industrial emissions | × | 64% | Moldova does not apply the NERP and opt-out mechanisms, therefore, compliance is checked on a plant by plant basis. Existing combustions plants in this Contracting Party are able to meet the emission limit values of the Large Combustion Plants Directive. |
| Nature protection | × | 20% | The implementation ratio of the Wild Birds Directive in Moldova is low. The designation of special protected areas has not started and measures for the protection of wild birds have also not been established yet. |

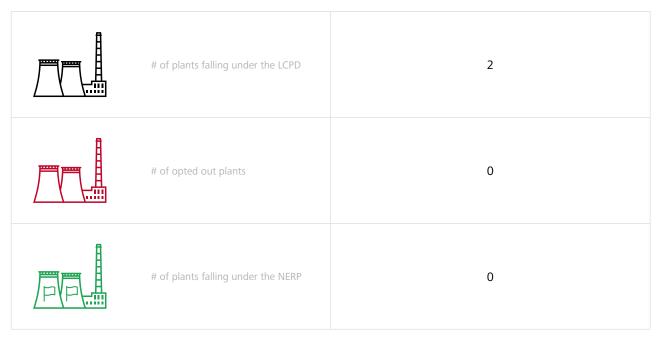
Moldova has followed up on the Secretariat's recommendations from the 2017 Implementation Report related to the amendments of the legislation on environmental impact assessment. Having the proper legal framework in place, efforts should be focused on the practical implementation of the provisions thereof as well as on capacity building of the authorities responsible for their implementation.

As regards legislation on the sulphur content of liquid fuels, the competent authorities of Moldova must ensure that the sampling and analysis of the fuels falling under the scope of the Directive takes place in accordance with the standards stipulated therein. The provisions on marine fuels do not apply to this Contracting Party.

Despite the assistance provided by the Secretariat, Moldova has not yet transposed the requirements of the two directives regulating the emissions of large combustion plants into national law and therefore national legislation is not compliant with the Energy Community *acquis communautaire*. Given the failure to adopt the transposing national legislation, the Secretariat initiated infringement proceedings against Moldova in September 2018. 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.

As regards the protection of wild birds, the draft law amending and supplementing the Law on Wildlife, which is to transpose Article 4(2) of the Wild Birds Directive, was still not adopted. Moldova currently has several areas nominated as candidates for Emerald sites under the Bern Convention.

Installations Under the Large Combustion Plants Directive



Source: compiled by the Energy Community Secretariat



| Climate Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--|------------------------------|-----------------------|--|
| National greenhouse gas emissions monitoring and reporting systems | ~ | 33% | The draft Regulation on the Organisation and Functioning of the National Monitoring and Reporting of Greenhouse Gas Emissions transposes the relevant provisions of Regulation (EU) 525/2013 on the national inventory system. It also contains provisions on policies, measures and projections. Its adoption is expected by the end of 2018. Moldova's Low Emission Strategy up to 2030 and the action plan for its implementation were adopted on 16 December 2016. Both are in compliance with Regulation (EU) 525/2013. |
| National Energy and Climate Plans (NECPs) | ~ | 5% | A national working group on NECPs has not been officially set up yet. However, the Government is considering the approval of a National Commission on Climate Change, chaired by the Ministry of Agriculture, Regional Development and Environment. Regional consultations will take place after the submission of the draft national plans. Preparatory work on the analytical and technical aspects of the NECP (reference and policy scenarios, templates) has not started yet. |

Moldova is a non-Annex I party to the United Nations Framework Convention on Climate Change (UNFCCC) and ratified the Paris Agreement in June 2017. The country has so far submitted to the UNFCCC four National Communications on Climate Change and one Biennial Update Report. According to its Nationally Determined Contribution (NDC), Moldova is committed to an unconditional target of 64-67% reduction of its greenhouse gas emissions by 2030 compared to 1990 levels.

Preparation of legislation in line with the climate *acquis* is progressing in Moldova. In 2017, a set of normative acts on climate was drafted, including a Regulation on the Organization and Functioning of the National Monitoring and Reporting of Greenhouse Gas Emissions and other Information relevant to Climate Change, a Government Decision on the Establishment of Mechanisms to Coordinate Activities on Climate Change and

a Government Decision on the Establishment of the National Commission on Climate Change. The adoption of these acts is expected by the end of 2018. A barrier to further progress in the climate sector remains the country's limited financial and technical capacity.

Moldova should urgently establish an inventory system by adopting the Regulation on the Organization and Functioning of the National Monitoring and Reporting of Greenhouse Gas Emissions.

Also, the National Development Strategy "Moldova 2030", currently under development, should be compliant with Recommendation 2018/01/MC-EnC and consistent with the already adopted Low Emission Strategy and action plan up to 2030.



Infrastructure Implementation

| Infrastructure Indicators | Transposition Assessement | Implementation Status | Descriptions |
|---|------------------------------|-----------------------|--|
| National competent authority | ~ | 30% | A draft amendment to the Energy Law transposing Regulation (EU) 347/2013 submitted to the Parliament for adoption foresees that the Ministry of Economy and Infrastructure will act as the national competent authority. The decision of the Parliament is pending. |
| Manual of procedures | ~ | 20% | Currently, there is no manual of procedures for the permitting process of Projects of Energy Community Interest or Projects of Mutual Interest. The first general draft of the manual of procedures exists, but it is yet to be agreed among stakeholders and published. |
| National regulatory authority involvement | ~ | 0% | To date, the Moldovan national regulatory authority did not publish its methodology and criteria. |

Moldova has initiated the transposition of Regulation (EU) 347/2013 by preparing an amendment to the Energy Law. The amendment, which foresees that the Ministry of Economy and Infrastructure will act as the national competent authority, is pending adoption by the Parliament.

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.

Proposed 2018 PECI/PMI projects

PECI: 1

PECI: 1

PHI: 1

PHI: 1



Statistics Implementation

| Statistics Indicators | Transposition Assessement | Implementation Status | Descriptions |
|-----------------------|------------------------------|-----------------------|--|
| Annual statistics | | 100% | Five annual questionnaires and MESH for 2016 are transmitted. |
| Monthly statistics | | 68% | All monthly collections are disseminated, but not transmitted to EUROSTAT. |
| Quality report | | 100% | Quality report is transmitted. |
| Price statistics | | 100% | Data on electricity prices are transmitted. |

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

Annual questionnaires are transmitted timely to EUROSTAT and published in the respective databases. Annual data are obtained using unified questionnaires for all registered legal entities in Moldova.

Based on the results of the survey on energy consumption in households, conducted by the National Bureau of Statistics of the Republic of Moldova (NBS), disaggregated data on energy consumption in households are compiled and transmitted to EUROSTAT.

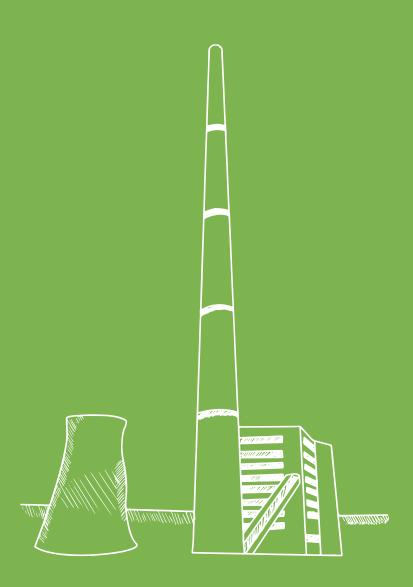
The reporting scheme for monthly data has been established and NBS publishes monthly datasets for coal, oil and petroleum products, natural gas and electricity. Until now, Moldova has been reporting only monthly data on solid fossil fuels to EU- ROSTAT. Although monthly data for other products are collected and disseminated by NBS, they are not transmitted to EUROSTAT in the prescribed format.

The established quality system has allowed NBS to timely prepare and transmit a quality report on its energy statistics in accordance with the Regulation.

NBS has established a methodology and a reporting system to collect electricity and gas prices. The price statistics include biannual gas and electricity price data per consumption band and disaggregated electricity prices for industrial end-users and households, broken down per price component. The price data-are transmitted to EUROSTAT in compliance with the *acquis*.

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

Montenegro









Summary Implementation

| Summary Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--------------------|------------------------------|-----------------------|---|
| Electricity | | 79% | Implementation in the electricity sector of Montenegro is well advanced. |
| Gas* | | 30% | Implementation in the gas sector of Montenegro is still at an early stage. |
| Oil | 0 | 10% | Implementation in the oil sector of Montenegro is yet to begin. |
| Renewable Energy | 0 | 71% | Implementation in the renewable energy sector of Montenegro is well advanced. |
| Energy Efficiency | | 75% | Implementation in the energy efficiency sector of Montenegro is well advanced. |
| Environment | | 76% | Implementation in the environment sector of Montenegro is well advanced. |
| Climate | 0 | 14% | Implementation in the climate sector of Montenegro is yet to begin. |
| Infrastructure | 0 | 47% | Implementation in the infrastructure sector of Montenegro is moderately advanced. |
| Statistics | | 81% | Implementation in the statistics sector of Montenegro is almost completed. |

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

Overall number of cases: **0**

No open Article 91 cases

No open Article 92 cases



Electricity Implementation

| Electricity Indicators | Transposition Assessement | Implementation Status | Descriptions |
|------------------------|------------------------------|-----------------------|--|
| Unbundling | | 100% | The TSO certification procedure was conducted in accordance with the <i>acquis</i> . The DSO is unbundled in a compliant manner. |
| Access to the networks | • | 90% | Third party access is based on publicly available tariffs. Allocation of cross-border capacities is performed by SEE CAO or through bilaterally agreed auctions for the interconnectors with Serbia. |
| Wholesale market | | 72% | Wholesale prices are fully deregulated. The day-ahead market is not functional yet. The company responsible for establishing a power exchange is in the process of selecting a strategic partner. |
| Retail market | | 84% | All customers are eligible. The incumbent supplier is designated by the Government as a supplier of last resort. Regulated prices based on a reference market price of electricity are available to households, small customers, vulnerable customers and to customers left without a supplier. |
| Regional integration | | 50% | The TSO is a shareholder of SEE CAO and the Security Coordination Centre. It established bilateral cooperation in exchanging balancing energy with the operators of Serbia and of Bosnia and Herzegovina. Connection Network codes are not transposed yet. |

The electricity market in Montenegro is developing in line with the Third Energy Package, transposed by the Energy Law and the Law on Cross-border Exchange of Electricity and Natural Gas.

The regulatory framework is defined by the Law, but the overall administrative framework is yet to be finalized. The necessary secondary legislation in the competence of the Ministry and the Government has not been completed within the deadlines set by the Law.

The unbundling of network operators is on a good track, including the certification of the transmission system operator. The distribution system operator is unbundled in accordance with the Law and the *acquis*.

The rules are in place guaranteeing non-discriminatory access

to the network and to interconnection capacities. Allocation of interconnection capacities is performed by the Coordinated Auction Office (SEE CAO) and in joint auctions in line with the published auction rules.

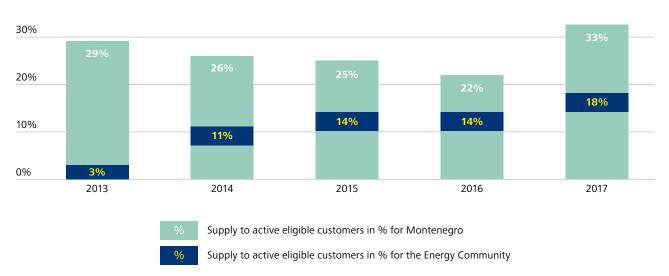
The authorities are taking further measures to improve the liquidity and competition in the market. The power exchange was established as a vehicle to operate a day-ahead market and its coupling. With technical assistance from the WB6 Connectivity programme, the responsible company is in the process of selecting a strategic partner to set up a power exchange.

The balancing rules allow market-based procurement and provision of balancing services and cross-border exchange of balancing energy. The national balancing market is functional. Imbalance settlement is applied to all market participants in a

Retail Market Opening

50%

40%



Source: Ministry of Economy

non-discriminatory manner. Prices of balancing reserves will remain regulated until a competitive balancing market is in place.

In terms of regional cooperation, the legislative and operational setup to enable integration of the wholesale market and the development of the cross-border balancing market is mostly in place.

The prices based on a reference market price of electricity are available to households, small customers, vulnerable customers, and to other customers if left without a supplier.

The selection of a supplier of last resort in a competitive procedure has not taken place yet and the incumbent still holds a prevailing share in the market, as a designated supplier of last resort, at prices capped to the reference market price.

Montenegro is the sole Contracting Party where trade is not subject to licensing.

Wholesale and retail markets are fully open for competition, however, the actual market liquidity is modest, considering the low number of active participants.

In the retail market, there is no actual competition, although

no formal obstacles exist to new market entrants. All customers are eligible to switch their supplier but the switching rate is almost negligible. All customers connected to the distribution network are supplied by the incumbent supplier. Considering the dominant share of the incumbent, acting as a designated supplier of last resort, the regulator has the power to intervene to prevent the abuse of a dominant position. The ceiling is set for the price charged by the designated supplier of last resort.

In practice, there are currently only three licensed suppliers of end-customers, one of them being a "self-supplying" customer. The rather small and highly concentrated retail market makes supplier switching unattractive and impedes new entrants from entering the supply market. No additional actions were taken to improve competition in the retail market.

Creating a more attractive environment for new entrants in the retail market in combination with activities to establish a competitive spot market on the wholesale level is expected to bring genuine competition and better offers for customers.

The Law envisages the introduction of a protection scheme for vulnerable customers, to be developed by the Government. The adoption process is not completed yet.



Gas Implementation

| Gas Indicators | Transposition Assessement | Implementation Status | Descriptions |
|------------------------|------------------------------|-----------------------|--|
| Unbundling | | 23% | The Law sets ownership unbundling as the only possible model for the country's future transmission system operator. |
| Access to the networks | | 33% | In the absence of any gas flows in Montenegro, no secondary acts nor tariffs are adopted. |
| Wholesale market | | 29% | The market is theoretically open and in line with the Third Energy Package. Market rules do not exist. |
| Retail market | | 34% | There is no retail market in Monte- negro. |
| Interconnectivity | ~ | 30% | Montenegro strongly promotes the Ionian Adriatic Pipeline project as the most feasible opportunity to bring natural gas supplies to its territory. |

At present, no gas market exists in Montenegro.

Montenegro transposed the majority of the Third Energy Package obligations in the gas sector via adoption of the 2015 Energy Law and the 2016 Law on Cross-Border Exchange of Electricity and Natural Gas. There are some missing or ambiguously transposed provisions, which are expected to be rectified with the adoption of secondary legal acts.

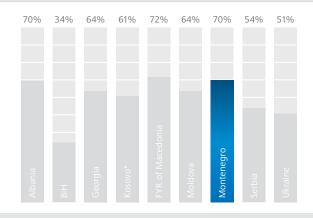
Montenegro has started to develop the missing secondary legal acts, though at a slow pace. This work should be intensified. With a sound legal framework in place, Montenegro will be able to promote the interconnection projects which would bring natural gas supplies to the country more effectively.



Montenegro National Authorities

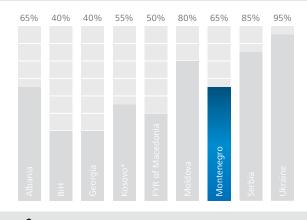


Regulatory Authority



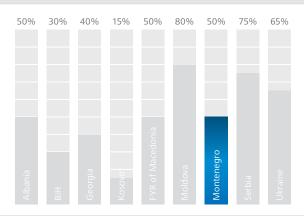
The Energy Regulatory Authority (RAE) has demonstrated its ability to exploit its legal competences and independence. In the electricity sector, RAE developed an advanced market model with a high degree of market orientation and proved being a proactive promoter as regards the implementation of national and regional reforms. Despite the lack of a gas market in Montenegro, the agency also started developing secondary legislation for gas. The effective functioning and independence of RAE are, however, challenged by several staff salary cuts in a row. This weakens the ability of the regulator to attract qualified staff and risks brain drain.

Competition Authority



The Agency for Competition Protection (ACP), established in 2013, is entrusted with the enforcement of competition law in Montenegro. There has been no case of applying competition law to the energy sectors in the past four years, except for the review of mergers.

State Aid Authority



The recent amendments to the Law on Protection of Competition provide for a transfer of State aid control and enforcement of competition law under one authority, the Agency for Competition Protection. In order to strengthen the independence of its decision-making, a council comprising a president and two members (for competition and State aid respectively) will be introduced. The Agency shall take over the tasks of the State Aid Control Commission.



Oil Implementation

| Oil Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--------------------------------|------------------------------|-----------------------|---|
| Stockholding obligation | ~ | 10% | There is no emergency oil stockholding policy, but a new draft Law on Security of Supply of Oil Products, was finalized and reviewed by the Secretariat during the third quarter of 2016 |
| Availability and accessibility | 0 | 10% | The draft Law foresees that emergency stocks must be physically accessible at all times and cannot be subject to measures which would limit their availability. |
| Reporting | © | 10% | Information regarding Montenegro's oil data collection is not available. The Joint Organisations Data Initiative (JODI) Questionnaire is not submitted. In the new draft Law, it is foreseen that the Ministry in charge of energy shall submit data referring to the import, export and placement of petroleum products on the market to the Statistical Office, which shall produce an official aggregated monthly statistical report on the petroleum products market. |
| Emergency procedures | ~ | 10% | 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 a contingency plan. |

In Montenegro, there is no emergency oil stockholding policy, but a draft Law on Security of Supply of Oil Products, which regulates the manner of establishing and managing emergency oil stocks and the procedure in case of disruption of supply of petroleum products, was finalized and reviewed by the Secretariat during the third quarter of 2016. In addition, the Government revised the Action Plan for the implementation of

Directive 2009/119/EC, in order to reflect all components of the emergency oil stockholding system. Nevertheless, the adoption of the new draft Law and the subsequent secondary legislation in line with Directive 2009/119/EC is still pending.

The Joint Organisations Data Initiative (JODI) Questionnaire is not submitted.



Renewable Energy Implementation

| Renewable Energy Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--|------------------------------|-----------------------|---|
| National Renewable Energy Action Plan | | 88% | Montenegro has registered a 41,6% share of energy from renewable sources in 2016, surpassing its 33% target. |
| Quality of support schemes | 0 | 70% | Support is based on a system of feed- in tariffs and power purchase agree- ments. The introduction of auctions is pending. |
| Grid integration | | 62% | Priority access and dispatch for privileged renewable energy producers are provided in the Energy Law but not completely implemented. Clear, predictable and transparent connection timetables have to be provided to applicants. |
| Administrative procedures | 0 | 69% | The administrative procedures for permitting, construction and licensing remain lengthy and burdensome despite several simplification rounds. |
| Renewable energy in transport | | 27% | The sustainability criteria for biofuels and bioliquids is transposed. However, the actual share of renewables in transport is a mere 1,1%. |

The 2015 Energy Law is currently being amended to fulfil all requirements of Directive 2009/28/EC and the Guidelines on State Aid for environmental protection and energy 2014-2020. The adoption of the Law is expected by the end of 2018.

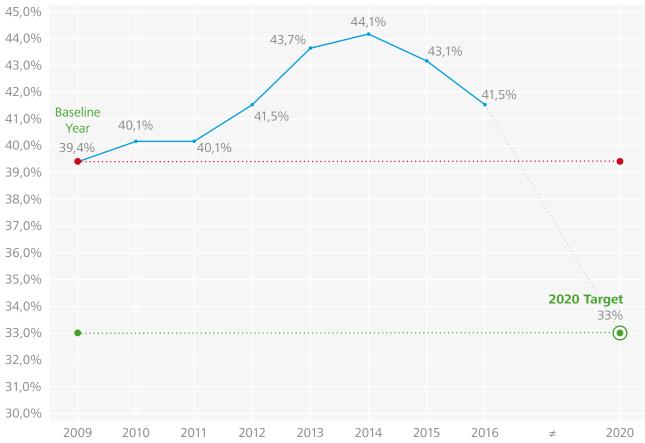
Several provisions of the existing Energy Law are yet to be implemented in practice. This includes ensuring that the costs associated with grid reinforcements are borne by grid operators and that authorisation and permitting procedures are coordinated and transparent. Self-consumption of electricity from renewable energy sources acknowledged in the legislation is not implemented yet.

Provisions on the issue, transfer and cancellation of guarantees of origin transposed in the 2015 Energy Law also need to be implemented. Compatibility with the standardised European Energy Certificate System and membership in the Association of Issuing Bodies (AIB) remain to be achieved.

To compensate the cost of the promotion of electricity from renewables, the Government adopts an incentive fee applied to end-customers. For 2018, it was set at 0,47316 c€/kWh, a seven fold increase compared with 2017 due to the impact of new wind projects. The market operator concludes power purchase agreements with electricity suppliers who are obliged to purchase a certain percentage of electricity from renewable sources.

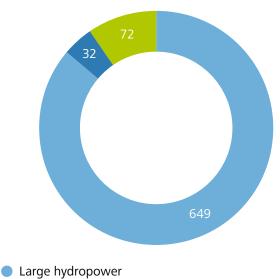
Significant progress has been registered in relation to the sustainability criteria for biofuels and biodiesel. Three governmental decrees adopted in June 2018 transposed the required provisions.

Shares of Energy from Renewable Sources



Source: EUROSTAT and Statistical Office of Montenegro (MONSTAT)

Total Capacities of Renewable Energy 2017 (MW)



Small hydropower <10 MW</p>

Wind

Source: Ministry of Economy

Montenegro has reached a 41,5% share of energy from renewable sources in 2016 surpassing its 29,3% median trajectory for 2015-2016. This is mostly due to the revision of biomass data and reduction of energy consumption of the largest electricity customer, the aluminium plant KAP.

In 2018, the Ministry launched an auction for 200 MW of solar PV without support, to be built on state-owned land. The awarding criterion is the price offered for the concession of the land. The cost of connection to the grid is to be covered by the transmission system operator.

Total capacities of renewable energy (MW):



Energy Efficiency Implementation

| Energy Efficiency Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--|------------------------------|-----------------------|--|
| National Energy Efficiency Action Plans and Targets | | 77% | The 3rd EEAP was adopted in 2016, and the 2020 cap consumption target was reported. A 1% annual target for central government buildings was set and concrete projects implemented, while decision on the energy efficiency obligation scheme is pending. |
| Energy efficiency in buildings | | 74% | A law and a series of implementing rulebooks were adopted in 2015. Montenegro continued implementing several successful building rehabilitation programmes, albeit a long-term building renovation strategy is missing. |
| ESCO market development and financing | 0 | 53% | An enabling legal framework and model contracts exist, and the 3rd EEAP envisages promotional measures. The remaining legislative requirements are to be transposed by draft amendments to the Public Private Partnership Law. |
| Energy efficient products - labelling | | 89% | Rulebooks on obligatory labelling and eco-design have been adopted and implemented, with engagement and permanent capacity building of involved market surveillance bodies. |
| Institutional capacities | 0 | 75% | The Ministry of Economy has established good cooperation with other state institutions and manages donations for implementation of the EEAP. |

During this reporting period, Montenegro achieved progress with the implementation and update of the Law on Efficient Use of Energy, as well as the adoption of a package of by-laws, especially those targeting energy efficient products.

In order to achieve the energy savings target, Montenegro must continue to mobilize financial resources that go beyond public budget financing, e.g. public private partnerships and energy service companies (ESCOs) finance models.

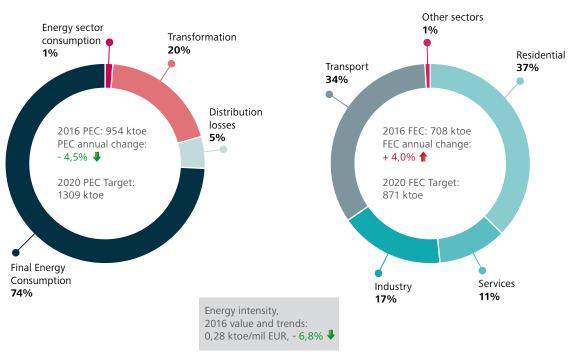
Montenegro should also improve statistical data collection and put in place a functional system for calculation of energy efficiency indicators and savings, as well as monitoring of EEAP implementation.

Without delay, Montenegro should adopt the missing secondary legislation on energy labelling of energy-related products. The full transposition and implementation of Directives 2012/27/EU and 2010/31/EU must also be continued.

Energy Efficiency Indicators

Primary Energy Consumption (PEC) in 2016 and trends

Final Energy Consumption (FEC) in 2016 and trends



Source: EUROSTAT 2018 data and Contracting Party's Annual Reports under Directive 2012/27/EU

Implementation of Energy Efficiency Product Regulation Overview

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|---------------------|-----------------------|---------------------------------------|----------------------------|-------------|------------------|-------------------------|---------------------------------|-----------------|---------------|-------------------------------|--------------------------------------|
| FRAMEWORK DIRECTIVE | Household dishwashers | Household refrigerating appliances | Household washing machines | Televisions | Air conditioners | Household tumble driers | Electrical lamps and luminaires | Vacuum cleaners | Space heaters | Water heaters & storage tanks | Domestic ovens, hobs and range hoods |
| | | | | | | | | | | | |

No progress with adoption/implementation

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

Adopted, implementation issues detected

Adopted and implemented



Environment Implementation

| Environment Indicators | Transposition Assessement | Implementation Status | Descriptions |
|---|------------------------------|-----------------------|---|
| Environmental impact assessment (EIA) and strategic environmental assessment (SEA) | | 77% | Environmental assessments in Montenegro are being carried out both at central and local level. During the reporting period, several positive decisions on environmental impact assesments were issued for projects related to transmission line dislocation and reconstruction as well as the construction of a small hydropower plant. |
| Sulphur in Fuels | | 100% | Implementation of the provisions of the Directive (including those on marine fuels) is ensured by the Annual Fuel Quality Monitoring Programme. |
| Large combustions plants and industrial emissions | | 73% | The only existing plant in Montenegro has started its opt-out as of 1 January 2018. |
| Nature protection | | 53% | Montenegro has the institutional framework for designating future Natura 2000 sites, including special protected areas for wild birds. |

With regard to environmental assessments, there is still room for improvement in the case of projects where the local level administration acts as the competent authority. In particular, the quality of environmental impact assessment reports and public consultations need to improve in such cases.

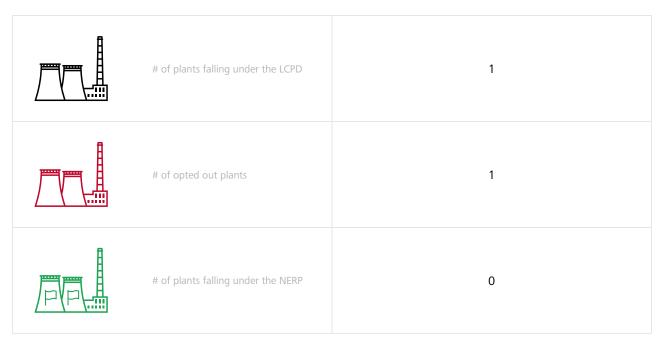
As regards legislation on the sulphur content of liquid fuels, Montenegro is implementing the provisions of the Directive correctly.

With regard to large combustion plants, the opt-out of the thermal power plant Pljevlja (the only existing plant in Montenegro) means that the plant would be able to remain in operation for a maximum of 20.000 hours between 1 January 2018 and 31 December 2023. This puts focus on the planned replacement

capacity. For the time being, it is not clear whether Montenegro intends to reconstruct the existing plant or build a new unit. In either case, the new plant must meet the emission limit values of the Industrial Emissions Directive for new plants.

As regards the protection of wild birds, administrative capacities for the future management of classified areas still need to be strengthened. It is also important to integrate the consideration of nature protection measures in environmental impact assessments, especially when considering possible hydropower projects. The Government still has not rendered the Ulcinj Salina under protective measures, even though it is one of the most important wetlands on the Mediterranean as well as a potential Natura 2000 site and a special protected area for wild birds.

Installations Under the Large Combustion Plants Directive



Source: compiled by the Energy Community Secretariat



Montenegro

Climate

| Climate Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--|------------------------------|-----------------------|---|
| National greenhouse gas emissions monitoring and reporting systems | | 27% | A national inventory system with concrete reporting obligations has not been established yet, although an annual data collection plan for the preparation of inventories was adopted in 2018. The country has a National Strategy on Climate Change until 2030, however, the financial component is under discussion. Currently there is no legislation providing for emission projections. The draft Law on Climate Protection, to be adopted by the end of 2018, will regulate these aspects as well as emission trading. |
| National Energy and Climate Plans (NECPs) | • | 5% | A national working group on the NECPs has not been set up yet, although a working group on climate change was established within the National Council as its permanent working body. Preparatory work on the analytical and technical aspects of the NECP (reference and policy scenarios, templates) has not started yet. Regional consultations will take place after the submission of the draft national plans. |

Montenegro is a non-Annex I party to the United Nations Framework Convention on Climate Change (UNFCCC) and ratified the Paris Agreement in October 2017.

It submitted to the UNFCCC two National Communications (2010, 2015) and its first Biennial Update Report in 2016. Preparatory work on the third National Communication on Climate Change and the second Biennial Update Report are ongoing. According to Montenegro's Nationally Determined Contribution (NDC), it will reduce by 30% its emissions by 2030 compared to 1990. The reduction is to be achieved by a general increase of energy efficiency, improvement of industrial technologies, increase of the share of renewables and modernization of the power sector. Montenegro's NDC is currently under revision, with the addition of the financial component and an adaptation strategy.

A draft Law on Climate Protection was prepared and its adoption is expected by the end of 2018. It will ensure harmonization of national legislation with the *acquis* on climate and regulate the functioning of the National Monitoring System for Reporting as well as emission trading.

It would be important to formally establish an inventory system and have concrete obligations to report also on policies and measures. The country also needs to develop low-carbon strategies and projections, a task that suffers from a lack of capacity.

A national working group on NECPs should be formalized, including representatives of all relevant institutions, and preferably also civil society and business organizations. Coordination of national policies on energy and climate should prevent adverse incentives and mitigate inconsistencies, while identifying synergies and trade-offs between the national energy strategies and the national climate strategies.



Infrastructure Implementation

| Infrastructure Indicators | Transposition Assessement | Implementation Status | Descriptions |
|---|------------------------------|-----------------------|---|
| National competent authority | ~ | 20% | The Ministry of Economy indicated the establishment of 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 | ~ | 30% | A unified procedure with strictly defined deadlines for obtaining the necessary documents from the permit granting entities already exists in Montenegro; however, it does not comply with Regulation (EU) 347/2013. |
| National regulatory authority involvement | • | 100% | The regulator has published its methodology and the criteria used to evaluate investments in electricity and gas infrastructure projects and the higher risks incurred by them on 29 December 2017. |

Montenegro shall adopt amendments to the Law on Cross-border Exchanges in Electricity and Natural Gas, which will ensure transposition and proper implementation of Regulation (EU) 347/2013, as soon as possible.

The national competent authority shall be designated and operational and shall publish a manual of procedures for the permit granting process applicable for Projects of Energy Community Interest and Projects of Mutual Interest.

The transposition of the Regulation will support the realization of the ongoing strategic infrastructure projects in electricity, as well as the planned infrastructure projects in gas. Montenegro will benefit from improved security of supply and overall operation of the energy system in the country. This will also have a positive impact on the regional market and its coupling.

| | Proposed 2018 PECI/ | 'PMI projects | |
|-----------------------|---------------------|---------------|---------------|
| Electricity: 1 | PECI: 1 | PMI: 1 | Gas: 1 |



Montenegro **Statistics**

Statistics Implementation

| Statistics Indicators | Transposition Assessement | Implementation Status | Descriptions |
|-----------------------|------------------------------|-----------------------|---|
| Annual statistics | | 83% | MESH for 2016 is not transmitted. |
| Monthly statistics | | 63% | Monthly oil data are not transmitted to EUROSTAT. |
| Quality report | | 0% | Quality report is not transmitted. |
| Price statistics | | 100% | Data on electricity prices are transmitted. |

In terms of annual and monthly energy statistics, there is still not sufficient progress to achieve full compliance with the *acquis*. As regards price statistics, it is implemented as required.

The Statistical Office of Montenegro (MONSTAT) collects and publishes annual energy balances. The methodology and formats are harmonized with IEA/EUROSTAT standards.

Based on the results of the conducted surveys of energy consumption in services and industry, MONSTAT revised the data series on energy production and consumption, thus improving relevance and completeness of its energy statistics.

Disaggregated data on energy consumption in households are not compiled and disseminated. Other annual questionnaires are communicated timely to EUROSTAT in compliance with the *acquis*.

Montenegro established a functional reporting system for monthly energy data in the Ministry of Economy. Monthly reports on electricity and solid fuels are transmitted to EUROSTAT, including short-term electricity data. However, although the reporting system is in place, the monthly oil data have not been transmitted to EUROSTAT. Hence, Montenegro failed to keep up the previously achieved level of compliance and produce monthly statistics of relevance.

MONSTAT established a procedure to maintain the expected level of quality, but the report on the quality of transmitted data in the format defined by EUROSTAT has not been prepared and transmitted.

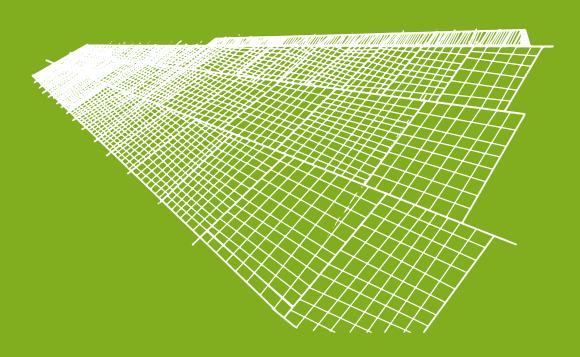
Electricity prices, charged to industrial end-users and households broken down per consumption band and taxation level, are communicated to and subsequently published by EUROSTAT. Montenegro does not have a natural gas market at present.

Montenegro started to report to EUROSTAT the components of electricity prices charged to end-users, both household and industrial, for the second semester 2017, in line with the *acquis*.

Montenegro should urgently take to reporting the disaggregated energy consumption in households in accordance with the *acquis* and re-establish dissemination of the monthly oil data in the requested format and transmit it to EUROSTAT.

In addition, the quality report has to be prepared and published.

Serbia







Summary Implementation

| Summa | ry Indicators | Transposition Assessement | Implementation Status | Descriptions |
|----------|----------------------|------------------------------|-----------------------|---|
| F | Electricity | | 72% | Implementation in the electricity sector of Serbia is well advanced. |
| 6 | Gas | | 41% | Implementation in the gas sector of Serbia is moderately advanced. |
| • | Oil | | 30% | Implementation in the oil sector of Serbia is still at an early stage. |
| | Renewable Energy | 0 | 50% | Implementation in the renewable energy sector of Serbia is moderately advanced. |
| A B | Energy Efficiency | | 74% | Implementation in the energy efficiency sector of Serbia is well advanced. |
| 8 | Environment | ~ | 74% | Implementation in the environment sector of Serbia is well advanced. |
| | Climate | 0 | 16% | Implementation in the climate sector of Serbia is yet to begin. |
| *** | Infrastructure | | 35% | 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. |





Electricity Implementation

| Electricity Indicators | Transposition Assessement | Implementation Status | Descriptions |
|------------------------|------------------------------|-----------------------|--|
| Unbundling | | 56% | The regulator certified the TSO as compliant with ownership unbundling rules in contrast to the Secretariat's Opinion, which concluded that compliance has not yet been fulfilled. Functional unbundling of the DSO is still not achieved. |
| Access to the networks | • | 74% | The lack of compliance with Regulation (EC) 714/2009 is subject to a dispute settlement case for non-compliance with regard to usage of congestion income from allocation of capacities on cross-border interconnectors. |
| Wholesale market | | 96% | The wholesale market is fully deregulated. A day-ahead market is in place. The balancing market is functional, yet lacks competition. |
| Retail market | | 89% | All customers are eligible, and supply prices are deregulated for all customers except prices of guaranteed supply for households and small customers. |
| Regional integration | | 59% | Cross-border cooperation is being developed, mainly on a bilateral basis. Participation in regional initiatives is missing. Negotiations with regional coordinated office SEE CAO are stalled, and no progress has been made towards resolution of the dispute between the TSOs of Serbia and Kosovo*. |

The Third Energy Package compliant Energy Law of 2014 is implemented to a large extent, but no progress was made in closing the remaining open issues that are blocking the further development of the country's electricity market and its integration. This goes in particular for the long-standing dispute between the transmission system operators of Serbia and Kosovo*, respectively EMS and KOSTT.

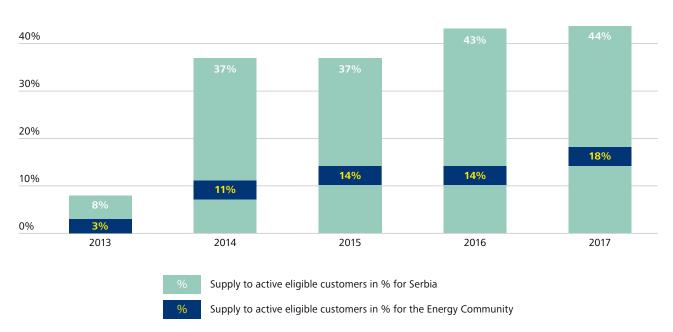
Negotiations between EMS and KOSTT are being facilitated by the Energy Community Dispute Resolution and Negotiation Centre and supported by the technical assistance under the WB6 regional energy market connectivity programme. However, there was no advancement towards implementation of the contracts signed in 2014. In addition, the absence of a political solution to this dispute led to power deviations originating from Kosovo* and Serbia, resulting in frequency deviations in the overall synchronous area of Continental Europe. Finding a sustainable solution to the frequency deviations requires action at political level.

EMS continues to allocate capacities on the interconnectors with Albania, former Yugoslav Republic of Macedonia and Montenegro. The usage of congestion income from allocation of capacities on these borders is subject to a Ministerial Council decision against Serbia.

The finalisation of unbundling of system operators and further deregulation of prices are prerequisites for the development of competition in the market. The transmission and distribution system operators, respectively EMS and EPS Distribution, are not yet unbundled in a compliant manner. EMS was certified by AERS, however, the Secretariat's assessment shows that compliance with regard to separation of control is still to be verified. EPS Distribution is legally unbundled, but the first compliance report revealed that the independence of the company in terms of organisation and decision-making is still to be ensured. Transposition of Connection Network Codes shall be finalised, as the deadline expired.

Retail Market Opening

50%



Source: Ministry of Mining and Energy

Prices of electricity in the wholesale market are fully deregulated and a day-ahead market, operated by power exchange SEEPEX, is functional. Foreign companies from EU Member States and Contracting Parties can obtain a wholesale license without seat establishment, which resulted in 12 out of 17 members in SEEPEX. Trading volume in SEEPEX increased by 60% in 2017.

The development of competition will require further measures, among which are the deregulation of the retail market and appointment of a universal supplier in an open procedure. Supply prices are deregulated for all customers, except for small and household customers that are entitled to universal service. Currently, regulated prices of supply for small and household

customers are at a level which does not provide an incentive to customers to change their supplier. Consequently, no switching from the universal supplier has taken place yet. Out of 63 licensed suppliers, only 19 were active in 2017 and 94,5% of electricity supply in the free market was sold by the dominant supplier.

The balancing market is also functional, however, it has only one provider of balancing services. In addition, the balancing reserve price is still regulated. Further deregulation of supply and balancing reserve prices is subject to the assessment of the regulator on the need for further regulation of these prices. The assessment report for 2018 is still to be published.



Gas Implementation

| Gas Indicators | Transposition Assessement | Implementation Status | Descriptions |
|------------------------|------------------------------|-----------------------|---|
| Unbundling | | 16% | The TSO Srbijagas is neither unbundled nor certified. The TSO Yugorosgaz Transport was certified for a period of one year in conflict with the <i>acquis</i> . The storage system operator, Banatski Dvor, does not apply the minimum unbundling criteria. The DSO regime is in line with the Third Energy Package de minimis clause. |
| Access to the networks | | 52% | An entry-exit transmission tariff methodology with individual tariffs is implemented for both entry-exit zones in Serbia. Tariffs of Banatski Dvor are not applied. Srbijagas banned the allocation of its capacities at the interconnection point Horgos with Hungary. |
| Wholesale market | | 52% | The virtual trading point is not operational. The wholesale market is deregulated, yet concentrated. |
| Retail market | | 55% | All customers are eligible, and supply prices are deregulated for all customers except prices of public supply for households and small customers. |
| Interconnectivity | 0 | 27% | There is an operational agreement with the Hungarian TSO, whereas negotiations with the TSO of Bosnia and Herzegovina on an interconnection agreement have not started yet. |

The total lack of progress in gas market reforms is becoming more evident. The gap between the transposition of law and its implementation in Serbia is widening each year. Moreover, several important secondary acts were not updated in line with the Law.

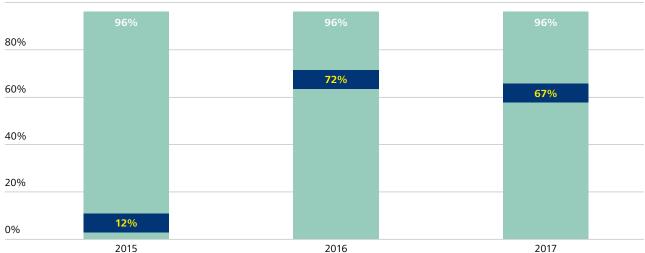
One of the most severe breaches is the lack of unbundling of the major transmission system operator, Srbijagas, which the 2016 Ministerial Council confirmed as a serious and persistent breach of the Energy Community Treaty. The Action Plan, adopted by the Serbian Government to rectify this breach, is discredited because none of the activities stipulated therein were fulfilled. The certification of Yugorosgaz Transport by the regulator in spite of evident non-compliance with the Third Energy Package principles constitutes another infringement case.

As a result, Srbijagas continues to enjoy a highly concentrated share in the wholesale and retail markets, where space for new entrants is non-existent.

The majority of gas supply is imported under an intergovernmental agreement signed between Serbia and Russia in 2012 and valid until 2021. The agreement includes a destination clause, which constitutes a restriction of the territory to which the gas may be sold. The Presidents of Serbia and Russia agreed in December 2017 to exclude the destination clause from the agreement. The Government of Serbia submitted such an amendment to the Serbian Parliament this spring.

Retail Market Opening





- % Supply to non-households at non-regulated prices in % of total non-households' consumption in Serbia.
- % Supply to non-households at non-regulated prices in % of total non-households' consumption in the Energy Community

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

The remaining supplies are produced by the only domestic producer, Naftna Industrija Srbije (NIS), which is majority owned by Gaspromnjeft of Russia. The only three wholesale players present in Serbia are NIS, Srbijagas and Cestor Veks d.o.o. NIS uses the majority of its production for its own needs and does not make it available to the market.

In retail gas supply, Srbijagas is also the dominant market player, accounting for some 87% of total natural gas sales in 2017. The second biggest supplier had only 3% of the retail market share. In principle, the retail market in Serbia is deregulated. The rest of the market (household customers and some small consum-

ers) is supplied under regulated prices by 33 public suppliers. The percentage of total sales to customers who switched their supplier decreased from 3,7% in 2016 to 0,9% in 2017.

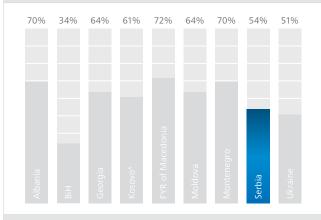
Gastrans LLC Novi Sad, a company owned by South Stream Serbia (51% Gazprom, 49% Srbijagas), has submitted an application for the exemption from the third party access rules on the entire natural gas pipeline on the territory of Serbia to the regulator. The project should connect the Bulgarian and Hungarian national transmission systems.



Serbia National Authorities

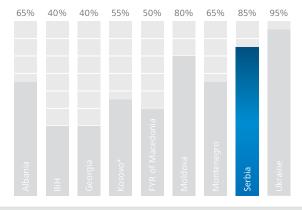


Regulatory Authority



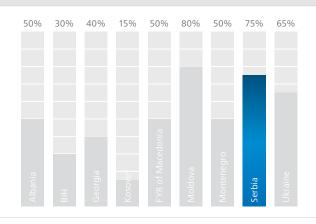
The performance of the Energy Agency of the Republic of Serbia (AERS) is beyond doubt when it comes to technical aspects of market regulation and tariff setting. AERS has proven both expertise and commitment to develop secondary legislation in line with domestic deadlines. By contrast, AERS failed to enforce compliance of regulated companies with Serbian and Energy Community law in a number of core areas such as unbundling of the incumbents Srbijagas, Yugorosgaz and EMS. In the latter two cases, the issuance of a positive certification decision by the regulator despite the lack of the companies' compliance with unbundling requirements is critical.

Competition Authority



Competition law in Serbia is enforced by the Commission for Protection of Competition (CPC). In the reporting period, the CPC's decision on abuse of dominance of EPS Distribucija was referred back to the CPC for procedural deficiencies. The CPS removed these issues and rendered a new decision coming to the same conclusions as in the previous decision. Furthermore, it completed its sector inquiry of the oil derivatives markets in Serbia in 2016.

State Aid Authority



The body in charge of the enforcement of State aid law is the Commission for State Aid Control. It is assisted by the Department for State Aid Control, established within the Ministry of Finance. The authority cooperates with the Secretariat in their enforcement activities. After several rounds of discussions and assistance of the Secretariat under Article 2 of the Dispute Settlement Procedures, the Commission for State Aid Control issued a compliant decision regarding the support measures in the form of guarantees for loans and the transfer of property for the Kolubara power plant project.



Oil Implementation

| Oil Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--------------------------------|------------------------------|-----------------------|---|
| Stockholding obligation | | 40% | The emergency oil stocks obligations in Serbia are calculated based on inland consumption and the estimated number of days of these stocks is 19. There were different public procurements carried out during 2018 which allowed the purchase of 8.700,00 tonnes of Euro diesel and 10.000,00 tonnes of gasoline. |
| Availability and accessibility | | 40% | The Law on Commodity Reserves clearly stipulates that emergency stocks must be physically available at all times and cannot be subject to any measures that would limit their availability. |
| Reporting | | 20% | There is no reporting information from Serbia but in their respective legislation (primary and secondary) the obligation is foreseen. The Joint Organisations Data Initiative (JODI) Questionnaire is not submitted to the Secretariat. |
| Emergency procedures | ~ | 20% | The Emergency Response Plan is not yet approved. This Plan shall include procedures and criteria for the identification of a supply disruption, the authority and responsibility to eliminate supply disruptions and the procedures for the normalization of the supply of the market of Serbia. |

Emergency oil stocks in Serbia are regulated by the Commodity Reserves Law adopted in December 2013. With this Law (and in particular its Articles 15 to 31), Serbia has transposed the most relevant provisions of Directive 2009/119/EC on Emergency Oil Stocks. During 2017 and 2018, the volume of oil products in Serbia increased due to a rise in the purchase of oil and related goods and call option agreements. In 2018, a new medium-term plan for the establishment and maintenance of emergency stocks of oil and oil products is in the process of

adoption and the country's long-term plan has been adopted. In addition, activities to start the construction of new storage capacities for the needs of emergency stocks have been started and currently they are in the stage of obtaining a construction permit. In Serbia, the oil stock obligations are calculated based on inland consumption.

The Joint Organisations Data Initiative (JODI) Questionnaire is not submitted.



Renewable Energy Implementation

| Renewable Energy Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--|------------------------------|-----------------------|--|
| National Renewable Energy Action Plan | | 50% | Serbia is in severe delay in the implementation of the NREAP. In 2016, the share of energy from renewable sources was 20,9%, well below the 23,8% indicative trajectory. |
| Quality of support schemes | 0 | 55% | The support system is based on feed-in tariffs and power purchase agreements signed between the market operator and the privileged producers for 12 years. The introduction of auctions is pending. |
| Grid integration | • | 56% | Guaranteed access for electricity or gas produced from renewable sources is not provided for by the 2015 Energy Law. Rules on renewable energy self-consumption for distributed generation are not in place. |
| Administrative procedures | • | 72% | The administrative procedures for permitting, construction and licensing remain quite lengthy and burdensome despite several simplification rounds. |
| Renewable energy in transport | × | 0% | Serbia is completely non-compliant with Directive 2009/28/EC in the transport sector. None of the relevant provisions have been transposed. Only the 10% target is included in the NREAP. |

The reform process of the renewable energy framework has been stagnant in Serbia in the last reporting period. Serbia has to step up its efforts to finalize the transposition of the renewables *acquis* and ensure its implementation in practice.

Serbia is the only Contracting Party with an operational dayahead market that could enable a swift transition to a feed-in premium support scheme, in compliance with the Guidelines on State Aid for environmental protection and energy 2014-2020. As a first step, Serbia must amend the Energy Law so that access for electricity produced from renewable sources is guaranteed.

The administrative procedures for permitting, construction and licensing need to be coordinated and streamlined. Furthermore, the system of issue, transfer and cancelation of guarantees of

origin has to be implemented. Compatibility with the standardised European Energy Certificate System and membership in the Association of Issuing Bodies remain to be achieved.

Renewable energy self-consumption of distributed renewable generation should be allowed under the legislation to encourage and enable customers to become prosumers.

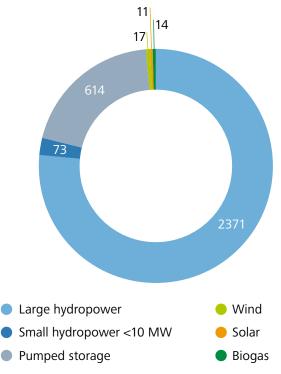
Despite being an obligation under the 2014 Energy Law, the sustainability criteria for biofuels have not been adopted so far. Nevertheless, the share of renewable energy in transport reached 1,2% in 2017 due to electricity used in public transport. A recently established inter-sectoral working group has been tasked to develop the missing regulations.

Shares of Energy from Renewable Sources

2020 Target 27% 27,0% 26,5% 26,0% 25,5% 25,0% 24,5% 24,0% 23,5% 22,7% 23,0% 22,5% Baseline 22,0% Year 21,5% 21,2% 21,8% 21,0% 21,4% 20,9% 20,9% 20,5% 20,0% 19,5% 19.9% 19,2% 19,0% 2009 2010 2011 2012 2013 2014 2015 2016 2020

Source: EUROSTAT and Statistical Office of the Republic of Serbia (SORS)

Total Capacities of Renewable Energy 2017 (MW)



Source: Ministry of Mining and Energy

In 2016, Serbia achieved only a 20,9% share of renewable energy in gross final energy consumption instead of the 23,8% median trajectory for 2015-2016. This was due to increased final energy consumption and limited investments in newly added renewable energy capacities.

In order to ensure compliance with the Guidelines on State aid for environmental protection and energy 2014-2020, Serbia has to introduce auctions for renewable energy and remove the capacity cap per type of renewable energy technology. This will enable the cost-effective achievement of the 2020 renewable energy target considering the decrease of costs of renewable energy technologies in the past years.

Total capacities of renewable energy (MW):

3100



Energy Efficiency Implementation

| Energy Efficiency Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--|------------------------------|-----------------------|--|
| National Energy Efficiency Action Plans and Targets | | 75% | The 3rd EEAP was adopted in 2016 and includes targets and measures until 2018. The 2020 cap consumption target was reported in the 1st Annual Report under the Energy Efficiency Directive. |
| Energy efficiency in buildings | | 67% | More than 2.000 energy performance certificates have been issued. Revision of current regulation is underway to achieve full compliance with the Energy Performance of Buildings Directive. Programmes for rehabilitation of public buildings are ongoing. |
| ESCO market development and financing | • | 75% | An enabling legal framework for energy performance contracting is in place and the implementation of ESCO projects in buildings, public lighting and district heating is ongoing. |
| Energy efficient products - labelling | | 89% | The framework directive and ten out of twelve delegated acts are being implemented. In February 2018, the rulebook for the energy labelling of space and combination heaters was adopted. |
| Institutional capacities | ~ | 75% | The two ministries have a clear division of responsibilities in the design and implementation of energy efficiency policy. However, implementation and enforcement capacities are still weak, and human resources should be increased. |

Serbia achieved certain progress towards the implementation of national energy efficiency legislation with the adoption of by-laws implementing the Law on Efficient Use of Energy and the regulations on labelling of certain energy related products. Nevertheless, additional secondary legislation, mainly linked to the buildings *acquis*, is still missing and should be adopted without delay.

The first priority for Serbia in the forthcoming period remains the

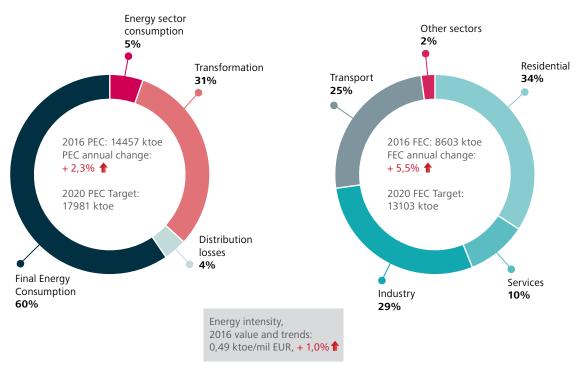
transposition of the Energy Efficiency Directive, either through amending the Law on Efficient Use of Energy or through a new law on energy efficiency.

The second priority should be the full implementation of the Energy Performance of Buildings Directive and adoption of the remaining delegated regulations for energy labelling of energy-related products, in accordance with the Ministerial Council Decision of September 2014.

Energy Efficiency Indicators

Primary Energy Consumption (PEC) in 2016 and trends

Final Energy Consumption (FEC) in 2016 and trends



Source: EUROSTAT 2018 data and Contracting Party's Annual Reports under Directive 2012/27/EU

Implementation of Energy Efficiency Product Regulation Overview

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|---------------------|-----------------------|------------------------------------|----------------------------|-------------|------------------|-------------------------|---------------------------------|-----------------|---------------|-------------------------------|--------------------------------------|
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| | | | | | | | | | | | |

Adopted and implemented
Adopted, implementation issues detected
No progress with adoption/implementation

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



Environment Implementation

| Environment Indicators | Transposition Assessement | Implementation Status | Descriptions |
|---|------------------------------|-----------------------|---|
| Environmental impact assessment (EIA) and strategic environmental assessment (SEA) | | 80% | Positive developments with regard to public participation and capacity building took place since last year. The competent authorities must ensure that environmental assessments are properly carried out when developing hydropower projects, taking also their cumulative impacts into account. |
| Sulphur in Fuels | ~ | 73% | Serbia is still under infringement for not fully rectifying the breach confirmed by Decision 2016/04/MC-EnC of the Ministerial Council, but performs well in all other aspects. |
| Large combustions plants and industrial emissions | ~ | 70% | National legislation allows for the proper implementation of the Large Combustion Plants and Industrial Emissions Directives. However, the National Emission Reduction Plan, approved by the Secretariat in 2016, is still not officially adopted by the Government. |
| Nature protection | | 73% | Implementation of the provisions of the Wild Birds Directive is based on the Law on Nature Protection in Serbia. The national system of protected areas includes various levels of protection (strict natural reserve, special natural reserve, national park, nature monument, protected habitat, landscape of exceptional qualities and nature park). |

With regard to environmental assessments, Serbia followed up on the priorities set out in last year's Implementation Report. Environmental assessments are being carried out at central and local level. The Ministry of Environmental Protection is responsible for all procedures with a potential transboundary impact. A database of environmental impact assessments and strategic environmental assessments was recently developed at national, regional and local levels and several capacity-building activities took place.

As regards legislation on the sulphur content of liquid fuels, Serbia has failed to comply with the decision of the Ministerial Council and complete the transposition and ensure effective implementation of the 1,00% sulphur threshold for heavy fuel oil. As a next step, the Secretariat has started dispute settlement procedures under Article 92 of the Treaty.

Four large combustion plants have started their opt-out in Serbia on 1 January 2018, meaning that those plants would be able to remain in operation for a maximum of 20.000 hours between 1 January 2018 and 31 December 2023. A record of their operational hours has to be kept and reported to the Secretariat from 1 January 2019. Serbia must adopt the NERP without further delay and also prepare for reporting on the emissions of large combustion plants under its scope from the same date.

With regard to nature protection, the existing data on the status of migratory birds that are subject to hunting is currently being analysed in order to provide a scientific basis for establishing effective protective measures for wild birds, including changes to legislation on hunting. To that end, negotiations with the hunting sector, experts in ornithology and civil society shall continue.

Installations Under the Large Combustion Plants Directive



Source: compiled by the Energy Community Secretariat



| Climate Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--|------------------------------|-----------------------|--|
| National greenhouse gas emissions monitoring and reporting systems | ~ | 32% | Serbia's Climate Change Law is finalized and largely in line with the climate acquis. A public consultation process was concluded in April 2018. Compliance regarding the establishment of a National Inventory System, in line with relevant MMR provisions, could be assessed upon the adoption of the Law on Climate Change (end 2018). Preparation of the National Climate Change Strategy, which started in July 2016, is advancing. Work on policies, measures and projections is ongoing and the results are expected in the first quarter of 2019. Cost-effective GHG mitigation potentials will be assessed through the preparation of a set of quantitative scenarios and projections and regular reporting thereon. |
| National Energy and Climate Plans (NECPs) | • | 4% | A national working group on the NECPs has not been set up yet. The Ministry of Environmental Protection established the working group on Climate Change Strategy and Action Plan, while the Ministry of Mining and Energy established a working group for the development of energy planning capacity. The two work closely together in order to ensure the preconditions for the future development of an integrated National Energy and Climate Plan. Preparatory work on the analytical and technical aspects of the NECP (reference and policy scenarios, templates) has not started yet. Regional consultations will take place after the submission of the draft national plans. |

Serbia is a Non-Annex 1 country and has been party to the United Nations Framework Convention on Climate Change since 2001 and of the Kyoto Protocol since 2008.

Serbia submitted to the UNFCCC two National Communications on climate change (2010, 2017) and one Biennial Update Report in 2016. In its Nationally Determined Contributions (NDC), the country made a pledge to reduce greenhouse gas emissions by 9,8% by 2030 compared to 1990 levels. The Law on the Paris Agreement ratification was adopted on 29 May 2017.

A Climate Change Law was finalized in the past months and is ready to be adopted. In addition, Serbia formally adopted in January 2018 Recommendation 2018/01/MC-EnC on preparing for the development of integrated National Energy and Climate Plans (NECPs).

Assistance for the improvement of data quality and data avail-

ability for the GHG inventory with the identification and indication of key data providers was provided by two EU twinning projects. Doubts remain on data verification, which is carried out mainly by the Environmental Protection Agency.

Some progress was made on the institutional side, since the new Ministry of Environmental Protection has now a dedicated Department on Climate Change with two units, one for mitigation and one for adaptation. Also, the overall human resources dedicated to climate action have increased.

The speeding up of the adoption of climate change legislation and the finalization of the National Climate Change Strategy represent the two key priorities for Serbia in the upcoming period. In addition, coordination of national policies and strategies on energy and climate should be prioritized, in compliance with Recommendation 2018/01/MC-EnC and in order to identify synergies and prevent inconsistencies.



Infrastructure Implementation

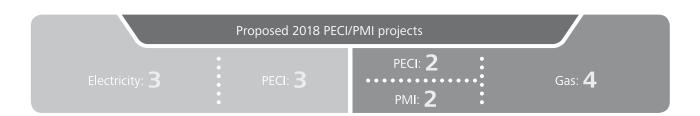
| Infrastructure Indicators | Transposition Assessement | Implementation Status | Descriptions |
|---|------------------------------|-----------------------|---|
| National competent authority | | 50% | No decision was taken to date on the designation of the competent authority. The Government is currently considering extending the competenc- es of one or more existing institutions to cover the tasks of the competent authority in line with the provision of the Regulation. |
| Manual of procedures | | 20% | A unified, web-based procedure with strictly defined deadlines for obtaining all relevant documents from the permit granting entities already exists and is applied for all infrastructure projects under the coordination of the Ministry of Construction, Transport and Infrastructure. However, it is not fully compliant with Regulation (EU) 347/2013. |
| National regulatory authority involvement | | 30% | The regulator drafted but not yet adopted and published the methodology. |

In October 2017, the Government adopted the Programme for the Implementation of the Energy Development Strategy by 2025 for the period 2017-2023 by which Regulation (EU) 347/2013 was transposed. Additional activities are needed to implement the Regulation.

The national competent authority shall be designated and become operational and it shall publish a 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 national regulatory authority AERS shall publish the methodology and criteria to be used to evaluate investment in electricity and gas projects and the higher risks incurred by them as soon as possible.





Statistics Implementation

| Statistics Indicators | Transposition Assessement | Implementation Status | Descriptions |
|-----------------------|------------------------------|-----------------------|---|
| Annual statistics | | 100% | Five annual questionnaires and MESH for 2016 are transmitted. |
| Monthly statistics | | 60% | Monthly oil data are not transmitted to EUROSTAT. |
| Quality report | | 0% | Quality report is not transmitted. |
| Price statistics | | 100% | Data on electricity prices are transmitted. |

The *acquis* on energy statistics is not fully implemented. Monthly oil and short-term monthly oil, gas and electricity statistics are not transmitted to EUROSTAT. Quality report on energy statistics, in the format requested by EUROSTAT, has not been submitted.

The Statistical Office of the Republic of Serbia (SORS) collects, compiles and disseminates annual energy statistics. Data is available on the website of SORS and in the form of five questionnaires communicated to EUROSTAT. Annual energy statistics are published by EUROSTAT.

Disaggregated data on energy consumption in households are compiled and transmitted to EUROSTAT in due time.

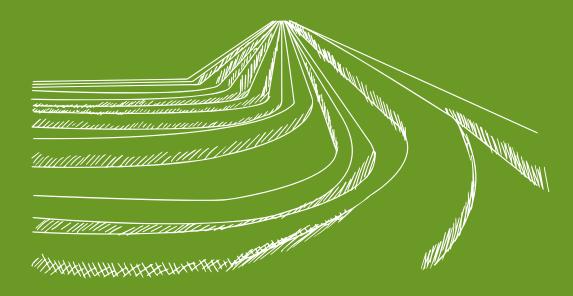
The monthly electricity, coal and natural gas data are collected and transmitted to EUROSTAT. The monthly oil data are still not transmitted in line with the *acquis*. Short-term monthly collections on natural gas, oil and electricity are yet to be provided.

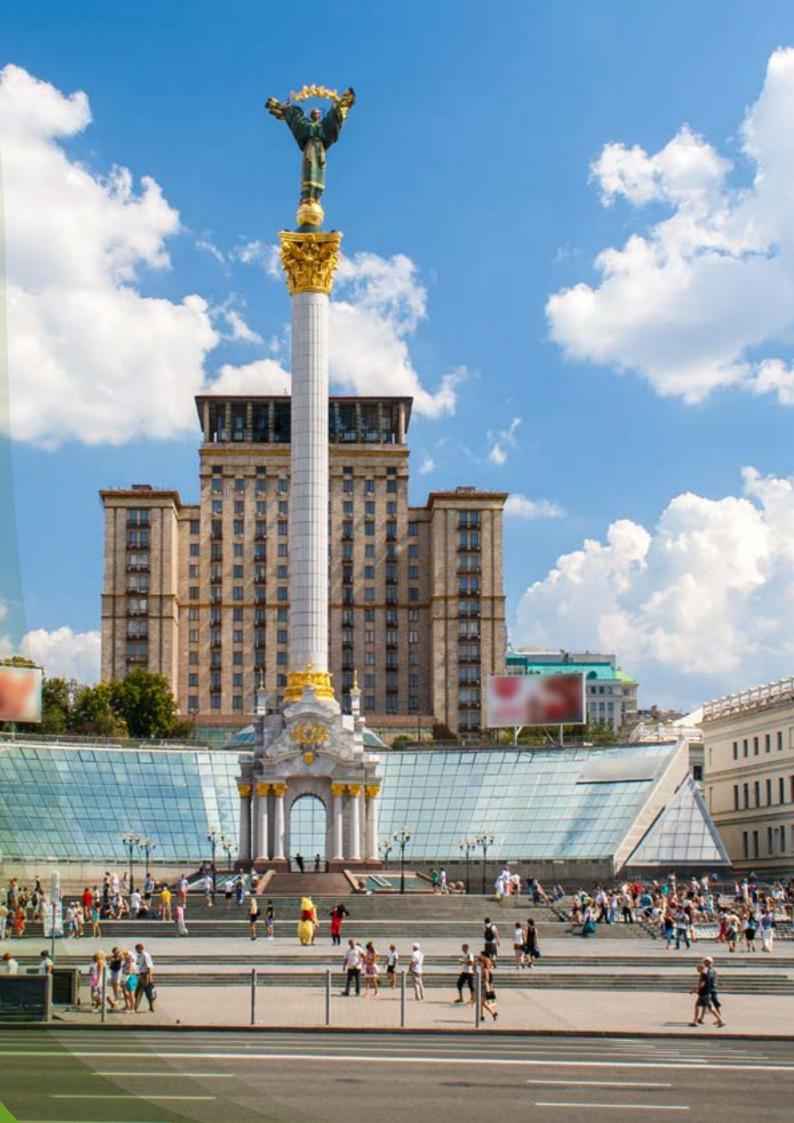
SORS has established the quality management system based on written procedures and policies. However, the quality reports for statistical surveys in the energy sector in the format defined by EUROSTAT has not been transmitted and published.

Questionnaires for collection of gas and electricity prices charged to industry and households were developed in accordance with EUROSTAT methodology. Prices of electricity and gas for industry and households per consumption band and the price breakdown per component and level of taxation are submitted to EUROSTAT in accordance with the Regulation.

Serbia has to collect and disseminate the remaining monthly data in the requested format and transmit it to EUROSTAT. The priority is the implementation of remaining obligations from Annex C of Regulation (EC) 1099/2008, namely monthly oil and gas statistics, followed by Annex D of Regulation (EC) 1099/2008. The quality report has to be transmitted to EUROSTAT.

Ukraine







Summary Implementation

| Summary Indicators | Transposition Assessement | Implementation Status | Descriptions |
|----------------------|------------------------------|-----------------------|--|
| Electricity | | 25% | Implementation in the electricity sector of Ukraine is still at an early stage. |
| Gas | | 43% | Implementation in the gas sector of Ukraine is moderately advanced. |
| Oil | × | 10% | Implementation in the oil sector of Ukraine is yet to begin. |
| Renewable Energy | 0 | 59% | Implementation in the renewable energy sector of Ukraine is moderately advanced. |
| Energy Efficiency | | 68% | Implementation in the energy efficiency sector of Ukraine is well advanced. |
| Environment | ~ | 49% | Implementation in the environment sector of Ukraine is moderately advanced. |
| Climate | ~ | 17% | Implementation in the climate sector of Ukraine is yet to begin. |
| Infrastructure | × | 0% | Implementation in the infrastructure sector of Ukraine is yet to begin. |
| Statistics | | 55% | Implementation in the statistics sector of Ukraine is moderately advanced. |





Electricity Implementation

| Electricity Indicators | Transposition Assessement | Implementation Status | Descriptions |
|------------------------|------------------------------|-----------------------|---|
| Unbundling | | 5% | The TSO is not certified under the ownership unbundling regime, constituting a breach of the <i>acquis</i> . The process of legal and functional DSO unbundling is significantly delayed and subject to a dispute settlement case. |
| Access to the networks | ~ | 52% | The lack of compliance with Regulation (EC) 714/2009 is subject to Case ECS-1/12 concerning Ukraine's failure to comply with the Treaty's obligations related to electricity interconnector capacity allocation. |
| Wholesale market | | 25% | Wholesale market reform is progressing at a slow pace. The July 2019 deadline for starting the new wholesale market arrangements will not be achieved. |
| Retail market | | 30% | In practice, only non-household customers can change supplier. Due to the single buyer model still in force, even these customers are not exercising their eligibility right. |
| Regional integration | | 12% | Regional market integration is hindered by import and export practices that do not comply with the Third Energy Package. Activities towards network synchronisation according to the Agreement with ENTSO-E have been initiated. Connection Network Codes are still not transposed. |

The adoption of the new Electricity Market Law has brought the legal framework into compliance with the Third Energy Package and provided the long-awaited starting point for the implementation of reforms. The main secondary legislation was approved within 2018 (market rules, day-ahead market / intraday market rules, transmission network code, commercial metering code) while other pieces of secondary legislation are still under preparation.

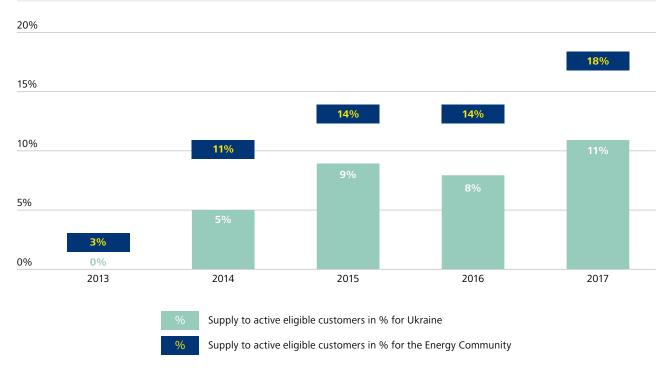
Nevertheless, the unbundling and certification of the transmission system operator is pending as well as the unbundling of the distribution system operators. Without these steps, successful market reform cannot proceed. Therefore, the unbundling of Ukrenergo under the ownership unbundling regime foreseen by the new Electricity Market Law, as well as the unbundling of the distribution network operators (which currently perform both the functions of distribution and regulated supply) should

be among the first reform priorities.

Under the new Law's transitional provisions, progressive measures are foreseen with a view to removing regulated prices at wholesale level and cross-subsidies and creating room for cost-reflective retail prices.

Capacity allocations for both exports and imports are performed through a platform launched in May 2017, but still not on a joint auction basis. Joint auctions are foreseen by the new Electricity Market Law and Ukrenergo has initiated preliminary discussions with neighbouring transmission system operators of EU Member States and Moldova. Ukrenergo needs to proceed immediately with appropriate rules implementation and software that would allow joint auctions and negotiate with neighbouring transmission system operators the exact processes that will need to apply as soon as possible, and even before the new wholesale

Retail Market Opening



Source: Ministry of Energy and Coal Industry

market model becomes operational, as the latter seems to face considerable delays.

The establishment of trading platforms and software for system balancing, day-ahead and intraday trading and settlement, as well as for electronic joint auctions for allocation of cross-border capacity, present additional challenges, as the newly adopted Electricity Market Law foresees that the new market model shall start operating by July 2019. Ukrenergo organized a tender for procuring the software for the operation of the balancing market. Energorynok launched a tender on the procurement of the software for operation of the day-ahead and intraday markets. However, the tender for the operation of the day-ahead and intraday markets was cancelled and thus the creation of the respective markets is expected to be delayed.

At the retail level, the operation of the existing wholesale electricity market model, which follows the single buyer model, is creating considerable obstacles for consumers to change supplier. Prices both at the wholesale and retail level are regulated thus leaving practically no room for competition. Distribution system operator unbundling combined with the creation and operation of a competitive wholesale market is of utmost importance with a view to allowing competition to emerge at the retail level as well.

The challenge of proceeding smoothly with retail price deregulation for small household consumers requires, in the first place, a universal supplier to be designated. Furthermore, the efficient functioning of the retail market requires appropriate secondary legislation and tariff methodology. Neither have been drafted so far.



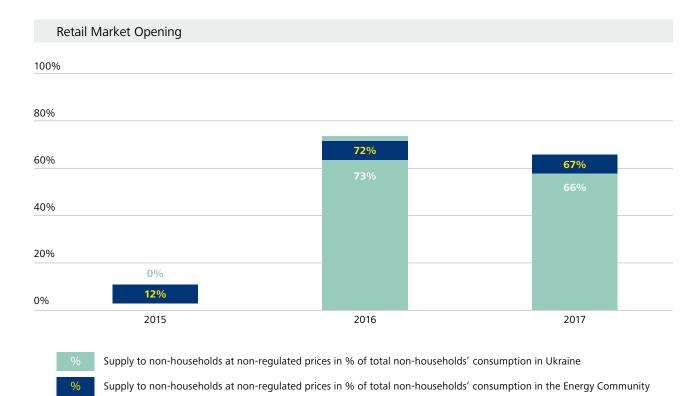
Gas Implementation

| Gas Indicators | Transposition Assessement | Implementation Status | Descriptions |
|------------------------|------------------------------|-----------------------|--|
| Unbundling | | 20% | The TSO and storage system operator (SSO) are not unbundled in line with the Third Energy Package. The DSO regime is in compliance. |
| Access to the networks | | 54% | Third party access, including transmission, storage and distribution tariffs, is in place. However, the distribution tariff methodology and the storage and entry/exit transmission tariffs have to be updated to reflect actual costs incurred. |
| Wholesale market | | 48% | The wholesale gas market has its regulated and non-regulated segments. Around 300 traders were active in 2017. The Public Service Obligation of Naftogaz is not in compliance with the <i>acquis</i> . |
| Retail market | | 41% | All customers are formally eligible, but de facto eligibility is limited to non-household customers. Household prices are regulated within the Public Service Obligation Decree and largely covered by budgetary subsidies. |
| Interconnectivity | • | 70% | The gas transmission system is well inter-connected with vast capacity on all country borders. Different communication and cooperation protocols with adjacent TSOs are in place, still to be aligned with Regulation (EU) 2015/703. |

While Naftogaz continues to be the dominant gas producer, accounting with its two daughter companies for 80% of total national production, its share in total gas imports is continuously decreasing. Sixty-seven European traders, in comparison to 34 in 2016, imported gas to Ukraine in 2017, their share reaching 38% of overall gas imports. Even after the Stockholm Arbitration Tribunal issued an award on a dispute over the supply contract with Gazprom, supply from Russia has not been re-established and import is managed exclusively from western interconnection points, namely with Slovakia, Hungary and Poland. Transit flow towards Europe continues to grow for the second year, reaching 95 Bcm, which is comparable with the levels of transit before Ukrainian and Russian relations deteriorated in 2014.

Ukraine is yet to live up to the commitments it made under the Energy Community Treaty as regards the modernization of its gas sector. The two main issues that remain in violation of the *acquis* are the deregulation of prices and independence of the transmission system operator. The two issues present the biggest obstacles to gas market reform by maintaining a monopoly position of the incumbent gas suppliers and counter the positive trends described above.

The gas supply price for households and district heating companies remains regulated, equalling 16,8 Bcm out of the total 31,9 Bcm consumed in 2017. The Public Service Obligation Act, which was meant to be a short-term transitory tool towards long-awaited market liberalisation, continues to be prolonged by the Government. This effectively forecloses the market.



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

The transmission system operator continues to lack independence. The process of unbundling Ukrtransgaz from Naftogaz has been one step forward and two steps back and amounts largely to an empty discussion without concrete progress. The only tangible result was the creation of a new shell company, Magistralny Gazoprovody Ukraine, which is to serve as a vehicle for a future transmission system operator. However, a supervisory board is the only body established so far.

The delay in resolving these two issues has negative repercussions on other market factors: daily balancing and establish-

ment of a proper gas exchange and cost-reflective network tariffs and their adequate implementation on entry/exit points, including the interface between the transmission and distribution systems.

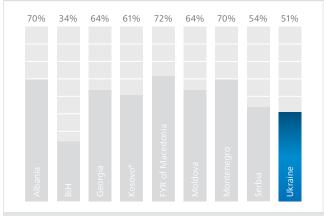
Only a solid and transparent legal and regulatory framework can attract the traders and partners necessary to ensure the future of the Ukrainian gas transit system and consequently improve the efficiency of its storage and transmission capacities benefiting energy consumers at large.



Ukraine National Authorities

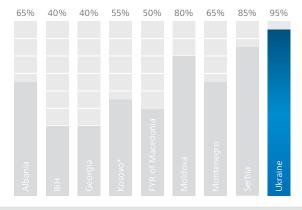


Regulatory Authority



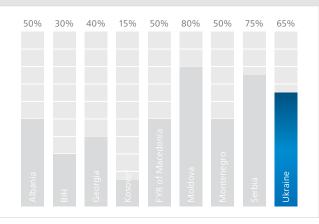
The independence of NEURC remains subject to a number of violations. Full budgetary autonomy still requires amendments of the Budget Code. The need for approval of the regulator's budget by the Budget Committee of the Verkhovna Rada has proven to be an instrument for depriving NEURC from certainty over its financial resources. The practice of delaying the entry into force of decisions by postponing their publication in the Official Gazette continued to be a systematic obstacle in 2017 and 2018. In November 2017, NEURC lacked the decision-making quorum required by law. A selection committee was not formed in time and the continued functioning of the commission was provisionally possible by legal amendments that reverted to the appointment of commissioners at the full discretion of the President. New commissioners were selected based on a public vacancy announcement and a selection committee in early 2018.

Competition Authority



The Antimonopoly Committee of Ukraine (AMCU) is the body in charge of enforcing competition law. During the reporting period, AMCU adopted several decisions regarding the natural gas market, the electricity market and the oil and oil products market. Currently, AMCU is conducting an investigation of the natural gas market in order to determine the state of competition. In the reporting period, AMCU also rendered two decisions regarding its investigative powers.

State Aid Authority



The Antimonopoly Committee of Ukraine (AMCU) is also responsible for enforcing State aid law. AMCU started to review potential State aid measures via a pilot project on potential State aid measures in the energy sectors and in particular in the electricity sector. However, no decision has been taken in the energy sectors. Furthermore, the Department for Monitoring and Control of State Aid actively engages in cooperation with the Secretariat and other national State aid authorities in the framework of the Energy Community State Aid Network.



Oil Implementation

| Oil Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--------------------------------|------------------------------|-----------------------|--|
| Stockholding obligation | ~ | 10% | There is no emergency oil stocks policy in place. The model for oil stocks establishment, maintenance and financing is prepared. A draft law on emergency oil stocks is drafted and will be sent to the Secretariat for a compliance review in October 2018. |
| Availability and accessibility | ~ | 10% | There are no emergency oil stocks and therefore no availability and accessibility. |
| Reporting | ~ | 10% | No legislation is in place and reporting obligations are not present. The Joint Organisations Data Initiative (JODI) Questionnaire is not submitted. Some data are provided by the State Statistical Service of Ukraine as part of the annual energy balances. The State Statistical Service is currently working on collecting data for the Monthly Oil Statistics (MOS). It is its intention to begin reporting the monthly data in 2018 and to use the monthly data as the basis for calculating the national stockholding obligation starting in 2019. |
| Emergency procedures | 0 | 10% | No emergency procedures in compliance with Directive 2009/119/EC are in place. |

The model for oil stocks establishment, maintenance and financing in Ukraine was sent by the State Reserve Agency to the Ministry of Energy and Coal Industry for approval at the end of December 2017. In May 2018, the Ministry approved this model, which was immediately sent by the State Reserves Agency to the Ministry of Economy. To this date, the Ministry of Economy has not officially provided its position on the proposed oil stocks model. Concurrently, the State Reserve Agency started

to prepare a draft Oil Stocks Law to be submitted to the Cabinet of Ministers until the third quarter of 2018. This draft Law is foreseen to be sent for a compliance review to the Secretariat within October 2018.

The Joint Organisations Data Initiative (JODI) Questionnaire is not submitted.



Renewable Energy Implementation

| Renewable Energy Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--|------------------------------|-----------------------|--|
| National Renewable Energy Action Plan | ~ | 64% | In 2016, Ukraine reached only a 5,8% share of energy from renewable sources, well below the trajectory of 8,0%. A revised NREAP, due by 30 June 2018, was neither submitted nor adopted. |
| Quality of support schemes | 0 | 66% | A system based on feed-in tariffs is in place. The adoption of amendments to introduce auctions in line with the <i>acquis</i> on State aid is pending. |
| Grid integration | ~ | 70% | Guaranteed access for renewables to enable the transition to a support scheme based on a feed-in premium is not provided by law. There are no rules on renewable energy self-consumption for distributed generation. |
| Administrative procedures | 0 | 64% | The administrative procedures for permitting, construction and licensing are lengthy and burdensome despite several simplification rounds. There is no one-stop shop for permits and licenses. |
| Renewable energy in transport | × | 2% | Articles 17 to 21 of Directive 2009/28/EC are not transposed yet. The relevant amendments to the Law on Alternative Fuels are currently pending adoption by Parliament. |

To comply with State aid requirements, Ukraine is in the process of reforming its support schemes, which are currently based on feed-in tariffs (so–called green tariffs). Ukraine shall adopt the required amendments to the Electricity Market Law and Alternative Sources Law aimed at introducing auctions to grant support in the form of a premium to new renewable energy producers during the next reporting period.

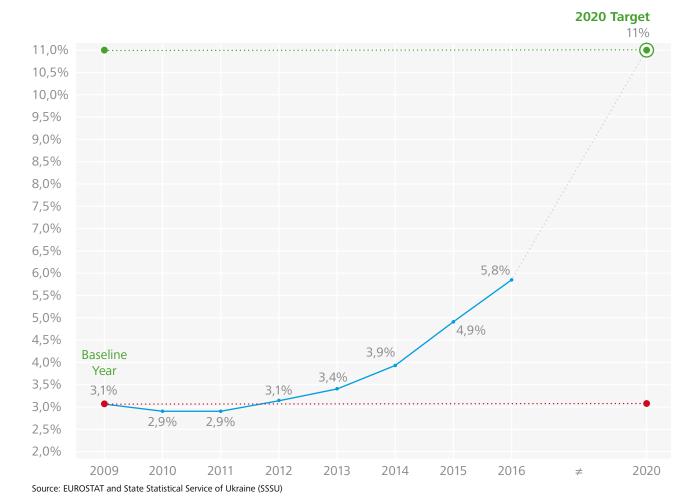
Due to a lower share of energy from renewable sources than the trajectory, the Ministerial Council asked Ukraine to submit a revised NREAP by 30 June 2018. The revised NREAP is neither submitted nor adopted.

Transmission and distribution system operators have to ensure that the technical specifications for grid connection are transparent and clear, which is currently not the case. A system of compensating for curtailments of energy from renewable sources remains to be implemented. Network operators must develop network investment plans in order to accommodate future increases of renewable energy. Self-consumption of electricity from renewable energy sources acknowledged in the legislation has to be implemented further.

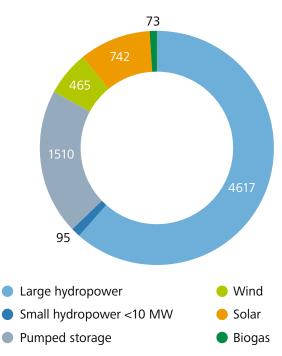
Coordination among various institutions, clarification and simplification of procedures for both small and large renewable energy developers must continue to create a conducive climate for investors.

An accurate, reliable and anti-fraud system for the issuing, transfer and cancellation of guarantees of origin in accordance with the requirements of Directive 2009/28/EC remains to be established.

Shares of Energy from Renewable Sources



Total Capacities of Renewable Energy 2017 (MW)



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

Measures to implement the requirements to increase renewable energy in heating must continue given the high share of energy used in the sector. The implementation of the recently adopted Law on Energy Performance of Buildings has to bring tangible results.

The amendments to the Law on Alternative Fuels transposing the main principles of Articles 17 to 21 of Directive 2009/28/ EC must be adopted without delay.

In spite of all shortcomings, the country increased its renewable energy capacities and the contribution of renewable energy to final energy consumption. However, the current share of renewables in the transport sector is only at the level of 1%, far from the planned NREAP trajectory.

Total capacities of renewable energy (MW):

7502



Energy Efficiency Implementation

| Energy Efficiency Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--|------------------------------|-----------------------|--|
| National Energy Efficiency Action Plans and Targets | | 69% | Ukraine adopted one EEAP for 2015- 2020 and set the 2020 target in prima- ry energy consumption and final energy consumption in line with the Energy Efficiency Directive. |
| Energy efficiency in buildings | | 56% | Nine of the fourteen by-laws needed to implement the Buildings Directive were adopted from March to July 2018. The remaining five by-laws are undergoing a consultation process. |
| ESCO market development and financing | • | 78% | The energy services market is significantly more developed than in any other Contracting Party. Legal and regulatory barriers were removed by amending the Law on Public Procurement. The by-laws for the implementation of the Energy Efficiency Fund law are being prepared. |
| Energy efficient products - labelling | | 80% | All energy labelling regulations, except for the one on space heaters, were adopted. |
| Institutional capacities | | 74% | Competences are split between the Ministry responsible for energy efficiency (Minregion) and the Agency on Energy Efficiency (SAEE), which leads to delays in taking decisions and finalising legal and regulatory acts. Both institutions lack institutional capacity, especially in the legal departments. |

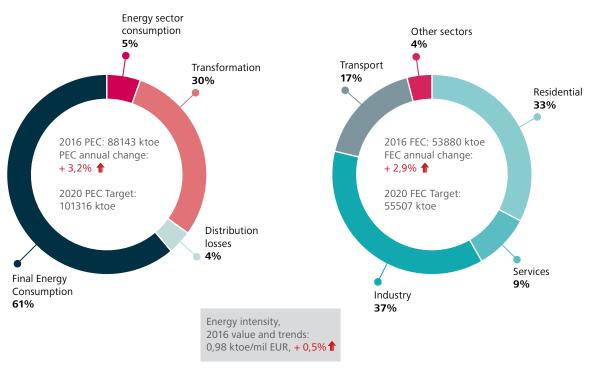
In the past year, Ukraine has made progress in preparing the Energy Efficiency Law, but the biggest hurdle – the Law's adoption – still lies ahead. The law drafting process remains very cumbersome and the Secretariat is not aware of a timeline for the Law's adoption by the Cabinet of Ministers.

The adoption of the Energy Efficiency Law in compliance with Directive 2012/27/EU remains the utmost priority for Ukraine. The second priority is the adoption of the remaining four bylaws to ensure full compliance with the Energy Performance of Buildings Directive.

Energy Efficiency Indicators

Primary Energy Consumption (PEC) in 2016 and trends

Final Energy Consumption (FEC) in 2016 and trends



Source: EUROSTAT 2018 data and Contracting Party's Annual Reports under Directive 2012/27/EU

Implementation of Energy Efficiency Product Regulation Overview

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|---------------------|-----------------------|---------------------------------------|----------------------------|-------------|------------------|-------------------------|---------------------------------|-----------------|---------------|-------------------------------|--------------------------------------|
| FRAMEWORK DIRECTIVE | Household dishwashers | Household refrigerating appliances | Household washing machines | Televisions | Air conditioners | Household tumble driers | Electrical lamps and luminaires | Vacuum cleaners | Space heaters | Water heaters & storage tanks | Domestic ovens, hobs and range hoods |
| | | | | | | | | | | | |

Adopted and implemented
Adopted, implementation issues detected
No progress with adoption/implementation

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



Environment Implementation

| Environment Indicators | Transposition Assessement | Implementation Status | Descriptions |
|---|------------------------------|-----------------------|--|
| Environmental impact assessment (EIA) and strategic environmental assessment (SEA) | | 51% | The recently adopted legal framework ensures that the provisions of both directives can be implemented correctly. The national administration (with particular regard to local authorities) is still in an early phase of preparedness for implementation. |
| Sulphur in Fuels | ~ | 47% | Ukraine is still under infringement for not fully rectifying the breach con- firmed by Decision 2016/05/MC-EnC of the Ministerial Council. |
| Large combustions plants and industrial emissions | ~ | 43% | Implementation of the National Emission Reduction Plan (NERP), approved by the Secretariat in 2016 and adopted by the Government in November 2017 started on 1 January 2018. |
| Nature protection | ~ | 53% | The biodiversity protection system in Ukraine is still weak. Protected areas cover only a small part of the territory of the country and there is no effective control or monitoring mechanism in place. |

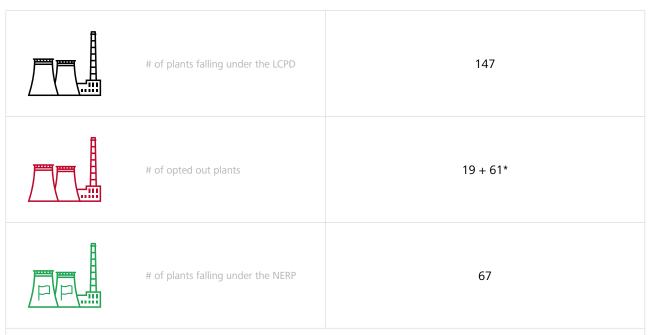
With regard to environmental assessments, Ukraine followed up on the priorities set in the previous Implementation Report. During the last reporting period, seminars and trainings were conducted for representatives of the state administration and businesses and a project was established for the development of a unified national registry for environmental impact assessments. Along these positive developments, certain concerns still remain present. The main difficulties expected in the implementation phase are due to the lack of finances and quality control mechanisms as well as administrative capacities. Furthermore, focus shall be given to transboundary environmental assessments in the case of projects with a significant transboundary environmental effect, with particular regard to hydropower development projects.

As regards legislation on the sulphur content of liquid fuels, Ukraine must comply with the Decision of the Ministerial Council and complete the transposition and ensure effective implementation of the 1,00% sulphur threshold for heavy fuel oil and the 0,10% threshold for gas oil. As a next step, the Secretariat has started dispute settlement procedures under Article 92 of the Treaty. Another priority for Ukraine is to transpose the provisions on marine fuels into the domestic legal framework and ensure their implementation.

With regard to large combustion plants, the key priority for Ukraine is the implementation of the NERP, for which adequate financing has to be ensured by the operators. Nineteen large combustion plants have started their opt-out on 1 January 2018, meaning that those plants would be able to remain in operation for a maximum of 20.000 hours between 1 January 2018 and 31 December 2023. Furthermore, a total of forty-four 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 between 1 January 2018 and 31 December 2033. For both categories, a record of their operational hours has to be kept and reported to the Secretariat from 1 January 2019.

With regard to nature protection, 271 Emerald sites throughout the Contracting Party were designated under the Bern Convention. Ensuring the proper functioning of the Emerald Network, which is highly compatible with the Natura 2000 network, would be beneficial for the future classification process. Furthermore, the necessary measures for the protection of the protected species have to be set up. Implementation of effective measures in the area of nature protection, however, still faces a number of difficulties. This is primarily due to the lack of adequate human resources.

Installations Under the Large Combustion Plants Directive



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

Source: compiled by the Energy Community Secretariat



| Climate Indicators | Transposition Assessement | Implementation Status | Descriptions |
|--|------------------------------|-----------------------|--|
| National greenhouse gas emissions monitoring and reporting systems | ~ | 32% | Provisions on the creation and maintenance of national inventory systems are included in two Decrees of the Cabinet of Ministers (2006, 2008). To be in line with Regulation (EU) 525/2013, it is necessary to strengthen the national system and create a single registry of controlled substances. The Low Emission Development Strategy up to 2050, overall in line with the acquis, was adopted by the Ukrainian Government in July 2018 and sent to the UNFCCC. |
| National Energy and Climate Plans (NECPs) | ~ | 5% | Ukraine has not officially set up a national working group to prepare the NECPs yet. Preparatory work on the analytical and technical aspects of the NECPs (reference and policy scenarios, templates) is expected to start by the end of 2018. Regional consultations will take place after the submission of the draft national plans. |

Ukraine ratified the Paris Agreement in 2016 and as an Annex I party to the UNFCCC, it submitted in 2013 its sixth National Communication and the first Biannual Update Report. Its greenhouse gas inventory for the year 2014 was submitted in 2016, while preparation of the seventh National Communication and the joint second and third Biennial Report is ongoing.

The country's Nationally Determined Contribution (NDC) includes a target of reducing greenhouse gas emissions by at least 40% below 1990 levels by 2030, including, inter alia, via removals from land use, land use change and forestry (LULUCF).

Progress was made on the preparation of legislation on climate change during 2018, including the draft Law of Ukraine on Ozone Depleting Substances and Fluorinated Greenhouse Gasses (April 2018) and the draft Law of Ukraine on Monitoring, Reporting and Verification of GHG Emissions (June 2018). These provisions lay the groundwork for Ukraine's planned emissions trading system, which is being developed in line with its obligations under the Association Agreement with the EU. Legislation is expected to be adopted by the end of 2018.

The Concept for the Implementation of State Policy in the Field of Climate Change up to 2030 was adopted in December 2017. It is the first holistic policy document on climate action, focusing on strengthening institutional capacity, climate change mitigation, and transition to low emission development as well as adaptation and reduction of climate related risks. It establishes the main principles of state policy in the field of climate change, including 49 measures, among them the development of two national strategic documents: a Low Emission Development Strategy and a National Adaptation Strategy. According to the Low Emission Development Strategy, adopted in July 2018, the indicative GHG emissions target is 31-34% by 2050 (compared to 1990 levels). If implemented, the targets would be far more ambitious than the current commitment under the Paris Agreement.

In August 2017, Ukraine adopted an Energy Strategy until 2035. Due to the fact that Ukraine's climate change and energy provisions are scattered across several laws, resolutions and governmental decrees, the country should consider merging them into one legislative text. This would also facilitate the process of integrating climate and energy policies in Ukraine, in compliance with Recommendation 2018/01/MC-EnC.



Infrastructure Implementation

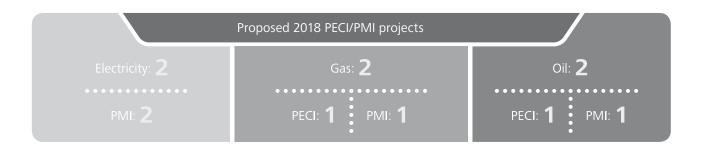
| Infrastructure Indicators | Transposition Assessement | Implementation Status | Descriptions |
|---|------------------------------|-----------------------|--|
| National competent authority | × | (0% | No decision was taken on the designation of the competent authority. |
| Manual of procedures | × | 0% | The manual of procedures, as defined by Regulation (EU) 347/2013, is neither drafted nor published. |
| National regulatory authority involvement | × | 0% | The Ukrainian national regulatory agency has not published the methodology and criteria as required by the Regulation. |

The process of transposing Regulation (EU) 347/2013 is yet to start in Ukraine, despite the deadline already expired.

As soon as possible, the national competent authority shall be designated and operational and it shall publish a Manual of procedures for the permit granting process applicable for Projects of Energy Community Interest and Projects of Mutual Interest. The national regulatory authority NEURC shall publish the methodology and criteria used to evaluate investment in electricity and gas projects and the higher risks incurred by them as soon as possible.

On 22 June 2018, a Reasoned Request concerning the lack of transposition and the lack of notification to the Secretariat of measures transposing Regulation (EU) 347/2013 (Case ECS-4/18) has been submitted to the Ministerial Council against Ukraine.

Ukraine, 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 to the Continental European power system.





Statistics Implementation

| Statistics Indicators | Transposition Assessement | Implementation Status | Descriptions |
|-----------------------|------------------------------|-----------------------|---|
| Annual statistics | | 83% | Five annual questionnaires and MESH for 2016 are transmitted. |
| Monthly statistics | | 72% | Monthly oil data are not transmitted to EUROSTAT. |
| Quality report | | 0% | Quality report is not transmitted. |
| Price statistics | | 20% | There is no required price reporting in place. |

The State Statistical Service of Ukraine (SSSU) collects and disseminates most of the annual and monthly energy statistical data. A quality report on energy statistics, in the format requested by EUROSTAT, has not been submitted.

Data on natural gas and electricity prices are still not compiled and disseminated in accordance with the *acquis*.

Having produced and transmitted its annual statistics in the format prescribed by the *acquis*, Ukraine has implemented the basic requirements of Annex B of Regulation (EC) 1099/2008. However, the information on production and consumption of solid biofuel and disaggregated data on consumption in households are still not sufficient to comply with the requirements of the Regulation.

SSSU compiles monthly energy statistics and ensures their timely dissemination. Monthly oil and gas data are submitted to the United Nations Statistics Division (UNSD). Monthly electricity and coal data are transmitted to EUROSTAT. SSSU is working on further improving its monthly statistics, especially with respect to short-term collections.

Although SSSU has established a robust quality assurance system and prepares quality reports, including on energy statistics,

it has not provided the report on the quality of transmitted data as defined and requested by EUROSTAT in accordance with the Regulation.

SSSU is expected to transmit monthly data to EUROSTAT and to complete monthly collections in line with Regulation (EC) 1099/2008 in 2018.

Ukraine still has not achieved full compliance with the *acquis* on electricity and gas prices. Following the adoption of the new Gas and Electricity Market Laws, SSSU is in the position to request and collect relevant data for regular electricity and gas price reporting per consumption band and broken down per price component in accordance with Regulation (EU) 2016/1952.

The reporting and compilation system for electricity and gas prices has to be implemented without delay. This should include the breakdown of price data per consumption ban, taxation level and price component. The quality report has to be prepared and transmitted in accordance with the *acquis*.

To achieve full compliance related to monthly data, Ukraine must transmit to EUROSTAT the remaining monthly data collection, namely oil and natural gas.



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 37 key implementation indicators across the nine sectors assessed by this Implementation Report.

Approach

The transposition assessment is presented by using an easy to understand traffic light system (red - no transposition, orange - partial transposition with ongoing activities and green - full transposition).

The implementation assessment is based on a system of indicators. Performance indicators are presented on three levels:

- **1. Sectoral sub-indicators** a total of 37 implementation sub-indicators per each Contracting Party across the nine sectors assessed (electricity, gas, oil, renewable energy, energy efficiency, environment, climate, infrastructure and statistics) based on the weighting explained in the table below;
- **2. Sectoral indicators** nine implementation indicators aggregating the values of the sub-indicators at sectoral level produced per Contracting Party;
- **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 (see pages 7 and 8 of this Report);

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 networks | 0,20 |
| Wholesale market | 0,20 |
| Retail market | 0,20 |
| Regional integration | 0,20 |
| 2. Gas | 0,27 |
| Unbundling | 0,25 |
| Access to the networks | 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 |
| Reporting | 0,25 |
| Emergency procedures | 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 | 0,15 |
| Renewable energy in transport | 0,10 |
| 4.2. Energy Efficiency | 0,30 |
| National Energy Efficiency Action Plans and targets | 0,35 |
| Energy efficiency in buildings | 0,28 |
| ESCO market development and financing | 0,10 |
| Energy efficient products - labelling | 0,12 |
| Institutional capacities | 0,15 |
| 4.3. Environment | 0,30 |
| Environmental impact assessment (EIA) and strategic environmental assessment (SEA) | 0,35 |
| Sulphur in fuels | 0,20 |
| Large combustions plants and industrial emissions | 0,30 |
| Nature protection | 0,15 |
| 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 | 0,05 |
| Regulatory authority | 0,50 |
| Competition authority | 0,25 |
| State Aid authority | 0,25 |
| 6. Infrastructure | 0,025 |
| National competent authority | 0,50 |
| Manual of procedures | 0,25 |
| National regulatory authority involvement | 0,25 |
| 7. Statistics | 0,025 |
| Annual statistics | 0,25 |
| Monthly statistics | 0,25 |
| Quality report | 0,25 |
| Price statistics | 0,25 |

Energy Community Secretariat (ECS)

Am Hof 4, 1010 Vienna, Austria

Phone: 0043 (0)1 535 2222

Fax: 0043 (0)1 535 2222 11

Email: contact@energy-community.org Web: http://www.energy-community.org